McElroy Twp. #5074508-80

MC'ELROY TWP.
REPORT #30

010

SCHEDULE "2"

CORPORATION FALCONBRIDGE COPPER - 1980 DRILL PROGRAM

MISEMA NORTH - SUPERIOR NORTHWEST BLOCK - McELROY TOWNSHIP - ONTARIO

HOLE	FOOTAGE	DIP	AZMUTH	CORE SIZE	CLAIM NUMBER
LL 80-2	383	-50°	045°	AQ	L 522745
LL 80-3	365	-50°	045°	AQ	L 522745 and L 522746
LL 80-4	605	-50°	075°	AQ	L 522748
LL 80-5	307	-50	090°	AQ	L 522748
LL 80-6	307	-50°	270°	AQ	L 522752
LL 80-7	306	-50°	250°	AQ	L 522764
LL 80-8	362	-50°	250°	AQ	L 522764
LL 80-9	548	-70°	045°	AQ	L 522746 and L 522743
TOTAL	3,183	FEET			

SCHEDULE "2"

CORPORATION FALCONBRIDGE COPPER 1980 DRILL PROGRAM

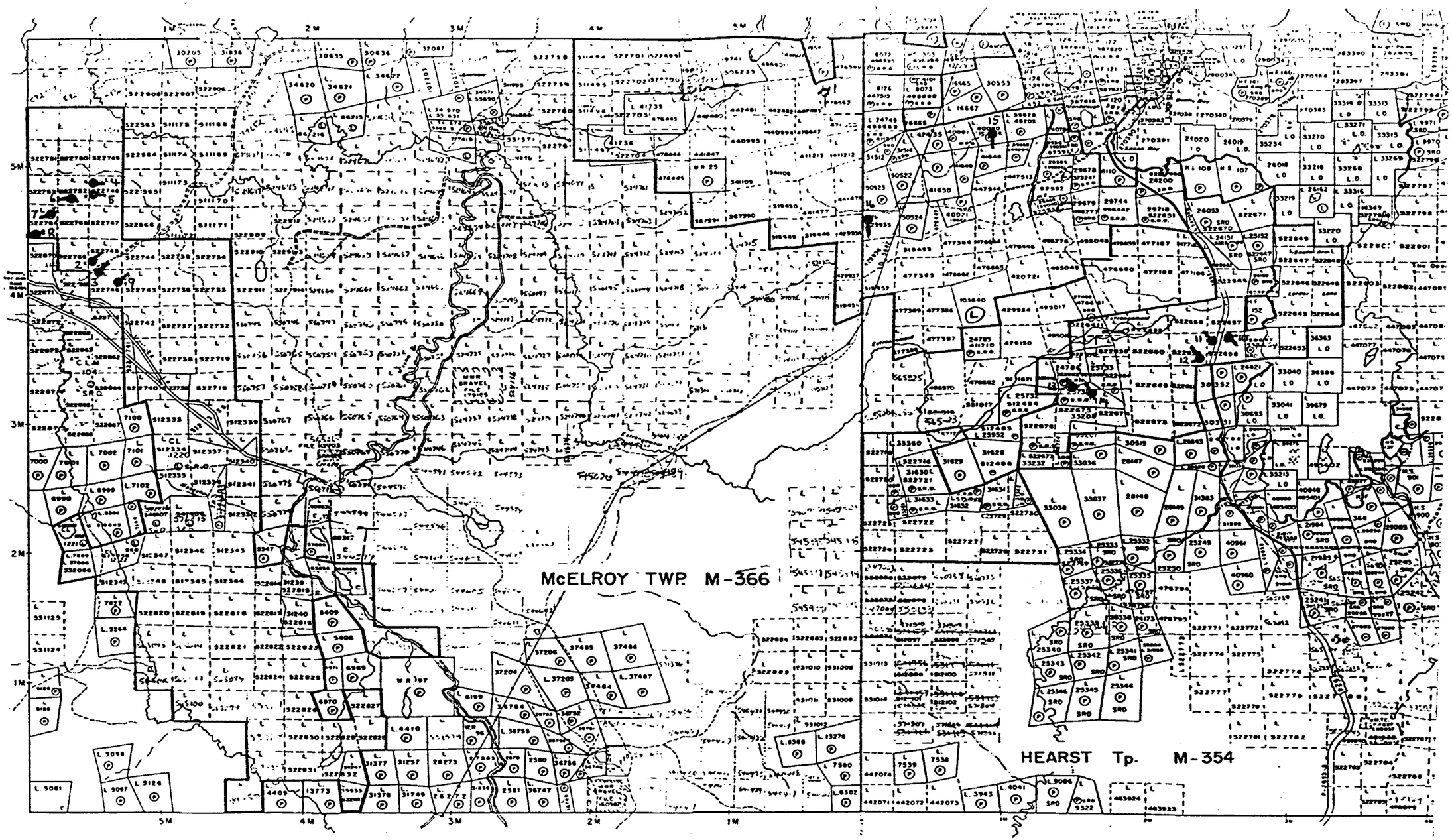
LARDER LAKE BLOCK

McELROY - HEARST TOWNSHIPS

HOLE NUMBER	FOOTAGE	DIP	AZMUTH	CORE SIZE	CLAIM NUMBER
LL 80-1	811	-50°	270°	AQ	L 476663
LL 80-10	407	-50°	135°	AQ	L 522658
LL 80-11	417	-50°	345°	AQ	L 522658
LL 80-12	452	-50°	315°	AQ	L 522659
LL 80-13	389	-50°	315°	AQ	L 522662
LL 80-14	396	-50°	315°	AQ	L 522663 and L 522675
*LL 80-15	356	-50°	180°	AQ	L 40080 (P)
LL 80-16	316	-50°	180°	AQ	L 429935
TOTAL	3,544 FEET				

* LL 80-15 - Drilled on Patented Claim and not eligible for assessment credit

3,544' less 356' = 3,188 Feet Eligible for Assessment Credit.



CORPORATION FALCONBRIDGE COPPER

FIGURE I. CLAIM MAP 1980 DRILL PROGRAM

0 1 2

MILES

1980 DRILL PROGRAM

LARDER LAKE PROJECT AREAS

PN 630 TO 637 INCLUSIVE
McELROY - HEARST TOWNSHIPS, ONTARIO

NTS 32-D-4

FRANK BALINT
CORPORATION FALCONBRIDGE COPPER
THUNDER BAY, ONTARIO

DECEMBER 10, 1980

CONTENTS

SUMMARY:

Sixteen AQ wireline diamond drill holes were completed totalling 6,727 feet in McElroy and Hearst Townships. Hole LL 80-1 is located on Claim L 47663 (C. F. C.) McElroy Township. Holes LL 80-2 to LL 80-9 inclusive are located on C. F. C. Misema North Group, McElroy Township. Holes LL 80-10 to LL 80-14 inclusive are located on C. F. C. Larder Lake Extension Group, Hearst Township. Holes LL 80-15 and 16 are located on Many Metals Mines Ltd., Option (D. Lowe), Hearst Township. The holes were drilled between March 25th, 1980 and September 18th, 1980, by McKnight Drilling Company of Haileybury, Ontario.

No base or precious metals of a commercially exploitable nature were discovered. Application is made for assessemnt credit equivalent to 3,188 days of work on the Larder Lake Claims and 3,183 days on the Misema North - Superior Northwest Claims.

INTRODUCTION:

Sulphides, primarily pyrite and pyrrhotite occur in graphitic horizons interbedded with volcanic flows, volcanoclastics and sediments of the Larder Lake Group. These graphitic horizons are frequently base metal rich with sphalerite, chalcopyrite and galena occurring as primary syngenetic horizons and as later remobilized veinlets. Sulphides are assumed to be related to metal-exhalitive processes or remobilization from accumulations originally deposited by such processes.

Sixteen holes totalling 6,727 feet tested H.E.M., airborne INPUT and VLF anomalies in geologically and/or geochemically favourable environments.

LOCATION AND ACCESS:

Corporation Falconbridge Copper holds two separate blocks of contiguous claims in McElroy and Hearst Townships, Larder Lake Mining Division (Figure 1). For the purpose of this report the eastern block is referred to as the Larder Lake claims and the western block as the Mesima North - Superior Northwest claims. In 1980 eight holes were drilled on C. F. C. claims on the Mesima North - Superior Northwest block in McElroy Township and eight holes were drilled on C. F. C. claims and claims optioned from Many Metals Mines Limited (D. Lowe), on the Larder Lake block in McElroy and Hearst Townships.

Access was via the Adams Mine pump house road in McElroy Township, old lumber roads going west from Bensen Creek on Highway 624 and old lumber roads that join Highway 66, 1000 feet west of Larder Lake Townsite in Hearst Township.

TOPOGRAPHY AND VEGETATION:

Topographic relief is gentle and does not exceed 50 feet. The predominant vegetation consists of thick alder swales with second growth poplar, jackpine, spruce and balsam on the few intervening ridges.

PROPERTY:

The drill program was completed on claims as summarized below.

CLAIM GROUP	CLAIM NO.	TOWNSHIP	HOLE NUMBER	FOOTAGE
C.F.C. Larder Lake	L 476663	McElroy	LL 80-1	811
C.F.C. Misema North	L 522745	McElroy	LL 80-2	383
C.F.C. Misema North	L 522745 & L 522746	McElroy	LL 80-3	365
C.F.C. Misema North	L 522748	McElroy	LL 80-4	605
C.F.C. Misema North	L 522748	McElroy	LL 80-5	307
C.F.C. Misema North	L 522752	McElroy	LL 80-6	307
C.F.C. Misema North	L 522764	McElroy	LL 80-7	306
C.F.C. Misema North	L 522764	McElroy	LL 80-8	362
C.F.C. Misema North	L 522746 & L 522743	McElroy	LL 80-9	548
C.F.C. Enstrangement Lake	L 522658	Hearst	LL 80-10	407
C.F.C. Enstrangement Lake	L 522658	Hearst	LL 80-11	417
C.F.C. Enstrangement Lake	L 522659	Hearst	LL 80-12	452
C.F.C. Enstrangement Lake	L 522662	Hearst	LL 80-13	389
C.F.C. Enstrangement Lake	L 522663 & L 522674	Hearst	LL 80-14	396
* Many Metals Mines Ltd. (D. Lowe)	L 40080 (patented)	Hearst	LL 80-15	356
Many Metals Mines	L 429935	Hearst	LL 80-16	316
			TOTAL FOOTAGE	6,727

* Note - Not filed for assessment credit.

PREVIOUS WORK:

Approximately 95 holes are known or are reported to have been drilled on the properties covered in this report. Logs exist in the assessment files for about two-thirds of the holes. Drilling to date by C. F. C. is summarized in the table below.

CORPORATION FALCONBRIDGE COPPER - DRILLING - LARDER LAKE PROJECT

YEAR	NUMBER OF HOLES	HOLE DESIGNATION	FOOTAGE
1977	7	LL 77-1 to LL 77-7	3,322
1978	13	LL 77-3A, LL 78-1 to LL 78-12	5,627
1979	7	LL 79-1 to LL 79-7	4,306
1980	16	LL 80-1 to LL 80-16	6,727
TOTAL	43 HOLES	TOTAL FOOTAGE	19,982

The core from C. F. C. holes and salvaged core from 4 holes drilled by McElroy Syndicate in McElroy Township is stored at the Norbec Minesite, Noranda, P. Q. Some core, in poor condition, from the Amax drill program in the late 1960's is stored at Lowe's camp on claim L 40080 (P), Hearst Township. All remaining core has been lost.

1980 CORPORATION FALCONBRIDGE COPPER PROGRAM

Between March 25th, 1980 and September 18th, 1980, sixteen AQ wireline holes were completed by McKnight Drilling Company of Haileybury, Ontario, for a total footage of 6,727 feet. Three hundred and fifty-six feet (356')were drilled on a patented claim. The remaining drilling, 6,371 feet is filed for assessement credit (Appendix B).

HOLE LL 80-1:

Property: C.F.C. Larder Lake
Location: Claim L 476663, McElroy Township
Latitude: 13 + 75 W
Departure: 51 + 00 N
Azimuth: 180°
Dip: -50°
Depth: 811'

Tested HEM conductor with corresponding geochemical Cu and Zn anomalies 300 feet west of LL 77-3A which had intersected interesting zinc values. Intersected graphite-rich interflow sediments between in situ brecciated tholeiitic basalts. Graphitic sections contained anomalous zinc. Best values obtained:

FROM	TO	LENGTH	ZINC
499.5	500.8	1.3'	.83%
516.6	531.6	15.0'	.52%
541.6	546.6	5.0'	.33%

HOLE LL 80-2:

Property: C.F.C. Misema North
Location: Claim L 522745, McElroy Township
Latitude: 30 + 00 N W
Departure: 2 + 15 S W
Azimuth: 045°
Dip: -50°
Depth: 383'

Tested an 1800 foot long coincident VLF and HEM conductor with accompanying resistivity low and anomalous Cu, Zn lithogeochemical values. Intersected graphitic argillites with anomalous Cu and Zn values at the main sediment-tholeiitic basalt contact and a second Zn-rich horizon of bedded sphalerite-graphite and felsic tuff at the tholeiite-basaltic komatiite contact. Best values obtained are as follows:

MAIN GRAPHITIC ZONE

FROM	TO	LENGTH	Cu. ppm	Zn	Pb ppm	Co ppm	Ni ppm
150.3	151.7	1.4'	398	1.82%	65	60	255
157.6	158.0	0.4	1.86%	3.20%	80	90	265
122.7	164.6	41.9	362	0.16%	37	30	77

INTER FLOW SEDIMENT

296.0	300.4	4.4	0.13%	0.90%	77	125	250
296.0	308.6	12.6	753	0.49%	56	90	225

HOLE LL 80-3:

Property: C.F.C. Misema North
Location: Claim L 522745 and L 522746, McElroy Township
Latitude: 24 + 00 N W
Departure: 2 + 50 S W
Azimuth: 045°
Dip: -50°
Depth: 365'

Tested an 1800 foot long coincident VLF and HEM conductor with accompanying resistivity low and anomalous Cu, Zn lithogeochemical values, 600 feet east of LL 80-2. Intersected graphitic argillites with anomalous Cu and Zn values at the main sediment-tholeiitic basalt contact and bedded sphalerite/graphite at the tholeiitic basalt-peridotitic komatiite contact. Best values obtained are as follows:

MAIN GRAPHITIC ZONE

FROM	TO	LENGTH	Cu ppm	Zn	Pb ppm	Co ppm	Ni ppm
259.9	262.5	2.6	730	0.65%	65	100	365
240.0	262.5	22.5	256	0.13%	35	33	103

INTER FLOW SEDIMENT

309.4	312.0	2.6	0.18%	1.00%	103	153	320
313.4	313.6	0.2	0.14%	1.65%	42	190	390
314.5	315.3	0.8	470	0.79%	37	103	318
306.2	315.3	9.1	990	0.48%	55	119	232

HOLE LL 80-4

Property:	C.F.C. Misema North
Location:	Claim L 522748, McElroy Township
Latitude:	56 + 50 N W
Departure:	23 + 50 N E
Azimuth:	075°
Dip:	-50°
Depth:	605'

Tested a coincident HEM, VLF, resistivity and geochemical anomaly. Intersected weakly graphitic argillites and two feet of seim-massive pyrite and pyrrhotite at the contact between a peridotitic komatiite and pillowed tholeiitic basalt flows. No significant assays were obtained.

HOLE LL 80-5

Property:	C.F.C. Misema North
Location:	Claim L 522748, McElroy Township
Latitude:	53 + 80 N W
Departure:	21 + 20 N E
Azimuth:	090°
Dip:	-50°
Depth:	307'

Tested the same coincident HEM, VLF resistivity and geochemical anomaly at LL 80-4, 400 feet to the south. Intersected 2.4 feet of semi massive to massive pyrite and pyrrhotite between dirty polymictic cobble to pebblestones with interbedded argillites and greywackes and pillowed tholeiitic basalts. No significant assays were obtained.

HOLE LL 80-6

Property:	C.F.C. Misema North
Location:	Claim L 522752, McElroy Township
Latitude:	51 + 10 N W
Departure:	10 + 90 N E
Azimuth:	270°
Dip:	-50°
Depth:	307'

Tested a strong VLF anomaly with a weak corresponding HEM response. The conductor was believed to be a north-south fault zone, which may be mineralized. Intersected a differentiated ultrabasic intrusive with a strongly sheared, serpentinized margin which is weakly conductive. No mineralization was intersected.

HOLE LL 80-7

Property:	C.F.C. Misema North
Location:	Claim L 522764, McElroy Township
Latitude:	52 + 00 N E
Departure:	1 + 50 N E
Azimuth:	250°
Dip:	-50°
Depth:	306'

Tested a corresponding VLF, HEM anomaly thought to represent the westward faulted extension of the conductor drilled by LL 80-2, 80-3, and 80-9. Intersected 91.5 feet of sporadic, weakly graphitic argillite containing only trace sphalerite. Surrounding rocks consisted of argillites and greywackes. No significant assays were obtained.

HOLE LL 80-8

Property:	C.F.C. Misema North
Location:	Claim L 522764, McElroy Township
Latitude:	52 + 00 N W
Departure:	5 + 00 S W
Azimuth:	250°
Dip:	-50°
Depth:	362'

Tested a coincident VLF, HEM anomaly believed to be the westward faulted extension of a chalcopyrite - sphalerite bearing graphitic horizon exposed on Claim L 522746. Intersected a considerable section (100 feet) of pyritic - graphitic argillite within a sedimentary section of argillites and greywackes. Only trace chalcopyrite and sphalerite were intersected and no assays of significance were obtained.

HOLE LL 80-9

Property: C.F.C. Misema North
Location: Claim L 522746 and L 522743, McElroy Township
Latitude: 16 + 00 N W
Departure: 1 + 00 S E
Azimuth: 045°
Dip: -70°
Depth: 548'

Tested an 1800 foot long coincident VLF and HEM conductor, 800 feet east of LL 80-3, at a depth of 500 feet. Intersected graphitic sediments with minor sphalerite bearing beds between silicified sediments and a serpentinized peridotitic komatiite. Best samples included:

FROM	TO	LENGTH	CU ppm	Zn %
450.5	450.7	0.2	190	0.62
508.0	509.0	1.0	165	0.68
508.0	517.0	9.0	232	0.20

HOLE LL 80-10

Property: C.F.C. Larder Lake Extension
Location: Claim L 522658, Hearst Township
Latitude: 12 + 00 S W
Departure: 13 + 75 S E
Azimuth: 135°
Dip: -50°
Depth: 407'

Tested a 600 foot coincident VLF, HEM anomaly. Intersected 30.4 feet of pyritic graphite at a basaltic komatiite-peridotitic komatiite contact. Best values obtained included:

FROM	TO	LENGTH	CU ppm	Zn %
296.0	298.0	2.0	700	0.68
318.0	322.4	4.4	625	0.26
296.0	322.4	26.4	318	0.18

HOLE LL 80-11

Property: C.F.C. Larder Lake Extension
Location: Claim L 522658, Hearst Township
Latitude: 16 + 00 S W
Departure: 12 + 00 S E
Azimuth: 345°
Dip: -50°
Depth: 417'

Tested a 1000 foot long southwest-northeast striking HEM anomaly corresponding to a chalcopyrite showing in graphitic argillites on Line 16 S W. Intersected approximately 250 feet of graphite and graphitic argillites between in situ brecciated tholeiitic basalts. Only trace sphalerite and chalcopyrite were observed in the graphitic sections. Assay results included:

FROM	TO	LENGTH	Cu ppm	Zn ppm
156.0	190.0	34.0	175	797
156.0	159.0	3.0	306	0.20%
190.0	387.0	197.0	134	732
312.0	322.0	10.0	163	0.11%
327.0	332.0	5.0	177	0.12%
347.0	352.0	15.0	207	0.13%
367.0	372.0	5.0	185	0.11%
382.0	387.0	5.0	190	0.12%

HOLE LL 80 -12

Property: C.F.C. Larder Lake Extension
Location: Claim L 522659, Hearst Township
Latitude: 24 + 00 S W
Departure: 13 + 00 S E
Azimuth: 315°
Dip: -50°
Depth: 452'

Tested a north-south striking HEM anomaly, with at least 1200 feet length. Intersected 135.4 feet of pyritic graphite to graphitic argillite, 22.4 feet of rhyolite tuff and 13.7 feet of graphitic argillite between weakly graphitic argillite-wackes and a sheared ultramafic volcanoclastic. Assay results obtained:

FROM	TO	LENGTH	Cu ppm	Zn
77.5	158.0	80.5	111	807
152.0	158.0	5.0	340	0.30%
219.6	355.0	135.4	292	0.12%
308.0	308.5	0.5	410	0.83%
314.1	315.2	1.1	430	0.52%
377.4	391.1	13.7	334	0.19%

HOLE LL 80-13

Property: C.F.C. Larder Lake Extension
Location: Claim L 522662, Hearst Township
Latitude: 64 + 00 S W
Departure: 10 + 75 N W
Azimuth: 315°
Dip: -50°
Depth: 389'

Tested an southwest - northeast striking HEM conductor with over 5000 feet strike length, approximately 2400 feet west of a hole drilled by INCO in the 1960's. Intersected 111.6 feet of intercalated argillite and greywacke with graphitic bands and 2.2 feet of massive pyrite at the contact between greywacke and basaltic komatiite. Assays included:

FROM	TO	LENGTH	Cu ppm	Zn %
341.0	346.0	5.0	830	0.72
361.0	362.7	1.7	545	0.19

HOLE LL 80-14

Property: C.F.C. Larder Lake Extension
Location: Claims L 522675 and L 522663, Hearst Township
Latitude: 60 + 00 S W
Departure: 3 + 75 N W
Azimuth: 315°
Dip: - 50°
Depth: 396'

Tested a southwest - northeast striking HEM conductor with over 5000 feet strike length approximately 2400 feet west of a hole drilled by INCO in the 1960's. Intersected 83.9 feet of graphite with intercalated graphitic argillite and 1.7 feet of massive pyrite at the contact between sediments and in situ brecciated tholeiitic basalt. Assay results included:

FROM	TO	LENGTH	Cu ppm	Zn %
134.0	179.5	45.5	237	0.19
215.0	221.0	6.0	128	0.21

HOLE LL 80 - 15

Property: Many Metals Option (D. Lowe)
Location: Claim L 40080 (Patented) McElroy Township
Latitude: 52 + 00 E
Departure: 32 + 00 N
Azimuth: 180°
Dip: -50°
Depth: 356.4'

Tested an east-west striking, 600 foot long HEM anomaly 1500 feet northwest of the AMAX zone. Intersected 165.2 feet of weakly pyritic graphitic argillite between in situ brecciated tholeiitic basalts. Assays included:

FROM	TO	LENGTH	Cu ppm	Zn %
147.2	167.0	19.8	226	0.16
177.0	212.0	35.0	230	0.17
237.0	247.0	10.0	195	0.12

HOLE LL 80 - 16

Property: Many Metals Option (D. Lowe)
Location: Claim L 429935, Hearst Township
Latitude: 4 + 00 E
Departure: 2 + 75 S
Azimuth: 180°
Dip: - 50°
Depth 316'

Tested a 1000 foot long, northwest-southeast striking VLF, HLEM anomaly. Intersected 23.5 feet of pyritic graphite at the contact between sediments and pillowed tholeiitic basalt. No significant assays were obtained.

CONCLUSIONS:

No base or precious metals of an economically significant nature were encountered during this drill program. Syngenetic bedded sphalerite was cored in LL 80-2, 80-3 and 80-9 and suggests that metal exhalitive processes were active in the Larder Lake Group rocks.

Frank Balint

FRANK BALINT - EXPLORATION GEOLOGIST
CORPORATION FALCONBRIDGE COPPER

DECEMBER 10, 1980

STATEMENT OF QUALIFICATIONS

I, Frank Balint, of the City of Thunder Bay, District of Thunder Bay, Province of Ontario, do hereby certify that:

1. I am an Exploration Geologist, residing at 410 Red River Road, Thunder Bay, Ontario. P7B 1B3

2. I have received a Honours Bachelor of Science Degree, in Geology, from Lakehead University, Thunder Bay, Ontario (1977).

3. I have been actively engaged in mineral exploration since 1977.

4. I am presently employed as an Exploration Geologist by Corporation Falconbridge Copper, Thunder Bay, Ontario.

5. I have personally supervised the exploratory work described in this submission.

Dated at Thunder Bay, Ontario, this 15 day of December 1980.

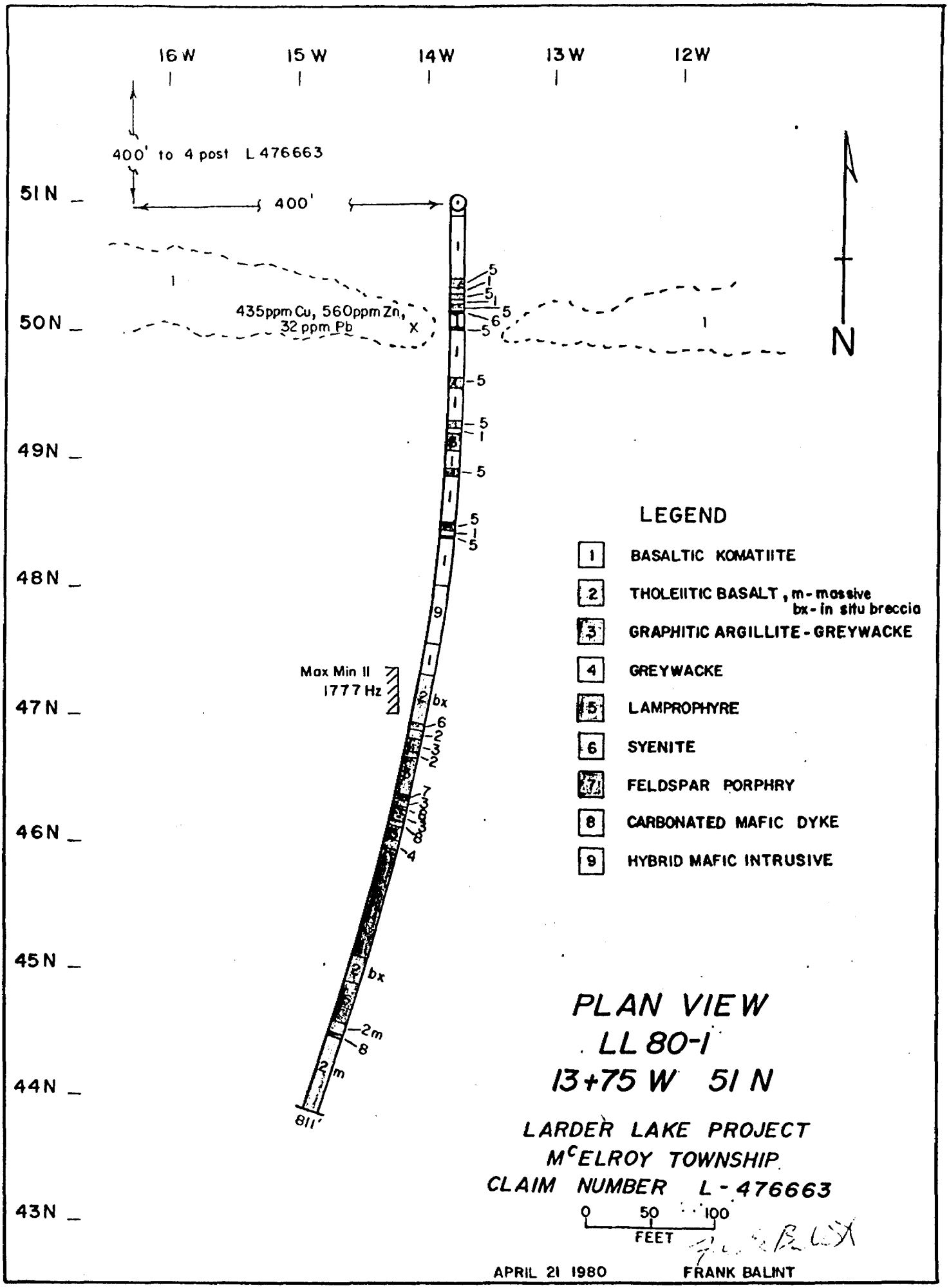
Frank Balint

Frank Balint

FRANK BALINT H BSc.
EXPLORATION GEOLOGIST

APPENDIX "A"

1980 DRILL LOGS, PLANS AND SECTIONS

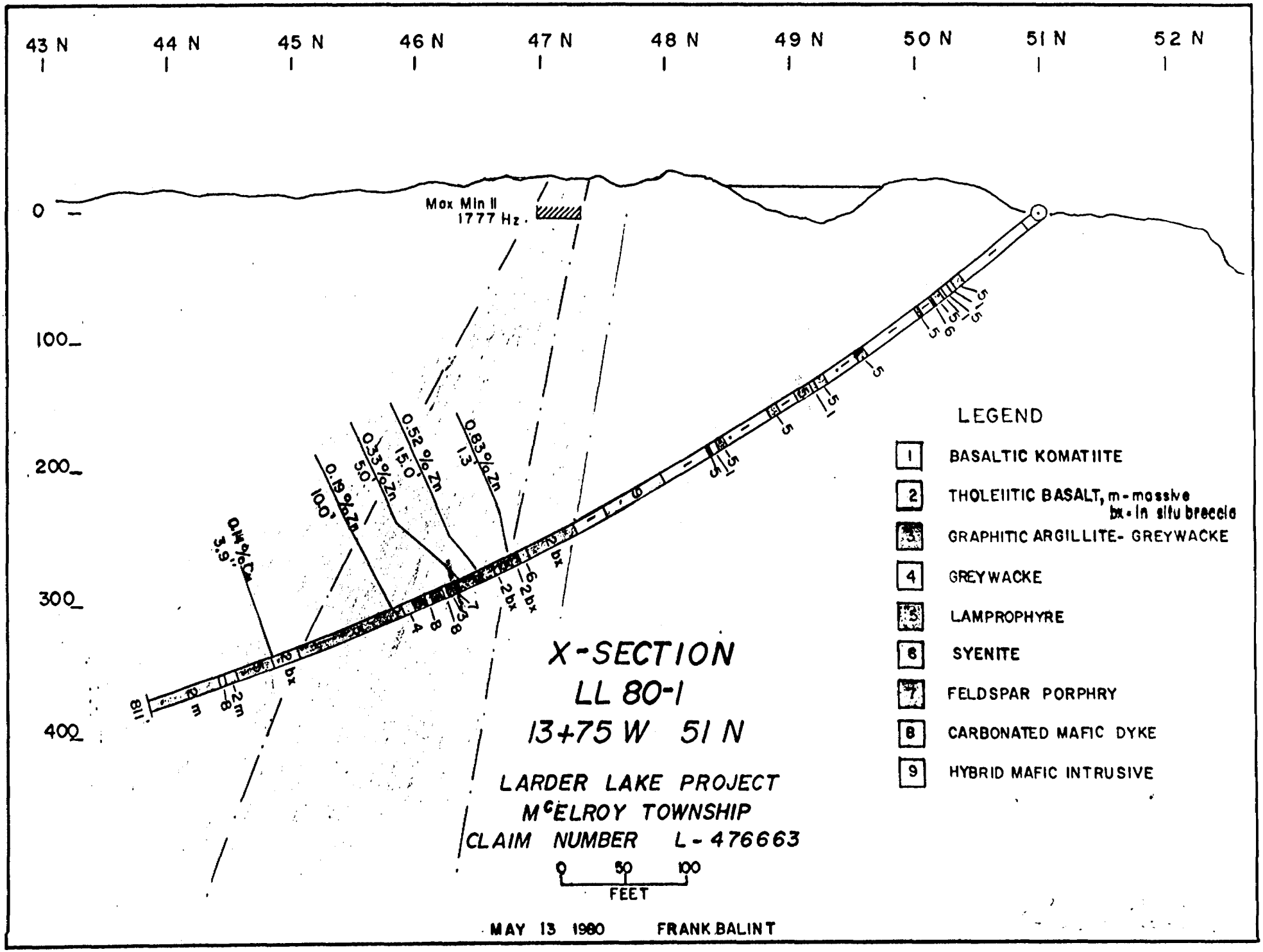


PLAN VIEW
LL 80-1
13+75 W 51 N

LARDER LAKE PROJECT
McELROY TOWNSHIP
CLAIM NUMBER L-476663

0 50 100
FEET

APRIL 21 1980 FRANK BALINT


43 N
44 N
45 N
46 N
47 N
48 N
49 N
50 N
51 N
52 N
0
100
200
300
400
Max Min II
1777 Hz.
0.52 % Zn
15.0
0.83 % Zn
1.3
0.33 % Zn
5.0
0.19 % Zn
10.0'
0.14 % Cu
3.9'
X-SECTION
LL 80-1
13+75 W 51 N
LARDER LAKE PROJECT
McELROY TOWNSHIP
CLAIM NUMBER L-476663
0 50 100
FEET
MAY 13 1980 FRANK BALINT
LEGEND
1 BASALTIC KOMATIITE
2 THOLEIITIC BASALT, m-massive bx-in situ breccia
3 GRAPHITIC ARGILLITE- GREYWACKE
4 GREYWACKE
5 LAMPROPHYRE
6 SYENITE
7 FELDSPAR PORPHRY
8 CARBONATED MAFIC DYKE
9 HYBRID MAFIC INTRUSIVE

FALCONBRIDGE COPPER LTD.
EXPLORATION
DRILL HOLE RECORD

Hole No.	Lat.	Dep.	Elev.	Dip	Bearing	Depth	Core
LL 80-1	L 13+75W	51+00N	-	-50°	180°	811'	AQ

Working Place: LARDER LAKE
PROJECT

Date Started: March 25,1980
Date Completed: April 2,1980

Compass Tests

Mag. Declination Depth	Dip	T. Azim.	Acid Test Depth	Dip	Depth	Dip
811	-18°	199°	300'	-32°		

Falconbridge Copper Ltd.
Claim # L-476663 McElroy Township

Drilling Contractor: McKnight Diamond Drilling

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 - 12.0	Casing							
12.0 - 77.6	Carbonate Altered Komatiite (Basaltic)	Light blue-green with white speckles	Fine-grained sugary appearance	Massive	weak foliation at 50° to C.A. Fine network of carbonate veinlets 1-2% throughout. Occasional quartz-carbonate veinlet up to 5 mm at random angles to core. Lamprophyre dykes at 36.3 - 36.4 46.7 - 47.8 48.9 - 50.0 52.0 - 52.6 53.2 - 53.4 53.7 - 56.6 (granitoid fragment at 54.3) 68.7 - 68.9 70.4 - 70.5 72.0 - 74.1	Pervasive carbonate alteration (3-4%). Fine leucoxene? speckling (white) throughout section at varying intensity. Magnetite evident as euhedral xylls up to 1 mm (61.7). Hematite along fractures 1-2%.	Trace pyrite as euhedral crystals up to 3 mm.	Sugary light blue-green colour common to more basaltic komatiites. Section magnetic throughout.

JF8 215M

Hole No. LL 80-1

Logged by ...Frank Balint.....

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
77.6 85.0	Lamprophyre dyke	Dk green to mauve with green-black laths	Medium grained	Porphyritic in micas and/or amphibole	Contacts sharp but irregular at high angle to C.A. Highly sheared at 83.6 & 84.8	Pervasive carbonate alteration	Trace pyrite	
85.0 90.0	Sheared carbonate altered komatiite	Dk green to blue-green	Fine grained	Massive	Sheared at 45° to C.A. Shearing invaded by carbonate 10-15%	Pervasive carbonate alteration and fracture filling carbonate	2% pyrite as euhedral cubes	Magnetic throughout. Assayed for Au. Probably Basaltic Komatiite.
90.0 95.0	Lamprophyre dyke	Similar to		76.6 - 85.0				
95.0 95.3	Syenite Porphyry Dyke	Pink to pinkish-green with dk green flecks.	Aphanitic to fine grained	Weakly porphyritic in a green mafic mineral	Upper contact with lamprophyre sharp at 45° to C.A. Lower contact with komatiite obscure.	Weak pervasive carbonate alteration	1% disseminate pyrite, less than 1 mm.	Along margin of lamprophyre dyke.
95.3 97.8	Carbonate altered Basaltic Komatiite	Lt blue-green with minute white speckles	fine grained	Massive	Massive and lacks structure except for a weak hint of foliation at about 60° to C.A. Lower contact with syenite ragged and at 45° to C.A.	Pervasive carbonate alteration 1-2% free carbonate as veinlets in a random network	Trace finely disseminated pyrite	Highly magnetic throughout.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
97.8 98.8	Syenitoid Dyke	Dk pinkish green	fine grained	Massive	Sharp ragged contacts at 45° to C.A.	Pervasive carbonate alteration	1-2% pyrite as euhedral xylls up to 2 mm	Hard compared to lamprophyre dykes. Assay for Au.
98.8 104.2	Lamprophyre dyke	As Previous Lamprophyre Dykes.						
104.2 107.4	Syenite Porphyry Dyke	Lt pinkish green with green speckles	fine grained	Massive to weakly porphyritic in green mafic mineral	Sharp contacts at 45° to C.A.	Weak pervasive carbonate alteration. Red hematite staining on some fractures.	Trace disseminated pyrite	Assayed for Au.
107.4 356.2	Carbonate Altered Basaltic Komatiite	Lt green with bluish hue on freshly broken surface	Sugary fine grained	Massive possibly variolitic in places (143.0)	Weakly foliated at 45° to C.A. Irregular carbonate veinlets up to 4 mm at various angles to axis (5%). Lamprophyre? (microdioritic) carbonated dyke at 118.8 to 121.0 Syenite porphyry dyke at 153.0 - 158.9 & 167.1 - 168.9 Lamprophyre dyke 171.9 - 181.2 slightly pink syenitic dyke (medium grained) 181.2-183.5	Pervasive carbonate alteration. Leucoxene? speckling irregularly throughout section. Slight bleaching of volcanic along quartz vein at 194.4 Carbonate-chlorite streaking at 50-60° to C.A. from 296 - 299 (5-10%)	Trace pyrite as coarse up to 4 mm cubes in sections accompanied by 1-2 mm magnetite xylls up to 10% at the base of flow? at 133.1 and 144.2 8-10% diss euhedral pyrite & 1-2% magnetite along pillow margin like feature rich in carbonate at 282.0	Magnetic throughout. Magnetite accumulations due to secondary alteration or primary segregation?

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					From 183.5 - 184.6 fine grained light green lamprophyre dyke. 190.4 - 190.5 light pink fine grained syenitedyke at 45° to C.A. 191.4 - 194.4 quartz veining 196.7 - 199.8 Carbonate altered med-fine grained mafic dyke. Hematite stained upper margin (1% Py) 212.0 - 220.7 light pink to green fine-med grained, multiple intrusions, brecciated syenite to lamprophyric dyke (hemative staining). 224.2 - 238.7 fine to med grained lamprophyre (hematite staining at chilled margins). Probably multiple intrusions again. Brecciated with wallrock xenoliths (226.0) 257.6 - 263.6 lamprophyric dyke fine-med grained green to pinkish-green.			

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					264.6 - 265.6 pinkish-green med grained lamprophyric dyke From 305.9 - 313.8 318.1 - 320.0 338.8 - 340.7 lamprophyric dykes at all angles to C.A. Quartz veining at 329.7 - 330 at 70° to C.A. In situ brecciated sections at 328.0 - 329.0 342.9 - 343.9 346.9 - 347.0			
356.2 359.8	Hybrid Basic Intrusive	Dk green with pinkish streaking and white speckling	fine grained	Massive	Cut by numerous calcite, hematite epidote bearing stringers & fractures	Weak carbonate alteration. Epidote, hematite in fractures	trace pyrite	Intrusive seems to have caught up wallrick and partially assimilated it
359.8 362.6	Altered Fractured Basaltic Komatiite	Lt green to weakly blue-green	fine grained to aphanitic	Massive	Cut by random network of quartz, carbonate hematite, epidote veins	Pervasive carbonate alteration (weak). Epidote fracture filling 5-10%	Pyrite in clots up to 10% at 361.5	5% magnetite crystals throughout. Magnetic.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
362.6 416.0	Basic Intrusive (Gabbroic hybrid)	Dk green speckled with white & lt green. In places pink to green with dk green speckles	Fine to medium grained	Massive	Cut by fine grained to aphanitic syenitic dykes 371.4 - 373.2 377.4 - 377.5 392.6 - 394.0 lamprophyre dykes at 378.6 - 382.3 403.7 - 405.5 410.5 - 411.7	Epidote-carbonate fracture filling 2-3%. Weak pervasive carbonate alteration. In places intense white speckling (leucoxene like mineral).	Trace to 2% pyrite throughout section.	Very strange looking intrusive. Leucoxene? alteration in this intrusive.
416.0 443.7	Basaltic Komatiite	Lt green to blue-green	Fine grained	Massive	1% free carbonate veining at random angles. Lacks strong foliation. Mafic dyke at 422.8 - 423.4	Reacts well with dilute HCl. Moderate pervasive carbonate alteration. Section from 442.2 to 443.7 strongely chloritic	Trace disseminated euhedral pyrite	Chloritic section preceeds bleached altered section below. Weakly magnetic.
443.7 472.8	Silicified Volcanic (possibly altered basaltic komatiite or tholeiitic basalt)	Lt green to very lt green mottled look	fine to aphanitic	Massive	Smeared out zone from 445.0 - 447.5 at 45° to C.A. Brecciated zone (hyaloclastic?) from 461.7 - 463.0 Mafic dykes at: 445.4 - 446.3 453.9 - 454.3	Weak pervasive carbonate alteration. Strong silicification reflected in bleaching and hardness of section. Minor chlorite in smeared out (sheared) section 445.0 - 447.5.	1-2% pyrite in brecciated section 461.7 - 463.0	Silicified volcanic immediately overlying car bonate altered graphitic in situ breccia, resembles typical altered tholeiitic basalt.
472.8 499.5	Carbonate Altered In situ Brecciated Volcanic (graphitic infilling)	Lt green to creamy white fragments set in a	Fine grained to aphanitic	Massive	Foliation noticed in sections at 45-50° to C.A. Matrix (graphitic argillites) from	Pervasive carbonate alteration in top of section. Less carbonate alteration as you approach the graphitic bed.	3-4% pyrite and pyrrhotite in matrix. 1-2% pyrite in dyke at 485.7 - 493.1	

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
		a black matrix			15-25% Pyriticmedium grained syenite? dyke from 485.7 - 493.1			
499.5 500.8	Graphite	Black with brassy coloured spots	Silt	Massive	Bedding at 45° to C.A. Upper contact gradational over 2" with in situ breccia. Lower contact sharp but rugged with graphite.	Weak carbonate alteration. 1% fine hairline carbonate filled fractures	Pyrrhotite nodules with trace chalcopyrite at 499.6 - 499.8. Trace sphalerite evident in fractures. 2-3% pyrite disseminated and as bed-like structures.	Chalcopyrite appears only with pyrrhotite nodules.
500.8 510.1	Interbedded Black Argillites & Greywacke	Light grey to dk black	Sands to silts	Massive	Bedding at 50° to C.A. Less than 1% fine carbonate veining. Coarse greywacke at top & grades to an argillite down section.	Weak pervasive carbonate alteration	1-2% disseminated euhedral pyrite throughout. 2-3% pyrrhotite from 508 - 510.1 in clots and as disseminations associated trace chalcopyrite and sphalerite	Mineralization tends to be restricted to finer argillite section.
510.1 516.6	In Situ Brecciated sediment? or Volcanic?	Lt grey to creamy yellow fragments in a dark black matrix	Sand to silt	Massive	Foliated at 50° to C.A. 20% matrix 80% fragments	Intense pervasive carbonate alteration throughout	None observed	May be volcanic fragments highly altered (carbonate)

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
516.6 568.7	Interbedded Graphitic Argillite & Greywacke	Black to lt grey in whispy bands	Silts to sands	Massive	Bedding at 45 - 50° to C.A. Feldspar porphyry (pink feldspar xylls up to 3 cm in creamy grey fine to medium grained groundmass) from 546.7 - 551.6 at 45° to C.A. Pyrrhotite rich light grey fine grained dyke intermediate-mafic composition from 553.7 - 558.0 at 70° to C.A.	Weak pervasive carbonate alteration. Chlorite observed along fractures which are mineralized Free carbonate veining average 3-5% over section. Up to 25% veining at 516.6 - 521.6	516.6 - 521.6 up to 2-3% sphalerite as disseminations & fracture filling, as well as trace chalcopyrite. 523 - 525 1% disseminated sphalerite trace pyrrhotite and 3-4% pyrite as nodules. 529.6 - 5316. from 3-4% sphalerite as disseminations, fracture filling & in nodule-like clots with associated 0.5% chalcopyrite 545.0 - 546.0 trace sphalerite Rest of section 1-2% disseminated pyrite with concentrations of pyrite nodules up to 20% at 543.5 - 545.5	Carbonate fracture sections apparently more sphalerite.
568.7 575.6	Halo of silicified sediments surrounding pyrrhotite bearing intermediate dykes	Lt grey to creamy white altered sediments, Lt grey dykes	Fine grained dykes. Sand to silt sediments	Massive microdiorite dykes	Intermediate dykes at 45° to C.A. at 569.3 - 570.6 and 573.2 - 574.6	Pervasive carbonate alteration in dykes. Silica alteration in halo around dykes for 0.5' above dykes between the two dykes & 1.0 feet below the dykes	2% disseminated pyrite in the dykes.	

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
575.6 584.3	Interbedded Graphitic Argillite & Greywacke	Lt grey & black banded with brassy spots	Silt to sand sized	Massive	Bedding at 45° to C.A. Section becomes graphitic and pyritic from 583 to 584.3	Very weak pervasive carbonate alteration. 1-2% fine carbonate veining.	Trace pyrite throughout section. 20% pyrite as nodules from 583.0 to 504.3 No visible economic sulphides.	
584.3 595.0	Greywacke	Lt grey	sand sized	Massive	Rather thick beds on the scale of a few cm. No grading evident. Bedding at 45° to C.A.	Mild carbonate alteration (pervasive)	Trace disseminated pyrite.	
595.0 688.3	Graphitic Argillite with minor intercalations of greywacke	Dk black with grey interbeds & brassy spots	silt to sand	Massive	Bedding at 45° to C.A. Carbonate pyrrhotite rich mafic dykes at: 601.0 - 602.5 604.1 - 604.3 613.1 - 614.1 615.1 - 618.5 620.6 - 621.6 622.3 - 629.9 631.8 - 633.7 635.4 - 635.8 639.0 - 645.0 646.7 - 647.0 652.3 - 652.4 655.7 - 656.1 657.7 - 658.2 663.0 - 663.8 668.7 - 668.9 These last three	Weak pervasive carbonate alteration in sediments. Moderate carbonate alteration in dykes. 2-3% fine veinlets of carbonate. Silicification haloes around the last three dykes in section (see structure)	3% pyrrhotite in dykes. 595.0 - 608.0 10-15% pyrite as nodules and/or boudinaged beds up to 2 cm thick. Trace sphalerite or chalcopyrite noted in hairline fractures at 604.3 612.5 631.6 634.0 - 637.0 652.4 - 652.8 Section 652.8 to 686.8 is virtually barren of sulphides.	The mafic dykes are identical to those encountered in Amax Zone. These dykes did not seem to occur in the volcanics above the graphitic sediments.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					dykes have pronounced silicification halos extending up to 1.0 feet into the sediments. From 653.0 - 686.8 the section becomes less graphitic and more sandy. Section from 686.8 - 688.3 is more graphitic.		686.8 o 688.3 contains 5% pyrrhotite as clots and 0.5% chalcopyrite associated with it.	
688.3 706.3	Chloritic mineralized in situ brecciated tholeiite	Dk green matrix lt green fragments	Fine to aphanitic	Massive	Foliation at 40° to C.A. 1% random carbonate veinlets. Chlorite-pyrrhotite matrix. Tholeiite fragments.	Pervasive carbonate alteration, reacts well with dilute HCl	3-5% pyrrhotite the majority in the matrix from 688.3 to 702.4, also trace chalcopyrite in this section. From 702.4 - 706.4 0.5% chalcopyrite occurring with 10 to 15% pyrrhotite as wisps and clots in the matrix.	Matrix appears to contain strong semi massive dark green chlorite (especially at 699.0).
706.3 738.2	Lamprophyre Dyke	Dk green to black	Fine to medium	Massive to weakly mica porphyritic	Contacts rugged at steep angles to core	Pervasive carbonate alteration	None	

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
738.2 811.0	Massive Basalt END OF HOLE	Light green	Fine grained	Massive	Hint of weak in situ brecciation in places 754.5 - 756.0 and at 707.0. Mafic dykes very similar to host volcanic at 747.5 - 751.0 and 779.2 - 780.8	Weak pervasive carbonate alteration. Chloritic matrix in situ brecciated sections.	754.5 - 756.0 15% pyrrhotite finely disseminated. Pyrrhotite in carbonate rich clots at: 758.0 759.2 - 759.3 763.8 - 764.0 765.5 766.0 768.5 - 769.0 771.2 772.0 773.3 775.5 776.5 789.0 804.9	Very homogeneous massive mafic rock

JEB 1982

Hole No. LL 80-1

JVR 1624

SULPHIDES #1

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE		LENGTH FT.	ppm Cu	ppm Zn	ASSAYS Oz. Ag	Oz. Au	ppm Pb	ppm Co	ppm Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	22551	85.0	90.0	A	u	5.0				.001						]								
	22552	97.8	98.8	A	u	1.0				.001						]								
	22553	104.2	107.4	A	u	3.2				.001						]								
	22554	153.0	158.9	A	u	5.9				.001						]								
	22555	196.7	199.8	A	u	3.1				.001						]								
	22556	212.0	215.9	A	u	3.9				.001						]								
	22557	224.2	228.0	A	u	3.8				.001						]								
	22558	233.7	238.7	A	u	5.0				.001						]	These samples of pyritic syenitic & lamprophyric							
	22559	318.1	320.0	A	u	1.9				.001						]	dykes for Au							
	22560	338.8	340.7	A	u	1.9				.001						]								
	22561	257.6	262.6	A	u	5.0				.001						]								
	22562	262.6	263.6	A	u	1.0				.001						]								
	22563	356.2	359.8	A	u	3.6				.001						]								
	22564	359.8	362.6	A	u	2.8				.001						]								
	22565	362.6	367.6	A	u	5.0				.001						]								
	22566	371.4	373.2	A	u	1.8				.001						]								
	22567	392.6	394.0	A	u	1.4				.001						]								
	22568	485.5	489.0	A	u	3.5				.001						]								
	22569	489.0	493.1	A	u	4.1				.001						]			ppm Cu	ppm Zn	ppm Pb	ppm Co	ppm Ni	
	22570	499.5	500.8			1.3	910	0.83%	0.03	.001	110	90	190	black graphite				1.3'	910	0.83%	110	90	190	

HOLE NO. LL 80-1

JER 1624

SULPHIDES #2

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ppm Cu	ppm Zn	ASSAYS Oz. Ag	Oz. Au	ppm Pb	ppm Co	ppm Ni	PROGRESSIVE TOTALS Ft Oz Ag	Ft Oz Au	
	22571	500.8	505.0			4.2	165	550	0.02	.001	50	20	50			Argillite-Cwke
	22572	505.0	510.1			5.1	400	1650	0.04	.001	70	30	70			
	22573	510.1	513.0			2.9	155	500	0.05	.001	80	70	10			In situ brecciated
	22574	513.0	516.6			3.6	200	500	0.05	.001	90	80	120			volcanic
	22575	516.6	521.6			5.0	330	0.46%	0.05	.001	1250	50	100			Bedded graphitic
	76	521.6	523.0			1.4	180	940	0.02	.001	220	20	40			arg.llites and greywackes
	77	523.0	525.0			2.0	1900	1.50%	0.22	.001	470	100	200			
	78	525.0	529.6			4.6	255	1800	0.02	.001	90	20	60			
	79	529.6	531.6			2.0	710	0.78%	0.03	.001	190	50	100			
	80	531.6	536.6			5.0	78	415	0.02	.001	40	10	20			
	81	536.6	541.6			5.0	120	580	0.02	.001	30	20	40			
	82	541.6	546.6			5.0	370	0.33%	0.02	.001	70	50	120			
	83	546.6	551.6			5.0	73	200	0.01	.001	40	20	40			
	84	551.6	553.7			2.1	132	2100	0.01	.001	30	20	60			
	85	553.7	558.0			4.3	62	215	0.01	.001	40	30	50			
	86	558.0	563.7			5.7	250	1350	0.01	.001	60	20	70			
	87	563.7	568.7			5.0	51	1500	0.01	.001	30	20	40			
	88	568.7	572.5			3.8	55	200	0.01	.001	50	20	30			dyked section
	89	572.5	575.6			3.1	70	150	0.01	.001	40	20	30			with silicification
	90	575.6	580.0			4.4	65	210	0.01	.001	20	10	20			

REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
			ppm Cu	ppm Zn	ppm Pb	ppm Co	ppm Ni
	15.0'	552	0.52%	553	45	95
	5'	370	0.33%	40	20	40

HOLE NO. LL 80-1

JKR 1684

SULPHIDES #3

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ppm Cu	ppm Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ppm Pb	ppm Co	ppm Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	
	22591	580.0	584.3			4.3	78	175	0.01	.001	80	30	40			
	92	595.0	600.0			5.0	325	2100	0.03	.001	170	70	150			
	93	600.0	605.0			5.0	325	1600	0.02	.001	70	50	140			tr sph
	94	605.0	610.0			5.0	200	600	0.02	.001	70	30	40			
	95	610.0	615.1			5.1	80	210	0.02	.001	30	10	40			tr sph
	96	615.1	618.5			3.4	91	85	0.01	.001	40	40	50			
	97	618.5	622.3			3.8	67	185	0.01	.001	30	20	20			
	98	622.3	626.9			4.3	56	90	0.01	.001	50	20	60			
	99	626.9	631.8			4.9	76	340	0.01	.001	40	10	30			tr sph
	22600	631.8	633.7			1.9	88	110	0.01	.001	60	20	20			
	22601	633.7	639.0			5.3	70	1030	0.01	.001	440	20	30			tr sph
	02	639.0	645.0			6.0	52	110	0.01	.001	50	30	50			tr sph bedded graphitic argillites & greywackes
	03	645.0	650.0			5.0	72	330	0.01	.001	40	10	40			tr sph
	04	650.0	652.8			2.8	92	350	0.01	.001	40	10	30			tr sph
	05	686.8	688.3			1.5	630	1550	0.02	.001	70	30	100			strong graphite
	06	688.3	693.3			5.0	200	600	0.02	.001	70	80	140			
	07	693.3	698.3			5.0	100	345	0.02	.001	70	80	120			In situ brecciated tholeiite
	08	698.3	702.4			4.1	215	890	0.03	.001	80	90	180			
	09	702.4	706.3			3.9	1430	980	0.08	.001	100	170	210			estimated 0.5% chalcopyrite equal to 1750 ppm Cu
	22610	754.5	756.0			1.5	960	560	0.06	.001	90	170	220			

REMARKS AND AVERAGE ASSAYS							
FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
		10.0'		0.19%			
		3.9'	0.14%	980	100	170	210
			ppm Cu	ppm Zn	ppm Pb	ppm Co	ppm Ni

HOLE NO. LL 80-1

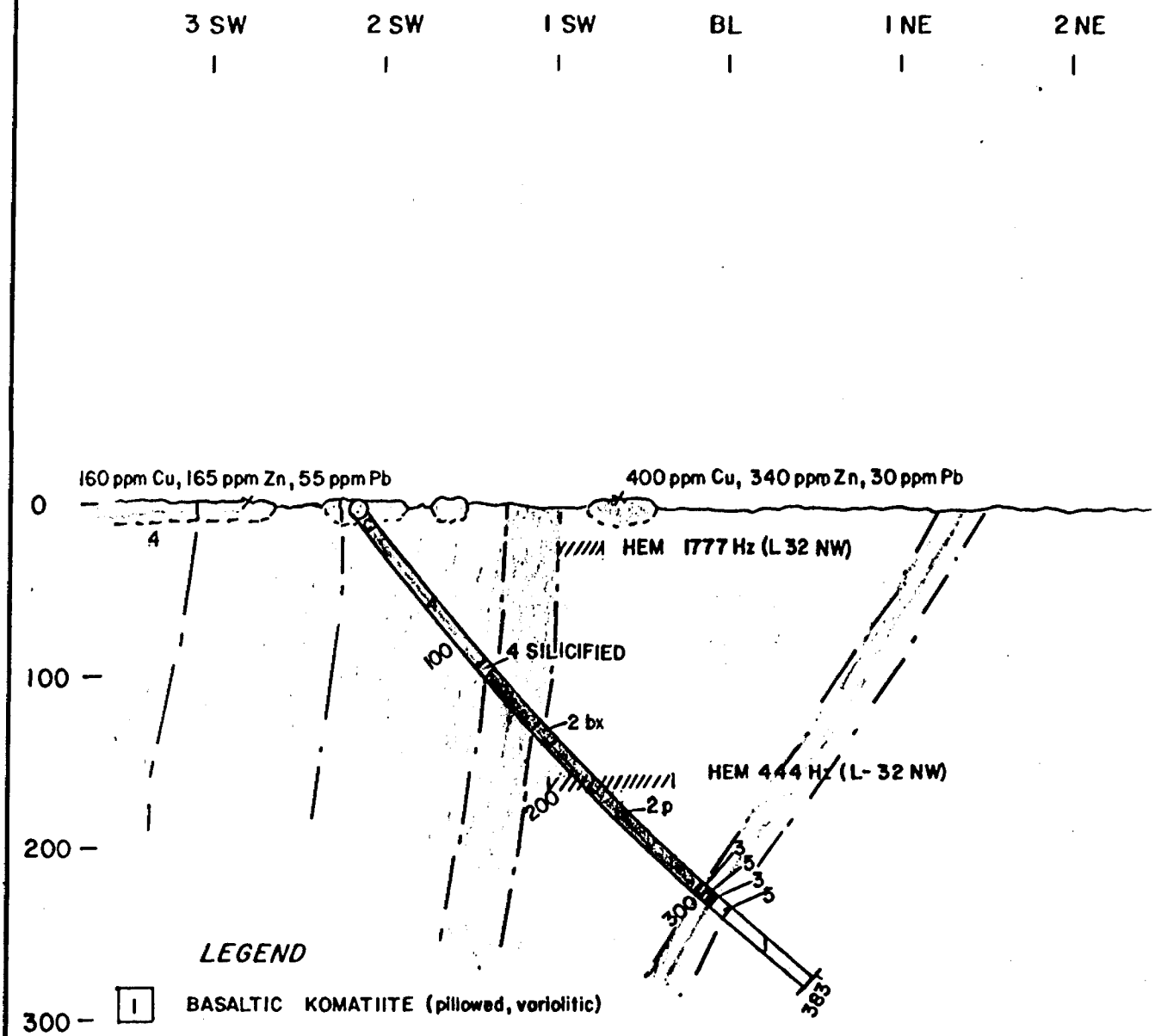
JFR 7624

GEOCHEMISTRY

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS % Cu	% Zn	Oz Ag	Oz Au		PROGRESSIVE TOTALS Ft. % Cu	Ft. % Zn	Ft Oz Ag	Ft Oz Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
							ppm Cu	ppm Zn			ppm Pb	% Fe	% Mg	$\%Na_2O$	$\% K_2O$	%CaO			% Si	% Ti				
	23251	12.0	22.0			10.0	90	106	0.02	.001	70	6.05	2.35	1.83	0.35	8.46	]		48.2	1.29	] carbonated altered			
	52	112.0	122.0			10.0	103	126	0.02	.001	75	7.82	2.55	2.10	0.27	6.72	] *very		42.8	1.45	] basaltic komatiite (leucoxene speckling)			
	53	202.0	212.0			10.0	95	106	0.02	.001	65	5.40	2.02	1.73	0.51	8.57	] homog-				]			
	55	314.0	324.0			10.0	130	106	0.02	.001	50	4.70	2.05	1.73	0.48	9.07	] eneous		50.4	1.39	]			
	56	455.0	465.0			10.0	163	98	0.01	.001	40	3.83	1.55	3.30	0.31	7.56			49.6	1.43				
	57	660.0	670.0			10.0	64	90	0.01	.001	20	1.54	0.35	3.50	2.27	2.07	ppm Co	ppm Ni	53.5	1.31	] silicified Tholeiitic Basalt			
	58	739.0	747.0			8.0	206	295	0.02	.001	45	5.82	2.00	2.72	1.13	5.77	15	25	73.7	0.35	] Silicified Wackes & marginal to dykes			
	59	801.0	811.0			10.0	95	176	0.02	.001	50	4.82	1.75	1.62	0.87	9.52			51.2	1.04	] Massive Tholeiite in sitn brecciated in places			
																			49.6	0.98	]			

HOLE NO. LL 80-1



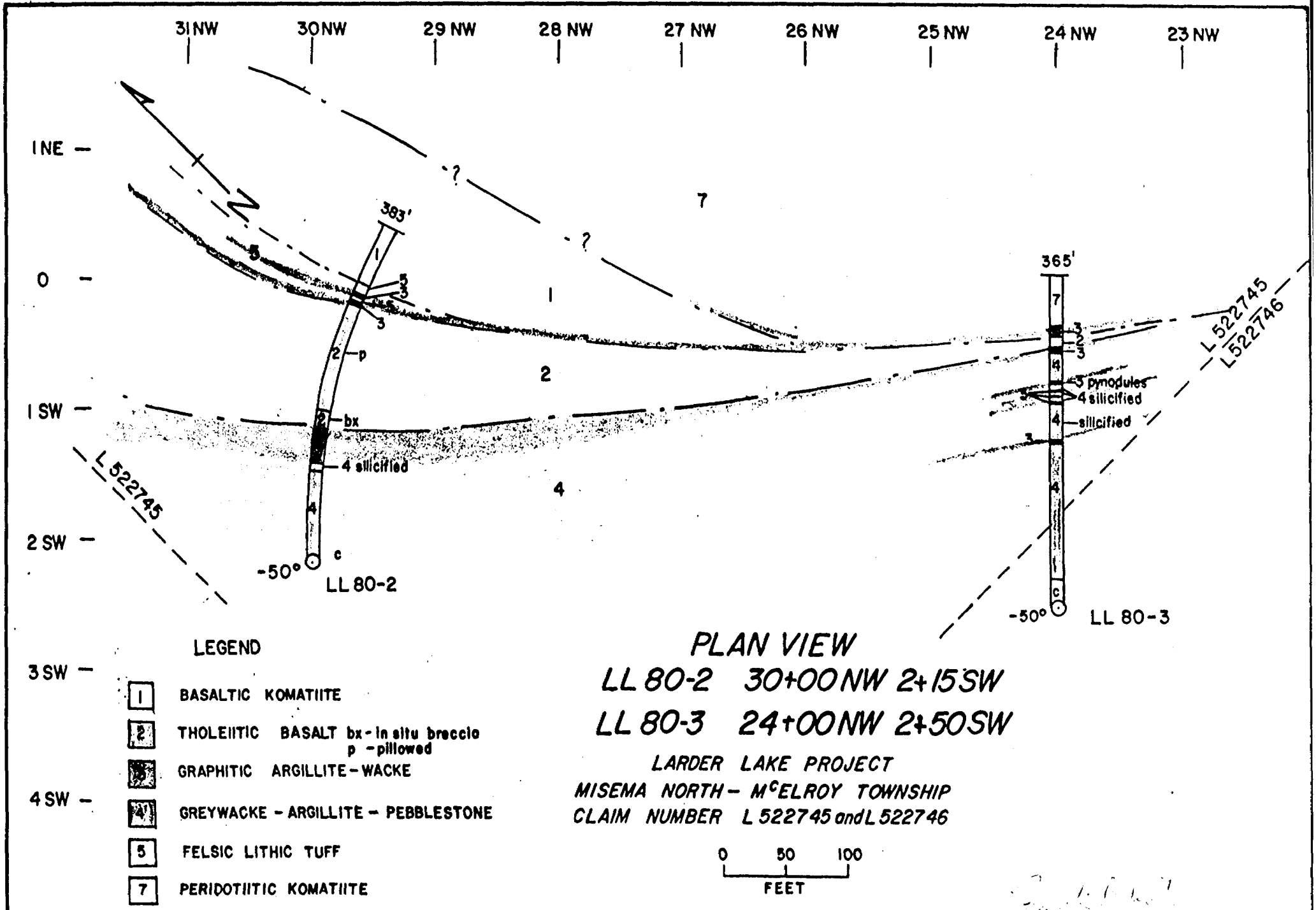
LEGEND

1	BASALTIC KOMATIITE (pillowed, variolitic)
2	THOLEIITIC BASALT, bx- in situ breccia, p- pillowed
3	GRAPHITIC ARGILLITE - WACKE
4	GREYWACKE - ARGILLITE - PEBBLESTONE
5	FELSIC LITHIC TUFF
6	RHYOLITE BRECCIA

X-SECTION
LL 80-2
30+00NW 2+15 SW

LARDER LAKE PROJECT
MISEMA NORTH - McELROY TOWNSHIP
CLAIM NUMBER L-522745

0 50 100
FEET



PLAN VIEW

LL 80-2 30+00NW 2+15SW

LL 80-3 24+00NW 2+50SW

LARDER LAKE PROJECT

MISEMA NORTH - M^{c}ELROY TOWNSHIP

CLAIM NUMBER L 522745 and L 522746

0 50 100

FEET

FALCONBRIDGE COPPER LTD.

EXPLORATION

DRILL HOLE RECORD

Hole No. LL 80-2 | Lat. L 30 NW | Dep. 2+15 SW | Elev. - | Dip -50° | Bearing 045° | Depth 383 feet | Core AQ

Working Place: LARDER LAKE PROJECT, MESIMA NORTH PROPERTY, McELROY TOWNSHIP

Date Started: 10/04/80

Date Completed: 23/04/80

Claim # L -522745

Compass Tests — Mag. Declination

Depth	Dip	T. Azim.
383'	42°	75°

Acid Test

Depth	Dip	Depth	Dip

Contractor: McKnight Diamond Drilling, Haileybury Ontario

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
o to 16.0	Casing							
16.0 – 116.1	Interbedded Argillite, Wacke and Pebble stones	Black to grey to lt grey banding	Silts, sands and pebble	Bedded	Bedding at 40° to C.A. Section goes from a black massive argillite from 16.0 to 26.7. 26.7 - 73.5 progressively coarser to a polymict pebble stone 68.4 - 70.0 a screen of graded greywackes (tops up hole). 73.5 - 116.1 a sequence of bedded argillites and wackes becoming more feldspathic down section, (i.e. from 105 - 116.1	A pervasive carbonate alteration is apparent only in local patches (estimate less than 10% of core reacts with dilute HCl) 1% free carbonate veining. Silicified zone from 113.5 - 114.5 surrounding fractures filled with dark green chlorite or serpentine and pyrite	Trace sulphide in fractures in a slightly graphitic argillite from 81.5 - 83.5. Negligible to trace pyrite in rest of section.	Tops consistently up hole The wackes become feldspathic from 105 - 116.1 Sample of feldspathic wacke for thin section at 111.1 feet.

JEB 7134

Hole No. LL 80-2

Logged by Frank Balint

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
116.1 117.8	Banded Siliceous Dyke, cherty tuff or silicified fine grained sediments	Creamy yellow to grey	Aphanitic	Cherty	Contacts at 40° to C.A. (conformable to bedding in sediments). Laminations on a fine scale (mm - cm)	Appears to be intensely silicified	Trace disseminated pyrite and/or pyrrhotite	Section sawn. Sample for thin section at 117.3 Similar to silicified rims to fine fractures in the obvious fine grained sedimentary sections down hole.
117.8 122.7	Silicified Feldspathic Wacke	Banded light brown to creamy yellow	Fine grained	Banded	Banding (bedding?) appears conformable with bedding in remainder of section i.e. at 35-40° to C.A. Evidence of size of feldspar xylls/clasts? grading over 0.3 feet at 118.4 Lower contact appears sharp with a silicified margin. Could be an intrusive contact but also may be a slump contact which localized later silicification process.	Intense pervasive silicification. No carbonate evident. Most intense alteration Seems to be around fractures & localized with respect to bedding?	Trace pyrite and pyrrhotite as disseminations	Would appear most likely as an intensely silicified feldspathic wacke. Section taken for thin section (to compare with earlier control sample) at 118.5. Lower contact between coarser & finer sediments both very siliceous although the coarser feldspathic sediments seem more altered.
122.7 164.6	Interbedded Wackes, Argillites & Graphitic Argillites	Banded Black & grey	Silts to sands	Massive	Bedding at 40-45° to C.A. Poor grading in coarser beds Graphitic horizons at: 137.8 - 151.7 150.3 - 151.7	Top of section considerably silicified. Gradually less silicification down section from 122.7 - 128.0 From 128 down section pervasive carbonate	Trace disseminated pyrite throughout section. Pyrite-rich sections at: 129.9 - 130.4 (5% Py) 132.0 - 133.1 (2-3% Py).	The dark black graphitic sections noted under structure are very conductive whereas the rest of section is not.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					153.7 - 154.5 157.6 - 158.0 163.8 - 164.6 Quartz veins at: 135.2 - 136.2 138.5 - 138.9 Mafic, carbonated, rhyolite-rich dyke 150.0 - 161.8	alteration as typical in the sedimentary sections. Free carbonate in veinlets (2-3%).	Trace sphalerite in fractures at: 135.0 137.0 - 140.0 (graphite) 150.3 - 151.7 (graphite 3-5% Py trace chalcopyrite) 153.7 - 154.5 (graphite 4-5% pytite) 157.6 - 158.0 (graphite 3-4% Sph, 1% Cp) 164.0 - 164.6 (graphite 10% pyrite) 161.8 (dyke margin)	
164.6 181.5	In Situ Brecciated Basalt with a Sulphide-rich Matrix	Lt green to grey fragments with black to brassy matrix	Fine to aphanitic	Massive	Fractures and matrix to volcanic fragments are filled with graphite and pyrite-pyrrhotite. Sulphide-rich sections at: 176.0 - 176.2 176.8 - 176.9 181.3 - 181.5 Foliation or bedding? long axis of the fragments aligned at 40° to C.A.	1-2% free carbonate veining. Weak pervasive carbonate alteration. Very chloritic fragments at 179.0 - 180.0 (dark green massive soft material)	40% pyrite and pyrrhotite with trace chalcopyrite at: 176.0 - 176.2 176.8 - 176.9 181.3 - 181.5 Overall matrix makes up 10% of core and sulphides average 3% of core.	Colour and texture of this in situ breccia resembles typical tholeiitic basalt seen elsewhere i.e. Amax Zone. The sulphide rich matrix is very conductive.
181.5 296.1	Pillowed Basalt with Brecciated Sections & Hyaloclastic Screens	Lt to dk green with white veining	Aphanitic to fine grained	Massive, weakly amygdaloidal	Brecciated sections at 216.0 - 223.0 236 - 250.5 Hyaloclastic screens at: 241.2 - 241.4	Weak pervasive carbonate alteration. 4-5% free carbonate veining. Epidote alteration marginal to veining from	Average 2-3% pyrite + pyrrhotite throughout section. Interpillow material contains up to	Pillow interstices contain sulphides-carbonate and a hyaloclastic component. This basalt would appear to be tholeiitic basalt.

JEB 1962

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
		of light green to white hyalo-clastite			242.7 - 243.0 248 - 250.5 Quartz carbonate vein at 243.5 - 335.7	362.0 - 365.0 295 - 296.1 is bleached and appears silicified.	30% pyrite and trace chalcopyrite at 187.8 188.7 - 188.9 191.0 - 191.2 293.0 - 294.0 Brecciated sections contain 4-5% Po and 1% Py	
296.1 300.4	Bedded Sphaleritic Graphite Andesite Basaltic Pillow Lava	Light honey-brown to black with lt grey-green pillows	Aphanitic volcanic & silty sediment	Massive	Bedding in the graphitic-sulphide material wraps around pillow margins. Bedding varies from 10° to 35° to C.A.	Basalt is silicified. Mild carbonate alteration? in the sediment.	Fine grained sphalerite appears to be in fine beds. 296.1 - 299.2 5% Sph 1% Cp 5-10% Py 299.2 - 300.4 2-3% Sph 1% Cp 10% Py	
300.4 302.1	Silicified Basaltic Pillow	Lt grey-green	Aphanitic	Massive	Lacks sedimentary structures. May have a slightly different coloured selvedge.	Pervasively silicified	2-3% Sph along fractures	Would appear to be a single pillow in section.
302.1 302.7	Sphaleritic Graphite	Black with brassy & brown wisps	Silt	Massive	Bedding at 30° to C.A.	Carbonate?	4% Sph 0.5% Cp 5-10% Py	Sulphides appear to be bedded.

JEB 1982

Hole No. LL 80-2

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
302.7 306.3	Bedded Feldspathic Wacke or Tuff?	Dark to light grey	Silt to sands	Massive	Bedding at 30° to C.A.	Weak pervasive carbonate alteration.	0.5% Sph finely disseminated trace chalcopyrite and pyrite	Sample for thin section at 305.0
306.3 308.6	Sulphide-rich Graphite	Black with brassy wisps	Silt	Massive	Bedding at 30° to C.A.	Weak carbonate alteration	1% sphalerite grace chalcopyrite 5-10% pyrite	
308.6 320.3	Felsic Crystal Lithic Tuff	Lt grey green with white speckles	Ash to Tuff	Massive	Size gradation from fine to ash to coarse mm sized fragments downhole. Bedding at 30° to C.A.. Lower contact appears to be shear zone.	Weak pervasive carbonate alteration. Silicification (bleaching) at 316.0 for 0.6 feet. Also serpentine filling fractures 3% at 316.	Trace pyrite and pyrrhotite	Samples for thin section 319.8 - coarse tuff
320.3 383.0	Pilloved variolitic Basaltic Komatiite	Dk green to blue green	Aphanitic to fine grained	Massive (variolitic)	Foliation at 30° to C.A. Moderately strong shearing	Strong pervasive carbonate alteration. Brown staining in pillow margins	Trace Py	Significantly more foliation, darker green-blue colour and variolites compared to above volcanic.
383.0	END OF HOLE							

JER 1624

SULPHIDES #1

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ASSAYS ppm Zn	ASSAYS Oz Ag	ASSAYS Oz Au	ppm Pb	ppm Co	ppm Ni	PROGRESSIVE TOTALS Ft. Oz Ag	PROGRESSIVE TOTALS Ft. Oz Au	REMARKS AND AVERAGE ASSAYS
	22611	81.5	83.5			2.0	123	395	0.01	.001	25	55	300			Slightly graphitic argillites
	12	83.5	88.5			5.0	76	235	0.01	.001	35	80	790			Argillite
	13	115.0	116.1			1.1	63	157	0.01	.001	10	30	180			polymict sediment (pebble, clasts)
	14	116.1	117.8			1.7	62	86	0.01	.001	20	15	55			banded cherty rhyolite (dyke-silicified sed?)
	15	117.8	122.7			4.9	50	89	0.01	.001	20	20	40			silicified wackes
	16	122.7	126.2			3.5	47	102	0.01	.001	25	15	15			
	17	126.2	129.9			3.7	86	216	0.01	.001	20	10	30			
	18	129.9	133.1			3.2	150	880	0.01	.001	40	20	95			
	19	133.1	137.5			4.4	100	538	0.01	.001	35	20	50			
	20	137.5	140.0			2.5	410	2020	0.01	.001	90	60	225			
	21	140.0	145.0			5.0	49	198	0.01	.001	25	25	25			
	22	145.0	150.3			5.3	85	875	0.01	.001	25	25	50			
	23	150.3	151.7			1.4	398	1.82%	0.02	.002	65	60	255			
	24	151.7	153.7			2.0	130	895	0.01	.001	40	25	35			
	25	153.7	154.5			0.8	720	790	0.02	.001	80	105	210			
	26	154.5	157.6			3.1	282	570	0.01	.001	25	25	45			
	27	157.6	158.0			0.4	1.86%	3.20%	0.10	.002	80	90	265			
	28	158.0	161.8			3.8	360	545	0.03	.001	30	45	110			
	29	161.8	164.6			2.8	350	2100	0.01	.001	60	45	110			
	22630	176.0	176.2			0.2	435	690	0.05	.001	80	80	145			

REMARKS AND AVERAGE ASSAYS	FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au

HOLE NO. LL 80-2

JYR 1684

SULPHIDES #2

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS Cu	ASSAYS Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS		PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
							ppm	ppm			ppm Pb	ppm Co	ppm Ni											
	22631	176.8	176.9			0.1	1500	530	0.07	.001	65	90	150											
	32	181.3	181.5			0.2	610	2850	0.08	.001	90	85	125											
	33	291.0	296.0			5.0	400	142	0.01	.001	35	55	100											
	34	296.0	299.2			3.2	1240	1.07%	0.04	.001	80	120	220											
	35	299.2	300.4			1.2	1640	4400	0.04	.001	75	130	310											
	36	300.4	302.1			1.7	270	1900	0.03	.001	35	55	120											
	37	302.1	302.7			0.6	700	1.18%	0.04	.001	65	50	140											
	38	302.7	306.3			3.6	117	222	0.01	.001	25	10	25											
	39	306.3	308.6			2.3	980	4870	0.05	.001	75	95	350											
	22640	308.6	311.8			4.2	70	281	0.01	.001	25	10	25											
	41	311.8	316.0			4.2	55	83	0.01	.001	30	10	25											
	22642	316.0	320.3			4.3	42	65	0.01	.001	20	10	45											

HOLE NO. LL 80-2

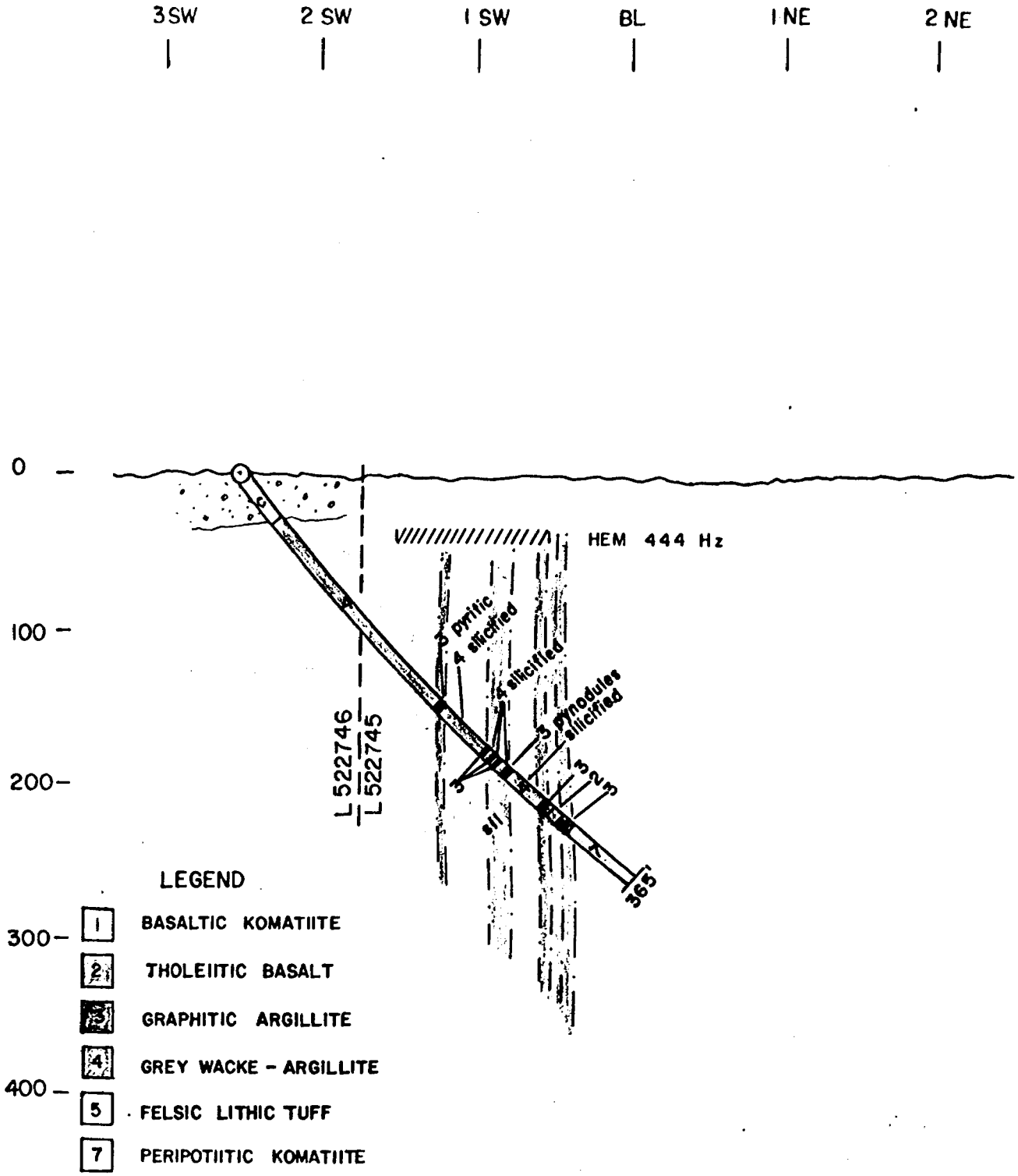
JFR 7634

GEOCHEMISTRY

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS					PROGRESSIVE TOTALS					REMARKS AND AVERAGE ASSAYS							
							% SiO_2	% TiO_2	% Fe	% Mg	% Na_2O	% CaO	% K_2O	ppm Cu	ppm Zn	ppm Pb	ppm Co	ppm Ni	Au oz/T	Ag oz/T	% Zn	Oz As	Oz Au	
	23260	16	26			10	62.7	0.69	4.08	2.83	2.53	2.07	2.19	107	212	30	65	610	.001	0.01		Argillite		
	1	170	180			10	45.8	1.09	8.00	2.00	1.08	9.52	0.34	70	505	40	75	150	.001	0.01		Tholeiitic Basalt		
	2	190	200			10	46.8	1.15	5.93	1.45	2.86	8.96	0.20	210	208	30	20	150	.001	0.01		Tholeiitic Basalt		
	3	245	255			10	50.8	1.39	4.13	1.07	4.91	6.22	0.62	167	125	30	55	150	.001	0.01		Pillowed Tholeiite		
	4	330	340			10	46.4	0.69	4.05	1.20	1.00	10.25	0.39	105	46	30	55	355	.001	0.01		Komatiitic Basalt		
	5	370	380			10	38.6	0.77	6.85	4.20	0.49	6.16	0.43	123	87	35	75	530	.001	0.01		Komatiitic Basalt		

HOLE NO. LL 80-2



X-SECTION
LL 80-3
24+00NW 2+50SW

LARDER LAKE PROJECT
MISEMA NORTH - M^{c}ELROY TOWNSHIP
CLAIM NUMBER L-522745
L-522746

0 100
FEET

FALCONBRIDGE COPPER LTD.
EXPLORATION
DRILL HOLE RECORD

Hole No. LL 80-3 | Lat. L 24 NW | Dep. 2+50 SW | Elev. - | Dip -50° | Bearing 045° | Depth 365' | Core AQ

Working Place: LARDER LAKE PROJECT

Date Started: April 24, 1980
Date Completed: May 1, 1980

Compass Tests — Mag. Declination: Depth / Dip / T. Azim.

Acid Test: Depth 365' / Dip -45° ; Depth / Dip

Mesima North Property
McElroy Township

Claim # L-522745 & L-522746

Contractor: McKnight Diamond Drilling

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 - 38.0	Overburden	40' of casing left in hole.						
38.0 - 199.7	Interbedded Wackes & Argillites	Grey, grey-green to black bands	Silts to sand & grit occasional pebbly horizon	Massive	Bedding at 45° to C.A. Minor slumping noted at 40.0. Overall section 70% wackes 30% argillites. Screens of argillite in wackes & vise versa through section. Crude grading in some beds. Tops generally up hole. Thick bed grading from massive argillite to wacke to pebble stone from 143.0 - 171.5. Fine scale (mm) bedding in argillite-wackes from 171.5 to	Very weak reaction with dilute HCl. Weak pervasive carbonate alteration. 1-2% free carbonate veining 146 - 148 siderite in veinlets.	Trace disseminated pyrite though section. 1% disseminated pyrite from 197.0 - 199.7	Some thin very black argillaceous horizons are weakly conductive with ohm-meter.

JOB 7134

Hole No. LL 80-3

Logged by Frank Balint

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
199.7 201.6	Bedded Pyritic Graphite	Black with white veining along margins	Silt	Bedded	Upper & lower contacts are brecciated and injected by carbonate veining Serpentine veinlet at 199.7 Bedding i.e. fine pyritic beds at 80 - 85° to C.A.	No pervasive carbonate alteration. 30% free carbonate veining over 3" at both margins of unit.	Fine disseminated sphalerite at 200.3 10% finely bedded and disseminated pyrite throughout section.	Seems to be tectonically bound on both sides. i.e. fault zone at 199.7 and 201.6 conductive section.
201.6 240.0	Silicified Sediments (Wackes and Argillites)	Lt creamy white to pale yellow banded. Minor black to grey banded sections.	Silts to sand to grits. Occasional clast up to 4 mm.	Bedded	Bedding at 50° to C.A. Upper contact brecciated and carbonate veined. Lower contact sharp at 50° to C.A.	Very weak to no reaction to dilute HCl. Carbonate veining at random angles to C.A. about 5%. Pervasive silicification throughout section. The finer silts-argillites are cherty in appearance. The wacke looks like felsic tuffs.	Trace disseminated pyrite throughout. Sections with disseminated euhedral pyrite 5% with trace pyrrhotite & chalcopyrite.at: 212.5 - 214.3 222.0 - 222.5	The silicification can become more intense around fractures and quartz-carbonate veinlets and appear to crosscut the bedding. The sediment coarsens to a grit at the base of the section.
240.0 241.8	Graphitic Argillite	Black with brassy specks & streaks	Silt	Bedded	More argillaceous & more graphitic screens interbedded. Bedding at 45° to C.A. 2" greywacke screen at 241.0	Weak pervasive carbonate alteration	3% disseminated pyrite. No sphalerite visible	Highly conductive

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
241.8 247.0	Silicified Interbedded Argillites & Greywackes	Banded grey to black	Silt to sand	Bedded	Bedding at 40-45° to C.A. Random fractures filled with quartz-carbonate (3-5%). Pyritic graphite bed at 246.0 to 246.2	Weak pervasive carbonate alteration. Strongly silicified pervasively. The fine-grained sections appear cherty.	1-2% disseminated pyrite throughout section.	
247.0 248.2	Bedded Pyritic Graphite	Black with Brassy Beds	Silt	Bedded	Bedding at 45° to C.A. Beds of pyrite up to 3 mm thick boudinaged and mildly contorted.	Minor carbonate in pyritic beds.	5-7% pyrite as semi-continuous boudinaged beds. No sphalerite visible.	Highly conductive
248.2 252.3	Silicified Pyritic Greywackes	Lt grey to dark grey-black bands	Sands to silts	Massive	Bedding at 45-50° to C.A.	Pervasively strongly silicified. Less than 1% carbonate veinlets	2% disseminated pyrite	
252.3 253.3	Bedded Pyritic Graphite	Same as	247.0 to 248.2					2" greywacke screek at 252.7 Highly conductive.
253.3 259.9	Silicified Greywacke & Argillite	Light to dk grey with black sections	Silts to Sands	Massive	Bedding at 45° to C.A. Graphitic section 258.6 - 259.0	10% of core reacts with dilute HCl. Silicification not as strong as other silicified sections	1-2% disseminated pyrite. Graphitic section 258.6 - 259.0 contains finely bedded pyrite 3%.	The silicification in this section appears weaker than in other sections in this hole.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
259.9 262.5	Graphite with pyrite Nodules	Black with brassy spots & streaks	Silt	Massive	Fabric at 45° to C.A. (bedding?) Pyrite nodules up to 2.5 cm show carbonate filled pressure shadows	Strong pervasive carbonate alteration. Fractures & voids filled with carbonate 1-2%.	Overall 5% pyrite as nodules and streaks (remnants of beds?). 1% disseminated brown sphalerite.	Highly conductive material.
262.5 291.5	Altered Greywackes	Lt cream to light green with green white mottling	Silt to Sand	Massive	Bedding where preserved at 45° to C.A. 262.5 - 263.0 argillaceous beds.	Intense silicification throughout section. 280.0 - 291.5 the rock becomes more fractured & chloritic smears & sericite alteration is apparent.	Trace pyrite except for 288.2 - 288.6 where 5% pyrite smears & wisps.	Appears to be a zone of very strong alteration.
291.5 297.0	Argillite with Graphitic Sections	Black with grey bands	Silt to sands		Minor wacke component. Bedding at 70° to C.A. Graphitic screens at 295.3 - 295.4 and at base of section 296.7 - 297.0	Pervasive carbonate alteration	2% disseminated pyrite throughout. 1-2% sphalerite (disseminated) from 296.7 - 297.0 in graphitic section	Graphitic section at base of sedimentary pile is sphalerite mineralized. Graphitic sections conductive.
297.0 306.2	Massive to in situ Brecciated Tholeiitic Basalt	Lt grey green	Fine grained	Massive	Massive to 302.0 then In Situ brecciated with dark green chloritic matrix (5%). Calcite-siderite veinlet 1/2" wide at 297.3.	Leucoxene speckling at top of section. Pervasive carbonate alteration throughout. Intensely sericitized section from 299.5 to 300.5	Trace pyrite in volcanic. Up to 5% pyrite in the matrix material.	Upper contact sharp with sediments (graphite). Lower contact gradational into graphitic argillite.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
306.2 309.2	Bedded and in situ Brecciated Graphitic Argillite & Greywacke	Black to grey banded	Silt to sand sized	Massive	Bedding at 45° to C.A. In situ brecciated throughout section probably some primary slumping.	Minor pervasive carbonate alteration. 308.8 - 309.3 Fractures filled with brown siderite veining.	1/2" pyrite seam at 306.3. Trace sphalerite in finer grained black graphitic argillite section at 306.2 307.0 307.8 309.0	Transition zone from in situ brecciated tholeiitic basalt to graphitic sequence.
309.2 309.4	Massive Pyrite Bed	Brassy Yellow	Fine	Massive	Finely bedded		100% pyrite	Single bed of pyrite.
309.4 312.0	Pyritic Graphite	Black with Brassy Streaks	Silt	Massive	Bedding as reflected by pyrite & disseminated sphalerite beds at 70° to C.A. Wacke screen at 311.2 - 311.6	Weak to no pervasive carbonate alteration	2% disseminated and finely bedded sphalerite. 5% disseminated and bedded pyrite	Conductive material
312.0 313.4	Pyritic Brecciated Perioditic Komatiite	Dk green with brassy specks	Fine to aphanitic	Massive	Brecciated and cut by sideritic veinlets	Serpentinized minor carbonate alteration	10-15% disseminated and stringer pyrite	

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
313.4 315.3	Silicified Bedded Sphaleritic Argillite?	Light grey to dk grey with brown wisps	Silt	Massive	Bedded, generally at high angle to C.A. (70-80°) but contortions evident 313.4 - 313.6 bedded sphaleritic argillite 313.6 - 313.8 Wacke screen 313.8 - 314.0 sphaleritic argillite 314.0 - 314.5 Wacke screen 314.5 - 314.8 Quartz siderite veinlet 314.8 - 315.3 Bedded sphaleritic argillite	No carbonate. Pervasive silicification throughout section.	2% sphalerite over section as fine disseminations and as fine beds.	Good bedded sphalerite. Not conductive.
315.3 365.0	Serpentinized Peridotitic Komatiitic Flow	Blue-green with white streaks	Fine grained with coarse grained spinifex sections	Olivine Spinifex preserved in some sections	Random carbonate veinlets throughout section. Good olivine spinifex from 353 - 354 coarsening down hole indicating tops uphole. Intermittantly brecciated throughout section.	10% free calcite in veinlets with minor siderite. Pervasive serpentine alteration (greasy feel to core)	No to trace pyrite	Weakly magnetic section
365.0	END OF HOLE							

SULPHIDES #1

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ASSAYS ppm Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ppm Pb	PROGRESSIVE TOTALS ppm Co	PROGRESSIVE TOTALS ppm Ni	PROGRESSIVE TOTALS Ft Oz Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au
	22643	306.2	309.2			3.0	497	1750	0.02	.001	20	88	118								
	22651	309.2	309.4			0.2	1050	1400	0.13	.001	150	320	547								
	22644	309.4	312.0			2.6	1800	1.00%	0.08	.001	103	153	320								
	45	312.0	313.4			1.4	1200	800	0.07	.001	60	135	255								
	46	313.4	313.6			0.2	1400	1.65%	0.05	.001	42	190	390								
	47	313.6	313.8			0.2	330	1700	0.02	.001	25	45	105								
	48	313.8	314.0			0.2	480	2500	0.02	.001	28	86	205								
	49	314.0	314.5			0.5	260	1300	0.02	.001	20	50	123								
	50	314.5	315.3			0.8	470	0.79%	0.03	.001	37	103	318								
	22652	197.0	199.7			2.7	178	390	0.03	.001	32	130	263								
	53	199.7	201.6			1.9	445	3800	0.02	.001	78	75	245								
	54	212.5	214.3			1.8	71	172	0.01	.001	33	28	52								
	55	235.0	240.0			5.0	46	325	0.01	.001	60	15	45								
	56	240.0	241.8			1.8	140	616	0.01	.001	57	43	125								
	57	241.8	247.0			5.2	60	367	0.01	.001	35	20	57								
	58	247.0	248.2			1.2	380	1600	0.03	.001	50	48	145								
	59	248.2	252.3			4.1	50	405	0.01	.001	42	17	52								
	60	252.3	253.3			1.0	95	1800	0.01	.001	48	30	100								
	61	253.3	258.6			5.3	62	233	0.01	.002	32	18	48								
	62	258.6	259.9			1.3	144	2360	0.01	.001	27	30	88								

HOLE NO. LL 80-3

FORM 1434

SULPHIDES #2

DIAMOND DRILL CORE ASSAY RECORD

C O	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ASSAYS ppm Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS ppm Pb	PROGRESSIVE TOTALS ppm Co	PROGRESSIVE TOTALS ppm Ni	PROGRESSIVE TOTALS Ft. Oz Ag	PROGRESSIVE TOTALS Ft. Oz Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au
	22763	259.9	262.5		.4%	2.6	730	0.65%	0.02	.001	65	100	365									
	64	288.2	288.6			0.4	290	680	0.03	.001	140	38	73									
	65	291.5	296.7			5.2	97	308	0.01	.001	30	20	53									
	66	296.7	297.0			0.3	110	2030	0.01	.001	38	42	215									

HOLE NO. LL 80-3

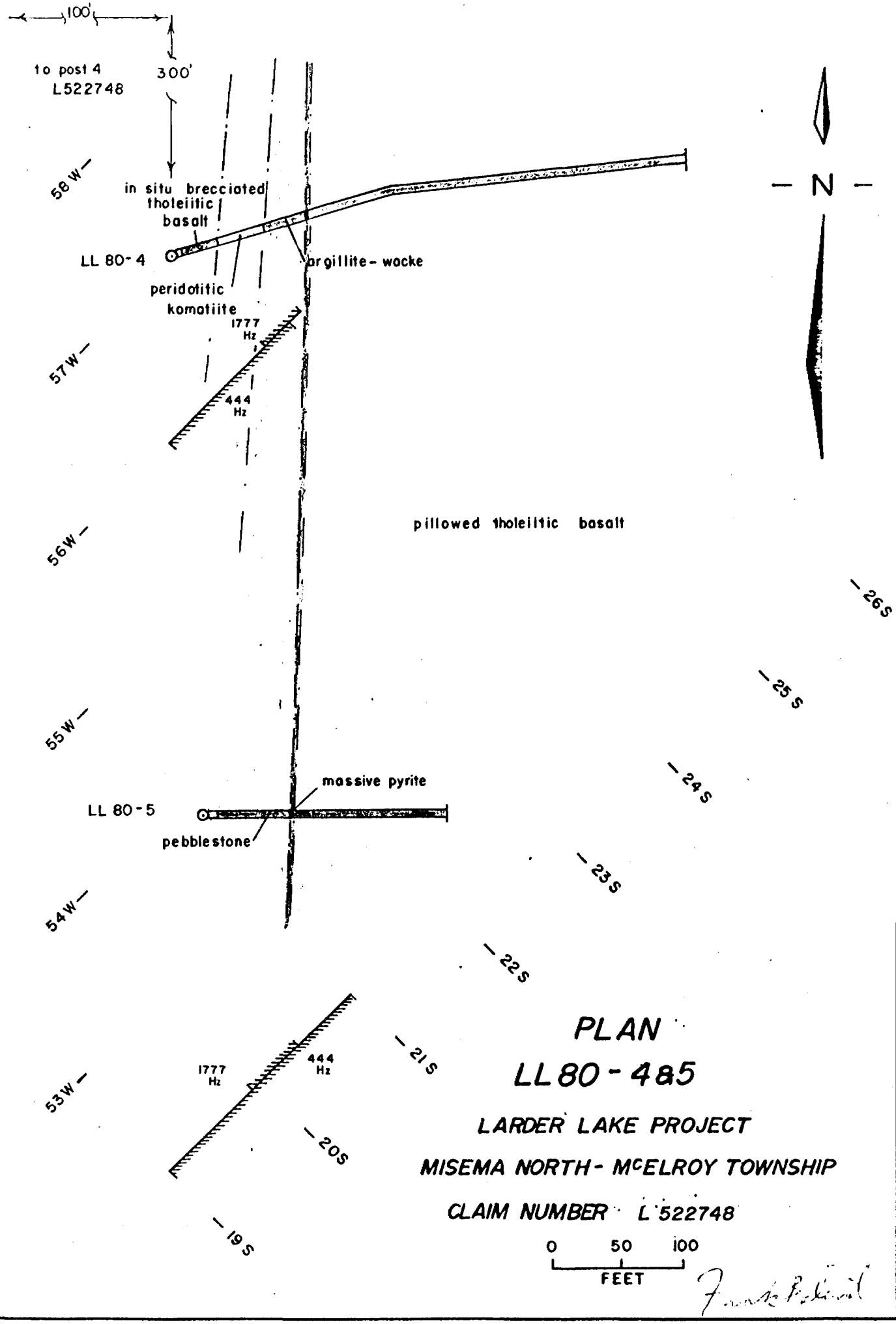
JVR 7424

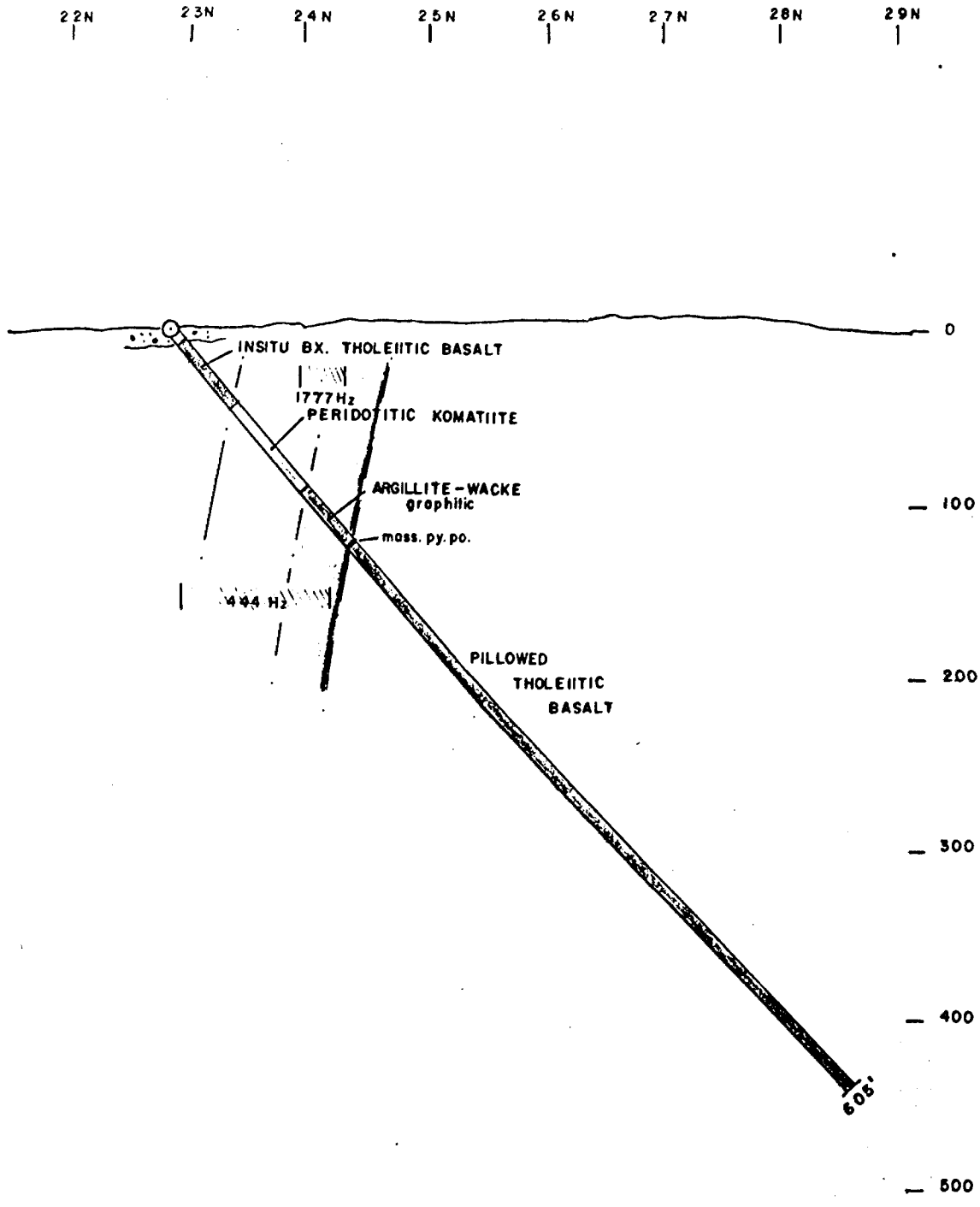
GEOCHEM

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ASSAYS ppm Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS ppm Pb	PROGRESSIVE TOTALS ppm Co	PROGRESSIVE TOTALS ppm Ni	PROGRESSIVE TOTALS % Fe	PROGRESSIVE TOTALS % Mg	PROGRESSIVE TOTALS %CaO	REMARKS AND AVERAGE ASSAYS $\%Na_2O$	REMARKS AND AVERAGE ASSAYS $\%K_2O$	REMARKS AND AVERAGE ASSAYS $\%SiO_2$	REMARKS AND AVERAGE ASSAYS $\%TiO_2$	% Zn	Oz Ag	Oz Au	
	23267	40.0	50.0			10.0	87	178	0.04	.001	50	68	62	3.78	5.53	3.14	1.62	1.45	60.2	0.57	Wacke-Argillite			
	68	140.0	150.0			10.0	100	233	0.03	.001	43	80	70	4.35	3.83	2.13	2.32	1.88	63.0	0.60	Wacke-Argillite			
	69	220	230			10.0	176	175	0.01	.001	30	18	65	1.73	0.34	3.36	4.37	1.93	74.6	0.40	Silicified Wacke			
	70	297	306			9.0	545	483	0.05	.001	58	85	275	5.25	1.93	6.50	2.67	1.04	52.5	1.32	In Situ Bx Tholeiite			
	71	345	355			10.0	205	132	0.05	.001	55	85	790	3.63	6.47	8.96	0.13	0.02	41.4	0.40	Peridoditic Komatiite			

HOLE NO. LL 80-3


100'
300'
to post 4
L522748
58W
in situ brecciated
tholeiitic
basalt
LL 80-4
argillite-wacke
peridotitic
komatiite
1777
Hz
444
Hz
57W
56W
pillowed tholeiitic basalt
55W
massive pyrite
LL 80-5
pebblestone
54W
53W
1777
Hz
444
Hz
N
26S
25S
24S
23S
22S
21S
20S
19S
PLAN
LL80-485
LARDER LAKE PROJECT
MISEMA NORTH - McELROY TOWNSHIP
CLAIM NUMBER L 522748
0
50
100
FEET



X-SECTION
EAST-WEST
LL 80-4

LARDER LAKE PROJECT
MISEMA NORTH - McELROY TOWNSHIP
CLAIM NUMBER L 522748

0 50 100
FEET

FALCONBRIDGE COPPER LTD.
EXPLORATION
DRILL HOLE RECORD

Hole No. LL 80-4
Working Place: LARDER LAKE PROJECT
Date Started: May 7, 1980
Date Completed: May 20, 1980
Let. L 56+50 NW
Dep. 23+50 NE
Elev. -
Dip -50° Bearing 075° Depth 605 ft. Core AQ

Compass Tests
Mag. Declination

Depth	Dip	T. Azim.
050'	-49°	074°
490'	-46°	084°

Acid Test

Depth	Dip	Depth	Dip

Mesima North
McElroy Township
Claim # L-522748
Contractor: McKnight Diamond Drilling (Haileybury, Ont.)

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 12.0	Casing (Clay & boulders)							
12.0 59.6	In Situ Brecciated Tholeiitic Basalt with Hyaloclastic Screens.	Lt grey-green with white network veining	Aphanitic to fine grained	Massive	In situ brecciation evident intermittantly throughout section. Screens of very delicate shard-like forms also intermittantly through section (15%) Lacks any discernable fabric. Fine grained mafic dyke with lamprophyric affinities at 33.5 - 38.5 Quarts veinlets at varying angles to core axis with weak to good pyritic halos at 19.8 29.2 41.2 50.0	Lacks carbonate alteration. Silica makes up the matrix to the in situ brecciated fragments (overall 5%).	Overall 3-4% pyrrhotite as fine disseminations and in hyaloclastic screens as blotches. Up to 10% pyrrbotite in some of these hyaloclastic screens. Trace disseminated pyrite throughout. Pyrite halos around quartz veinlets up to 0.1 feet into wallrock contain up to 15% pyrite at 29.2 29.8 56.0 Trace molybdenite in quartz vein at 56.0	Ran section 29.9 - 30.0 for Au 55.9 - 56.5 for Au (pyritic halos to quartz veins)

Hole No. LL 80-4

Logged by Frank Balint

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					53.0 56.0 Contact with komatiite downhole sharp, slightly bleached at 55° to C.A.			
59.6 123.5	Talcose-Serpentinized sheared Peridotitic Komatiite Clastic with a minor Rhyolite Component	Dk green to lt green with lt grey fragments & white carbonate riddling	Fine grained	Massive, brecciated	Strongly carbonate riddled. Delicate primary clastic nature only preserved in local windov. For the most part the ultramafic clastic is sheared and altered to a talc-serpentine schist. Foliation at 45° to C.A. Lamprophyre dyke at 110.0 - 113.7 10-15% rhyolite clasts (massive) from 99.0 - 104.0. Bovnhole contact is very gradational with the argillite-wacke sediments, from 122.0 - 123.5. Clasts up to 5" observed. Quartz vein 122.6 - 123.0	Much carbonate alteration as coarse veinlets and pervasively throughout section. Section is strongly altered to serpentine-talc with minor magnetite.	Disseminated pyrite (2-3%) throughout section. Up to 10% pyrite in a halo around a quartz vein at 64.8 - 66.0	Section weakly magnetic Gradational contact with finer argillite-wacke sediments

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
123.5 165.8	Finely bedded Argillites & Greywackes	Dk black to grey banded	Silts to sands	Massive	Bedding at 30° to C.A. No apparent grading in the beds observed. Brecciated and/or coarser clastic of argillaceous fragments in a sandy matrix from 163.1 - 165.8. At top of section the argillites are strongly sheared at 45° to C.A. Good slickenslides on foliation plane at 45° to C.A. indicate right lateral movement.	Weak pervasive carbonate alteration throughout section. Coarser sandy sections more carbonate alteration. Free carbonate in fine veinlets 2-3% over section.	Trace pyrite throughout section. Trace sphalerite in fine carbonate veinlets throughout section. 127.8 - 129.0 up to 5% disseminated pyrrhotite in sandy? layer. 163.1 - 165.8 5-10% disseminated pyrite and pyrrhotite about 50:50	Very little graphitic component in this section. Weakly conductive between 140.0 - 141.0 More sulphides as you go down hole in this section.
165.8 166.1	Massive Pyrite and Pyrrhotite Clastic?	Brassy Yellow to brassy brown	Coarse pyrite fine pyrrhotite	Massive may be clastic	Appears to be sand to pebble sized fragments between sulphide grains. Contacts about 70° to C.A.	Sericite (fuchsite) smears up to 3% of section.	60% pyrrhotite 30% pyrite	Chrome green (fuchsite) smears throughout and at base.
166.1 167.0	Pyrrhotite-rich altered Argillite-Wacke	Lt grey to creamy white with brassy streaks	Silts to sand with occasional cobble	Massive clastic	Foliation at 45° to C.A. (bedding and/or tectonic fabric)	Intense sericite? alteration (bleaching)	5-10% pyrrhotite as fine dissemination and as wisps. Trace finely disseminated sphalerite. Trace pyrite	Look very much like the light grey altered sediment-rich in bedded sphalerite encountered in LL 80-2 and LL 80-3. As the contact with the volcanic is approached this sediment becomes very pyrrhotite rich (massive-semi massive).

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
167.0 167.8	Semi Massive Pyrrhotite	Brassy yellow	Fine grained sulphides. Sandy sediment	Massive	70% sulphides 30% altered sandy material. Lower contact with altered basalt very shallow angle to C.A. (20°)	Sedimentary material sericite altered. No evidence of carbonate alteration.	65% pyrrhotite massive 5% coarse pyrite as blebs and fringes on massive pyrrhotite	It would appear that these sulphides are a detrital accumulation at the base of a sedimentary accumulation.
167.8 184.0	Sulphide rich Hydrothermally altered Tholeiitic Basalt Pillow Breccia	Lt grey to brassy brown, with white mottling, ribbing & fragments	Fine grained to aphanitic	Massive	No apparent tectonic fabric. Pillow ribbing apparent in fragments. Pillow interstices, filled with delicate shards, sulphide altered rock fragments and minor carbonate. Minor quartz veining. Screens of sand in pillow interstices at: 180.4 - 180.6 Overall top of section seems more brecciated. 167.8 - 171.4 entirely brecciated section also very altered.	167.8 - 173.5 intense silicification and sericitization. Fragments and entire pillow interstices of sericite. Some of the fragments have bleached rims, some are entirely bleached. Brecciated zones are intensely altered, i.e. 172.8 - 173.5 182 - 184 Minor free carbonate in hyaloclastic screens.	167.8 - 171.4 30% pyrrhotite trace pyrite and trace sphalerite 171.4 - 184 10% pyrrhotite in matrix to breccia and 179.8 1/2" sulphide vein 60% pyrrhotite 30% pyrite 10% quartz.	May represent the more easily altered brecciated flow top pillow breccia. Section magnetic
184.0 222.0	Silicified Tholeiitic Pillow Basalt	GReento grey-green with lt green to white veinlets	Aphanitic to fine grained	Massive	Pillow ribbing, selvedges, hyaloclastic pillow interstices & sandy pillow interstices observed. Sandy screens at	Minor free carbonate in hyaloclastic brecciated sections. Sandy (feldspathic) screen at 189.3 is sericitized. Some minor silicification and/or serici-	184.0 - 222.0 Over 3% disseminated pyrite. Pyritic halos with 10-20% pyrite at:	Assays for gold on pyritic sections; Section lacks as much sulphide and intense bleaching of sections above and below

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					188.5 189.3 (sericitized) 191.0 192.0 Overall brecciation of section about 40%. Randomly oriented quartz veining from hairline to 1/2" with trace sulphides and pyrite rich halos make up 3% of section. Carbonate veining possibly a shear at 45° to C.A. surrounded by a brown alteration halo at 216.5 to 217.0 and at 219.4 to 219.5	tization (bleaching) evident in more brecciated sections. Entire section very hard i.e. silicified.	201.5 - 201.8 211.1 - 211.4 213.5 - 217.5 220.0 - 220.3 220.0 to 5% pyrrhotite and 20% pyrite in matrix to brecciated section.	
222.0 270.0	Pyrrhotite rich Silicified Tholeiitic Pillow Breccia	Lt grey-green to grey-white (mottled) with white fracturing.	Aphanitic to fine grained	Massive	Pillow breccia with hyaloclastic interstices containing much sulphide and concentric cooling fractures present throughout section. The very sulphide rich breccia is intensely bleached. Brecciation in 30 - 40% of core.	Pervasive silicification throughout. Sulphide rich sections bleached to a white fragment breccia. Light coloured mottling present at 224 to 226.0'. Carbonate veinlets up to 5% . Yellow coloured epidote? coloured alteration marginal to quartz vein at 263.0 268.0 Bleaching diminishes gradually from 268.0 - 270.0	Overall 5% sulphides in matrix to pillow breccia and a pillow interstices as pyrrhotite with minor pyrite. Section of 10% pyrrhotite 232.0 - 242.0; 246.0 - 253.0 1/4" pyrrhotite veinlet with some pyrite at 241.4 293.0 - 257.0 5% pyrrhotite & 5% fine disseminated pyrite apparently related to fine	Intensely hydrothermally altered. Silicification associated with brecciation and abundant iron sulphides. The bleaching which seems to be intimately related to the sulphides is absent after 270.0 but the basalt remains very hard and light colour probably still silicified. Section magnetic.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
							quartz fracturing. 262.0 - 264.0 10% fine disseminated pyrite 5% pyrrhotite 264.0 - 270.0 5% pyrrhotite 5% pyrite Quartz veinlets with pyritic halos (1/2") at 256.0 263.0 266.1 267.8	
270.0 605.4	Tholeiitic Basalt Pillow Breccia	Lt grey-green to green with white veinlets & white mottling	Fine to aphanitic	Massive	Lacks any apparent fabric. About 40 - 50% of section is brecciated on a scale varying from fine shards (mm) to in-situ type fragments (cm). In the fine hyaloclastic (shard) screens the fragments are white (devitrification). Sand in matrix at 321.4. Microdiabasic dyke 360.5 - 363.3 From 320 down section less overall brecciation of the pillow lava & more	From 270 - 320 the core is very hard for a basalt indicating pervasive silicification. Minor carbonate alteration present evident in light coloured matrix to brecciated section & hairline fractures. 5% of core displays a white coloured clot-like mottling. This mottling seems to be due to silicification. 294.0 - 295.0 an intensely carbonate altered band at 30° to C.A.	Overall 1-2% finely disseminated pyrrhotite occasional blotch in matrix of breccia. Quartz veinlets contain trace molybdenite & pyrite surrounded by a yellow pyritic halo (5% pyrite) at: 305.0 305.6 306.7 (1/2") 307.0 - 307.2 309.3 - 309.4 311.1 311.8 312.3 313.0 318.0 - 318.4	Molybdenite in quartz veinlets especially along margins of veinlets. "Plutonization" of basalt in intensely altered section 511.0 to 523.6.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					discrete pillows with brecciated hyaloclastic interstices & margins (5%). Sheared zone 90% to C.A. 446.0 - 446.6 475.0 - 475.3 Quartz carbonate riddling 435-437. Quartz vein 473.9 Fault gouges at 487.5 at 70° to C.A. 490.0 70° to C.A. Shear at 70° to C.A. 514.8 Quartz epidote vein 601.7 - 602.5 Lamprophyre dyke 589.1 - 591.5	From 320 down the core becomes chloritic 1-2% chlorite along fractures. 319.2 - 319.5 semi-massive chlorite & pyrite. 323.0 - 327.0 section chloritic (10% chlorite) 324.8 epidote veinlets (2 mm) 350 - 351 10-20% chlorite truncated at 351.0 by epidote rich fracture. Chloritization evident as patches from 366.0 - 377.0 (5%) Carbonate-quartz veinlets 2% 395 Epidote alteration along carbonate veinlets 502.0 - 504.0 Epidote altered section cut by quartz-quartz, carbonate-K spar veinlets with pyrite developing along margin of veining from 511.0 - 523.8. The center of this zone is "plutonized" to a coarse grained plutonic looking dioritic rock.	10% pyrite as clots 319.2 - 319.4 319.9 - 320.3 10% disseminated pyrite marginal to pyrrhotite rich (20%) bleached fragments? Quartz carbonate veinlets with pyritic halos & trace molybdenite 321.2 1/2" 323.6 324.5 324.7 - 324.8 (2% MoS_2) 326.9 330.2 333.2 335.3 336.1 337.9 339.5 341.1 342.9 345.1 } epidote 345.3 } 5% disseminated pyrite 324-326 Quartz-carbonate veinlets 353.0 363.3 366.0 369.9 373.0 1/2" 2% MoS_2 376.2 (1") 378.9 - 379.2	

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
							380.0 - 380.3 383.8 1/2" 3% MoS_2 390.3 391.2 - 393.5 (numerous veinlets) 410.7 Trace sphalerite in quartz fracture filling 360.4 From 320 down 5% of core is pillow margin breccia containing 10% sulphides 1:1 pyrite to pyrrhotite. 3 mm pyrite seam at 397.8 Quartz veining with pyrite halo 483.4 485.0 - 485.7 10% disseminated pyrite marginal to shear at 514.6-515. 1/4" quartz veinlet with 1% molybdenite 522.9 - 523.6 Pyrite halos of 5% disseminated pyrite around small quartz carbonate veining at 541.0 - 541.6 554.7 - 556.1	
605.4	END OF HOLE							

Hole No. LL 80-4

SULPHIDES #1

DIAMOND DRILL CORE ASSAY RECORD

C.D.	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ppm Zn	Oz. Ag	Oz. Au	ppm Pb	PROGRESSIVE TOTALS ppm Co	ppm Ni	Ft. Oz Ag	Ft. Oz Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
	22767	29.0	30.0			1.0	376	325	0.02	.001	30	77	138											
	8	55.9	56.5			0.6	555	420	0.04	.001	140	80	145											
	9	64.8	66.0			1.2	240	175	0.03	.001	37	125	864											
	70	123.5	127.8			4.3	184	285	0.02	.001	22	68	445											
	1	127.8	129.0			1.2	210	390	0.02	.001	78	50	225											
	2	129.0	134.0			5.0	156	295	0.02	.001	20	57	260											
	3	134.0	139.0			5.0	122	216	0.02	.001	18	60	265											
	4	139.0	144.0			5.0	112	220	0.02	.001	15	58	240											
	5	144.0	149.0			5.0	105	250	0.02	.001	12	53	235											
	6	149.0	154.0			5.0	100	207	0.02	.001	13	50	207											
	7	154.0	159.0			5.0	103	218	0.02	.001	17	55	233											
	8	159.0	163.1			4.1	101	198	0.02	.001	15	62	318											
	9	163.1	165.8			2.7	115	270	0.06	.001	22	60	275											
	80	165.8	166.1			0.3	395	240	0.06	.001	55	195	290											
	1	166.1	167.0			0.9	855	920	0.02	.001	12	56	153											
	2	167.0	167.8			0.8	863	505	0.06	.001	30	118	210											
	3	167.8	171.4			3.6	268	255	0.02	.001	10	70	113											
	4	171.4	176.0			4.6	180	123	0.01	.001	12	67	125											
	5	176.0	181.0			5.0	883	147	0.02	.001	18	93	198											
	6	181.0	184.0			3.0	275	128	0.01	.001	20	75	135											

HOLE NO. LL 80-4

JFR 1634

SULPHIDES #2

DIAMOND DRILL CORE ASSAY RECORD

C.D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ASSAYS ppm Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS ppm Pb	PROGRESSIVE TOTALS ppm Co	PROGRESSIVE TOTALS ppm Ni	PROGRESSIVE TOTALS % Fe	PROGRESSIVE TOTALS Ft. Oz. Au	PROGRESSIVE TOTALS ppm Mo	REMARKS AND AVERAGE ASSAYS FROM	REMARKS AND AVERAGE ASSAYS TO	REMARKS AND AVERAGE ASSAYS LENGTH	REMARKS AND AVERAGE ASSAYS % Cu	REMARKS AND AVERAGE ASSAYS % Zn	REMARKS AND AVERAGE ASSAYS Oz. Ag	REMARKS AND AVERAGE ASSAYS Oz. Au	
	22787	201.5	201.9			0.4			0.01	.001				4.38										
	8	206.3	207.3			1.0			0.01	.001				3.95										
	9	210.1	211.7			1.6			0.16	.001				5.05										
	90	213.5	217.5			4.0			0.02	.001				6.53										
	1	232.0	237.0			5.0	243	116	0.01	.001	18	80	155	7.78										
	2	237.0	242.0			5.0	290	123	0.04	.001	22	120	188	9.95										
	3	246.0	248.0			2.0	280	166	0.02	.001	20	107	200	10.10										
	4	248.0	253.0			5.0	205	234	0.02	.001	13	105	150	7.90										
	5	253.0	257.0			4.0	236	185	0.03	.001	18	80	143	7.73										
	6	262.0	264.0			2.0	335	205	0.03	.001	28	110	183	10.40										
	7	264.0	268.0			4.0	560	255	0.03	.001	23	100	180	6.20										
	8	304.9	306.7			1.8			0.02	.001				3.38		86								
	9	306.7	308.1			1.4			0.02	.001				4.38		320								
	22800	308.1	310.7			2.6			0.02	.001				5.13		280								
	22851	310.7	313.5			2.8			0.02	.001				5.93		152								
	2	317.9	320.3			2.4			0.02	.001				7.90		162								
	3	323.0	327.0			4.0			0.02	.001				5.18		280								
	4	378.5	380.7			2.2			0.02	.001				3.33		10								
	5	383.5	384.3			0.8			0.02	.001				3.90		280								
	6	483.1	485.7			2.6			0.03	.001				4.48		58								

HOLE NO LL 80-4

JDR 1624

SULPHIDES #3

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT	TO FT	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT	ASSAYS ppm Cu	ppm Zn	Oz. Ag	Oz. Au	% Fe	PROGRESSIVE TOTALS Ft. % Cu	Ft. % Zn	Ft. Oz. Ag	Ft. Oz. Au	ppm Mo	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
	22857	514.4	515.2			0.8			0.04	.001	6.53					100							
	22863	522.9	523.6			0.7	147	42	0.33	.003	2.02					8							
	4	541.0	541.6			0.6	240	64	0.04	.001	5.40					18							
	5	554.7	556.1			1.4	138	61	0.05	.001	5.25					124							

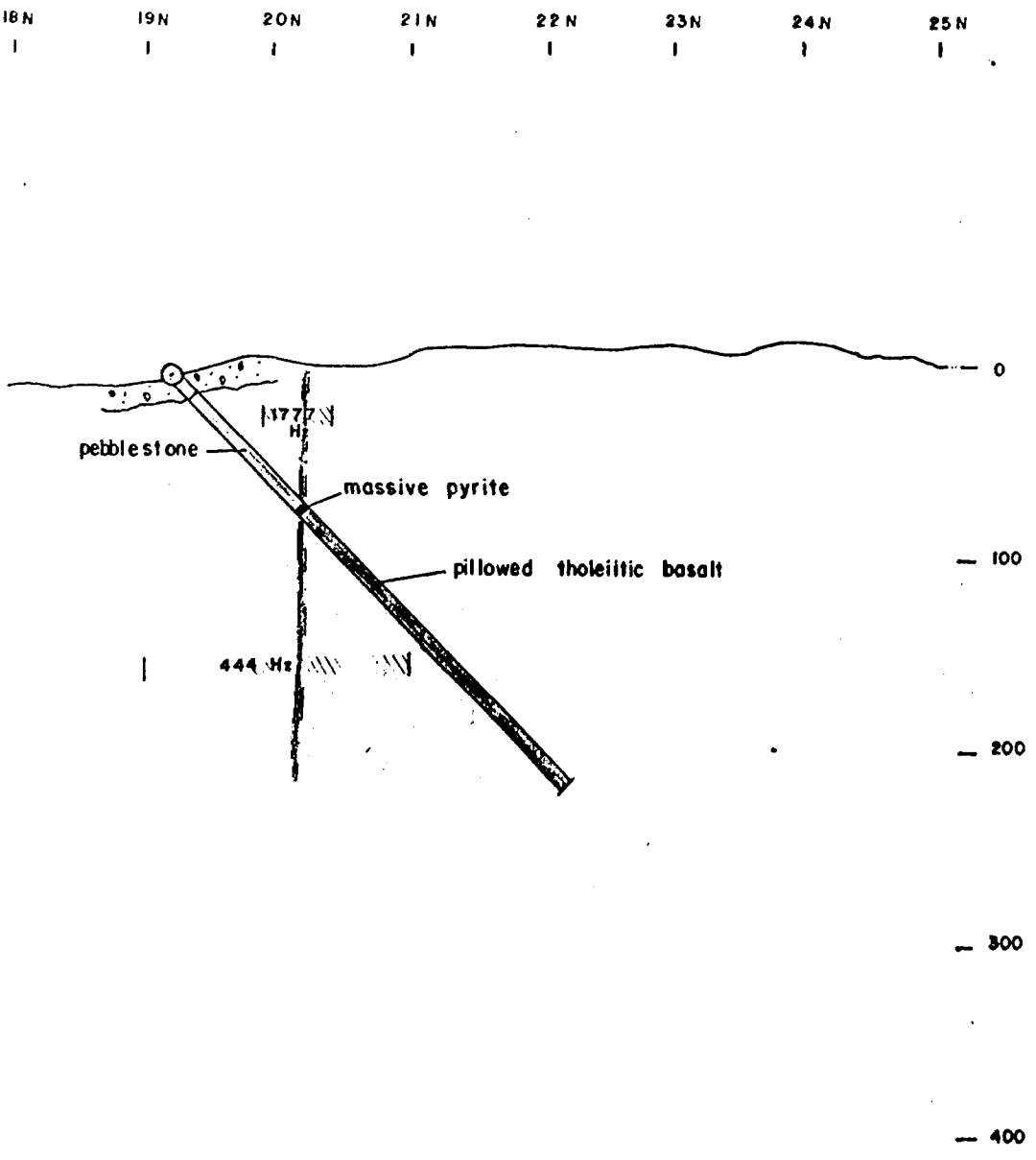
HOLE NO. LL 80-4

JFR 1434

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT	TO FT	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS ppm Cu	ppm Zn	ppm Pb	ppm Co	ppm Ni	PROGRESSIVE TOTALS % Fe	% Mg	%Na_2O	% K_2O	%CaO	REMARKS AND AVERAGE ASSAYS %SiO_2	%TiO	Au	Ag	% Zn	Oz Ag	Oz Au	
	23272	45.0	55.0			10	238	160	17	78	143	4.55	0.65	4.15	0.29	6.00	49.8	1.45	.001	.02				
	3	95.0	105.0			10	150	97	32	95	445	3.88	1.70	4.21	0.10	6.61	48.3	0.75	.001	.01				
	4	185	195			10	305	193	18	73	135	4.18	0.50	2.97	0.27	7.39	55.9	1.19	.001	.01				
	5	280	290			10	392	200	23	70	138	3.68	0.54				49.3	1.16	.001	.02				
	6	330	340			10	280	125	20	62	113	3.65	0.74				51.5	1.33	.001	.01				
	7	366	376			10	225	130	27	80	133	4.80	1.17				48.0	1.42	.001	.02				
	9	450	460			10	230	78	18	58	155	3.77	0.55				68.0	0.64	.001	.02				
	23280	511	521			10	172	65	32	78	125	3.63	0.60				48.8	1.34	.001	.02				
	81	595	605			10	515	217	20	70	100	3.46	0.97				51.7	1.20	.001	.02				

HOLE NO LL 80-4



X-SECTION
EAST-WEST
LL 80-5

LARDER LAKE PROJECT

MISEMA NORTH - McELROY TOWNSHIP

CLAIM L522748

0 50 100
FEET

FALCONBRIDGE COPPER LTD.
EXPLORATION
DRILL HOLE RECORD

Hole No. LL 80-5 | Lat. 53+80 NW | Dep. 21+20 NE | Elev. - | Dip -50° | Bearing 090 | Depth 307.0 | Core AQ

Working Place: LARDER LAKE PROJECT | Date Started: May 22/80 | Date Completed: May 27/80

Compass Tests — Maq. Declination

Depth	Dip	T. Azim.
300'	-43°	96°

Acid Test

Depth	Dip	Depth	Dip

Misema North
McElroy Township
Claim # L-522748

Contractor: McKnight Diamond Drilling

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 14.2	Overburden Clay & boulders		(15' of casing left in hole)					
14.2 109.2	Dirty Polymict cobble to pebble-stone, with minor Wacke & Argillite interbeds.	Dk grey to black with lt grey, greenish grey & black clasts	Silt to sandy matrix cobble to pebble clasts	Massive to bedded	Washbed with a coarsening feldspathic bottom 14.2 - 18.7. Tops would seem to be up hole. Fine argillite coarsening to a wacke 18.7 - 26.5 Bedding at 40-45° to C.A. Polymict pebble-cobble stone 26.5 - Clasts of argillite, wackes, feldspar porphyry (minor component) altered komatiite (talcy-serpentine) pyrrhotite (0.5%) & silicified volcanic (tholeiite?).	Minor pervasive carbonate alteration. Silicified mafic volcanic & carbonate altered komatiite clasts altered prior to erosion and deposition as sediment. Serpentine + carbonate veinlet at 54.0 and 107.5. 107.9 - 109.2 intensely sericitized fine grained clastic sediment	Clasts of massive pyrrhotite about 0.5 - 1.0% of clastic. More sulphide clasts apparent as you approach base of unit. 3-5% disseminated pyrite in dyke 37.4 - 41.8. 1% molybdenite in quartz vein 41.8 - 42.0 (marginal to above dyke). From 100.0 - 107.9 3-5% disseminated clastic? pyrrhotite.	Elongation of some fragments would seem to be a primary feature in the sediment probably a result of a fabric in the rocks prior to erosion & deposition. Base of section increase in sericitization and clastic pyrrhotite.

Hole No. .....LL 80-5.....

Logged by ...Frank Balint.....

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					The argilliceous & altered komatiite clasts appear wispy (elongated) parallel to bedding. The border porphyry & silicified volcanic clasts are equi-dimensional. Pyritic intermediate dyke from 37.4 - 41.8 with quartz veining on margins.		107.9 - 109.2 10% pyrrhotite	
109.2 111.6	Chrome Mica bearing Clastic Iron Sulphides	Brassy yellow to brassy brown with bright jade green smears in matrix to sulphides	Fine grained sulphides. Coarse clasts (cm scale)	Clastic	Mixture of sulphide clasts 80% sericitized sedimentary clasts (10%) and silicified volcanic clasts (10%). Minor feldspar porphyritic clasts in a feldspathic sandy matrix.	Weak to no carbonate alteration. Silicification of basic volcanic fragments and sericitization of feldspathic sedimentary fragments. Development of chrome mica 5%. 5-10% chlorite developed in matrix to pyritic sections 109.2 - 109.6 110.2 - 110.4	80% iron sulphides 1:1 pyrite to pyrrhotite. Trace chalcopyrite rimming some of pyrrhotite fragments. Trace sphalerite in clastic matrix.	Reworked clastic sulphide at the sediment volcanic contact.
111.6 307.0	Tholeiitic Pillowed-Pillow Brecciated Basalt	Lt green to grey green with brassy specks & white random veining.	Aphanitic to fine grained	Massive to pillowed	Pillowed flow brecciated for about 30% of section. Quartz veinlets up to 0.8 ft. 3-4% of section at about 45° to C.A.	Minor pervasive carbonate alteration 3-4% free carbonate veinlets. Pervasive silica alteration reflected in hardness of basalt.	2-3% pyrite disseminated throughout locally up to 5% pyrite around quartz veinlets. Trace sphalerite in qtz veinlet	Same material as in LL80-4 except lacking the very pyrrhotite rich bleached section beneath the sulphide section.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					Basic micro-lamprophyre with a chilled margin at 246.4 - 251.5 (carbonate rich) Ribbing concentric cooling fractures 10-20% of section. Variolitic fragment in a brecciated pillow interatice at 240.0. Flow becomes more medium grained (mottled) from 283.0 - 307.0	1-2% epidote as marginal alteration to quartz veinlets	at 151.0. Trace chalcopyrite & molybdenite at 154.4 in qtz veinlet. 5% disseminated pyrite from 273.7 - 277 in brecciated qtz-carb invaded section.	
307.0	END OF HOLE							

JKB 1982

Hole No. LL 80-5

JVR 7434

GEOCHEM

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT	TO FT	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	PPM Zn	PPM Pb	PPM Co	PPM Ni	% Fe	% Mg	% Na_2O	% K_2O	% CaO	REMARKS AND AVERAGE ASSAYS				% Cu	% Zn	Oz.	Oz. Au	Oz Ag
																	% SiO_2	% TiO_2							
	23282	75	85			10.0	175	78		83	138	3.23	0.90	3.72	0.87	5.77	60.6	0.63		Argillite-wacke				.001	0.01
	83	150	160			10.0	185	127		70	150	3.75	0.47	3.94	0.37	8.40	52.9	1.27		Pillowed Tholeiite				.001	0.01

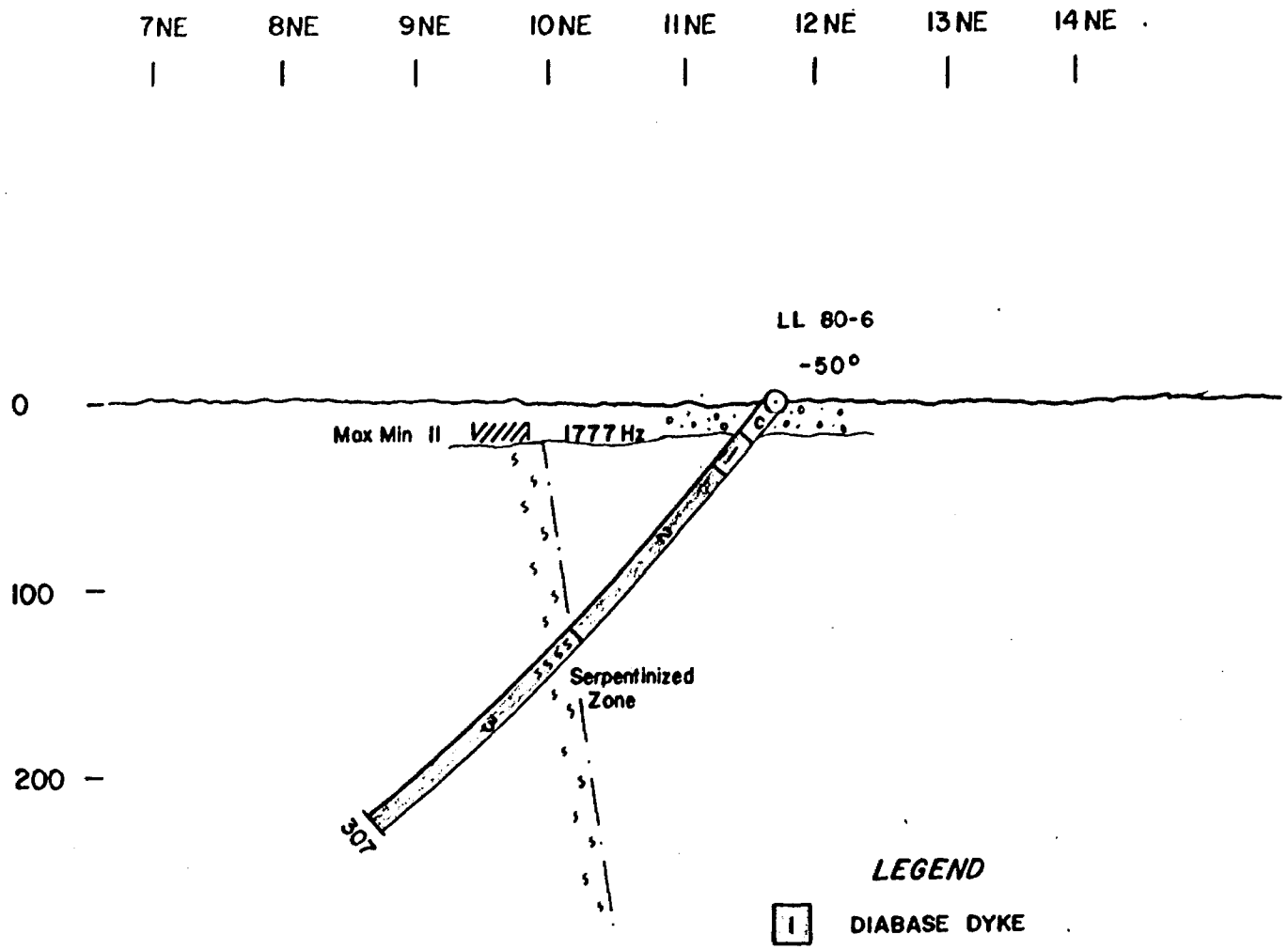
HOLE NO. LL 80-5

SULPHIDES

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS % Cu	ASSAYS % Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS	PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft Oz Ag	PROGRESSIVE TOTALS Ft. Oz. Au	PROGRESSIVE TOTALS	REMARKS AND AVERAGE ASSAYS FROM	REMARKS AND AVERAGE ASSAYS TO	REMARKS AND AVERAGE ASSAYS LENGTH	REMARKS AND AVERAGE ASSAYS % Cu	REMARKS AND AVERAGE ASSAYS % Zn	REMARKS AND AVERAGE ASSAYS Oz Ag	REMARKS AND AVERAGE ASSAYS Oz Au	
							ppm Cu	ppm Zn			ppm Pb	ppm Co	ppm Ni			ppm Mo								
	22858	37.0	41.8			4.8	110	78	0.02	.001														
	59	41.8	42.0			0.2	255	118	0.02	.001						1440			1% MoS_2 in Qtz vein					
	60	104.0	109.2			5.2	106	203	0.02	.001	15	78	315											
	61	109.2	111.6			2.4	405	307	0.05	.001	43	225	318											
	62	111.6	116.3			4.7	148	223	0.03	.001	10	110	190											
	66	273.3	277.0			3.3																		

HOLE NO. LL 80-5



LEGEND

1. DIABASE DYKE
2. THOLEIITIC BASALT (pillowed)
3. DIFFERENTIATED ULTRABASIC INTRUSIVE

X-SECTION
LL 80-6
51+15 NW 10+85 NE

LARDER LAKE PROJECT

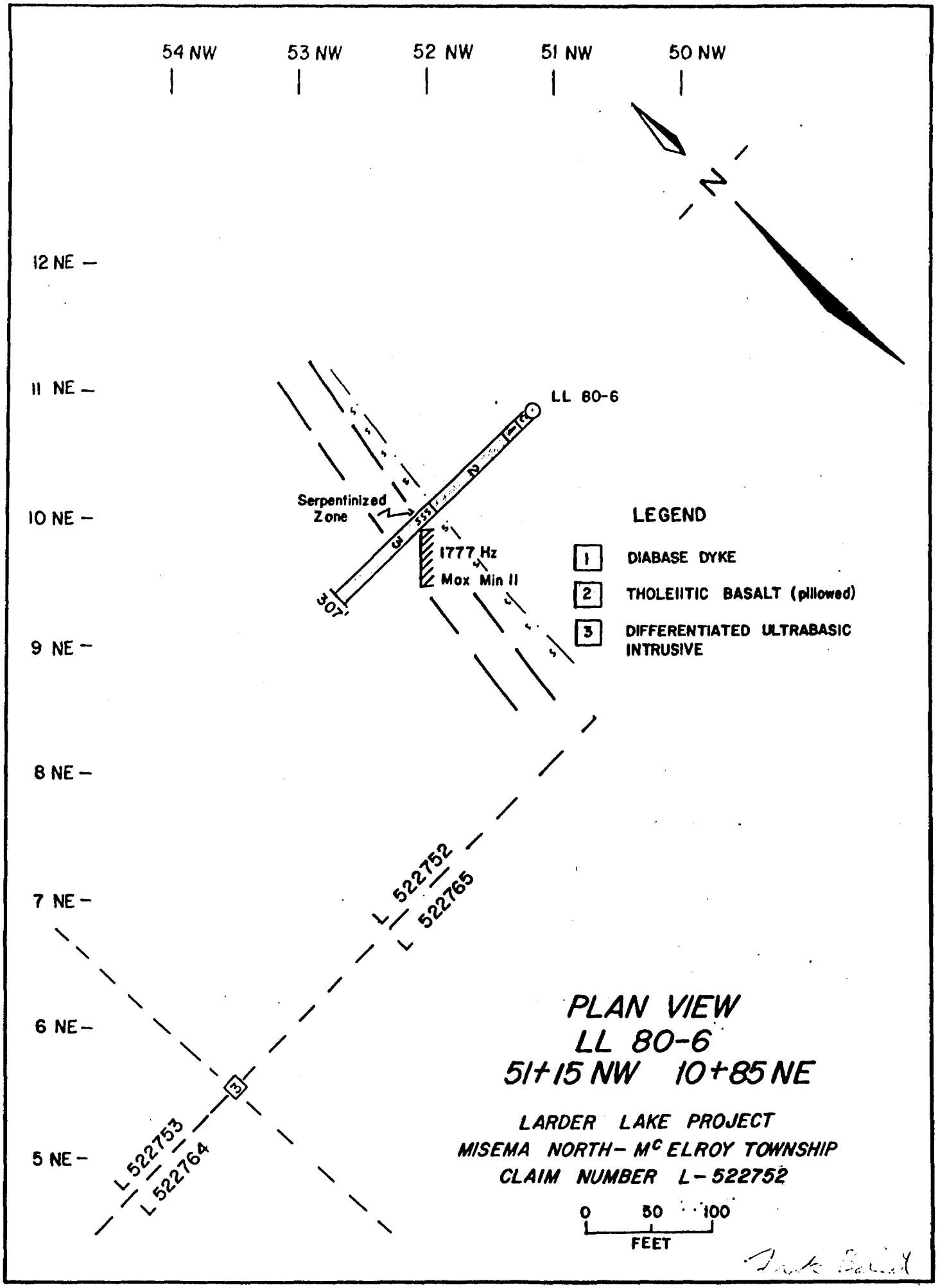
MISEMA NORTH - McELROY TOWNSHIP

CLAIM NUMBER L-522752

0 50 100

FEET

Frank Balint


54 NW
53 NW
52 NW
51 NW
50 NW
N
12 NE
11 NE
10 NE
9 NE
8 NE
7 NE
6 NE
5 NE
LL 80-6
Serpentinized Zone
1777 Hz
Mox Min II
307
LEGEND
1 DIABASE DYKE
2 THOLEIITIC BASALT (pillowed)
3 DIFFERENTIATED ULTRABASIC INTRUSIVE
L 522752
L 522765
L 522753
L 522764
PLAN VIEW
LL 80-6
51+15 NW 10+85 NE
LARDER LAKE PROJECT
MISEMA NORTH- McELROY TOWNSHIP
CLAIM NUMBER L-522752
0 50 100
FEET

FALCONBRIDGE COPPER LTD.
EXPLORATION
DRILL HOLE RECORD

Hole No. LL 80-6
Working Place LARDER LAKE PROJECT MISEMA NORTH
Lat. 51+10 NW
Dep. 10+90 NE
Elev. -
Dip -50°
Bearing 270°
Depth 307'
Core AQ
Date Started May 29,1980
Date Completed June 5,1980
Compass Tests
Mag. Declination
Depth | Dip | T. Azim.
Acid Test
Depth | Dip | Depth | Dip
300' | 45°

Claim #L-522752
Contractor: McKnight Diamond Drilling

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 - 25.0	Overburden (27' of casing)							
25.0 43.0	Diabasic Dyke	Green-yellow speckled with yellow veining.	Medium	Massive	Contact with pillow lava sharp at 80° to C.A. (no chill apparent)	Epidote veining about 5% of section	Trace to 2% pyrite disseminated	
43.0 161.8	Tholeiitic Pillow Basalt to Pillow Breccia	Dark green to grey green	Aphanitic to fine grained	Massive pillowed	Concentric cooling cracks pillow selveges and brecciated sections (5%) all apparent in section. Lamprophyre dykes at 52.5 - 53.5 92.3 - 93.4 (irregular contacts). Quartz carbonate epidote? veinlets at 86.2 - 86.7	No pervasive carbonate alteration. 1-2% fine carbonate veinlets. Epidote veinlets 1-2%	Trace disseminated pyrite throughout section. Locally in pillow margins & in brecciated section up to 5% pyrite. 114.0 - 114.1 qtz carb Kspar vein let with trace sphalerite, chalcopyrite & molybdenite.	This basalt is very similar to that encountered in LL 80-4 & 5 Frank Belint

JRS 7124

Hole No. LL 80-6

Logged by Frank Belint

Frank Belint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
							124.6 - 125.5 10% coarse pyrite cubes.	
161.8 307.0	Serpentinized differentiated olivine Porphyritic Ultra basic Intrusive	Dk green to black with yellow (olive) coloured spots grading to pink-green speckled rock	Coarse grained to med grained	Porphyritic in olivine and biotite	Serpentine veinlets (fibers growing perpendicular to vein at all angles to C.A. from hairline up to 2" thick (5%) gradation to a massive to coarse grained non-porphyritic phase with pink potassic feldspar increasing down hole. Kspar observed at 257 - 300	Serpentine, dark green soft fibrous mineral (poorly developed fibers). Alteration is pervasive & most intense from 175 - 215 ft. Serpentization decreases down hole.	No sulphides	The serpentinized sections and veinlets are weakly conductive with an ohm-meter Sample 219.5 - 283.7 for thin section. Weakly magnetic Differentiated ultrabasic dyke probably along the N-S fault Serpentization of the ultrabasic phase gives rise to conductivity.
307	END OF HOLE							

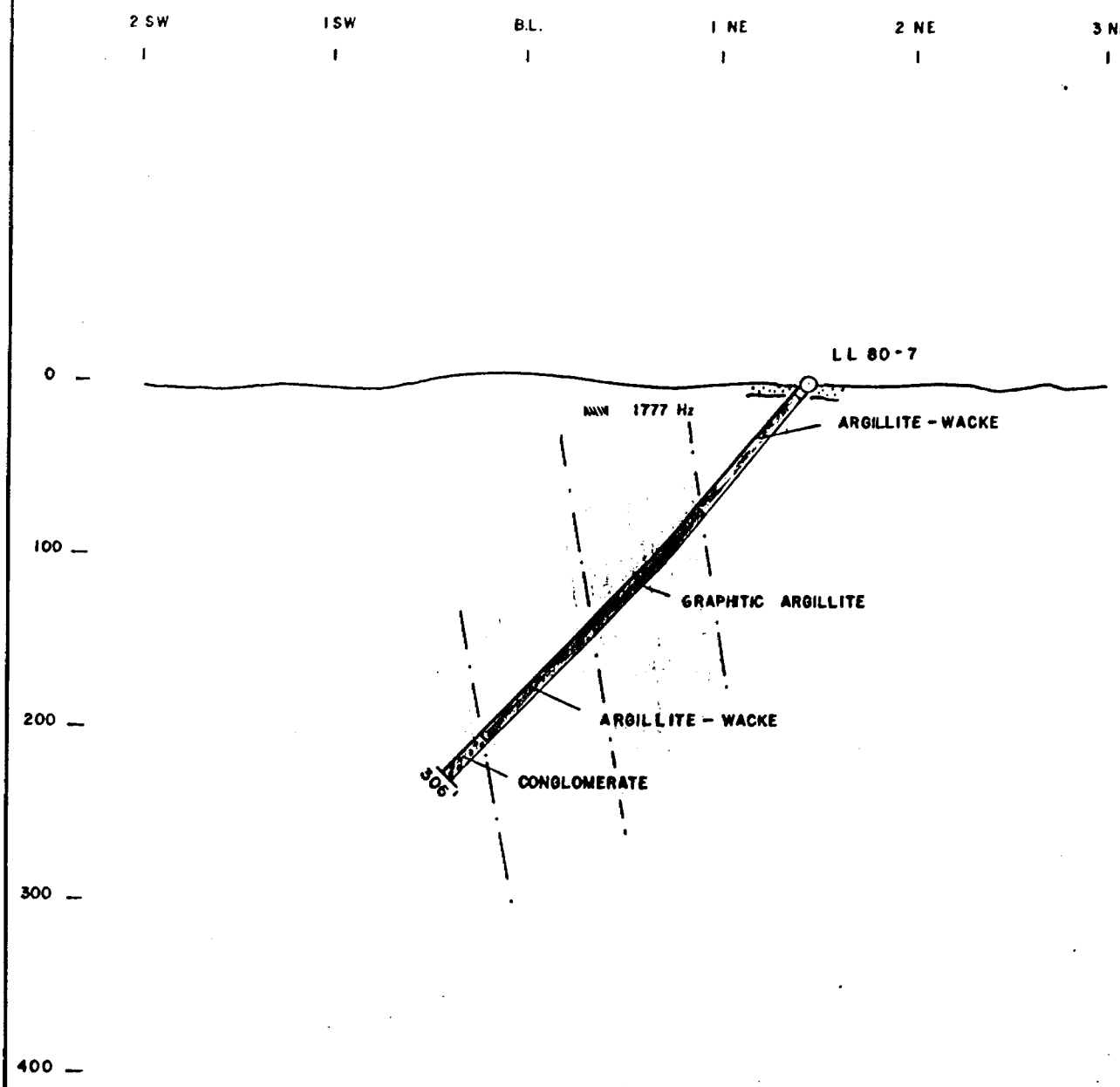
JEB 1982

GEOCHEMISTRY RESULTS DIAMOND DRILL CORE ASSAY RECORD

CD	Sample Number	From Ft	To Ft	Estimate Cu	Estimate Zn	Length Ft	% Cu	% Zn	% Pb	oz Ag	oz Au	% SiO_2	% TiO_2	% Na_2O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	PPM Ni	PPM Co	% K_2O	% CaO	
	23284	50	60			10.0'	Tholeiitic Basalt			0.02	.001	47.9	1.35	3.13	.90	5.0	183	85		133	72	.89	8.18	
	23285	150	160			10.0	Tholeiitic Basalt			0.02	.001	50.6	1.47	2.6	.52	4.83	143	100		112	58	.84	8.79	
	23287	175	185			10.0	Intrusive: Peridotite			0.02	.001	44.3	1.15	1.04	4.65	5.93	197	83		740	110	1.18	7.78	
	23288	295	305			10.0	Intrusive: Felsic Phase			0.01	.001	66.1	1.69	4.29	1.97	4.85	330	82		310	70	2.0	5.54	

HOLE NO. LL 80 - 6 PAGE 3

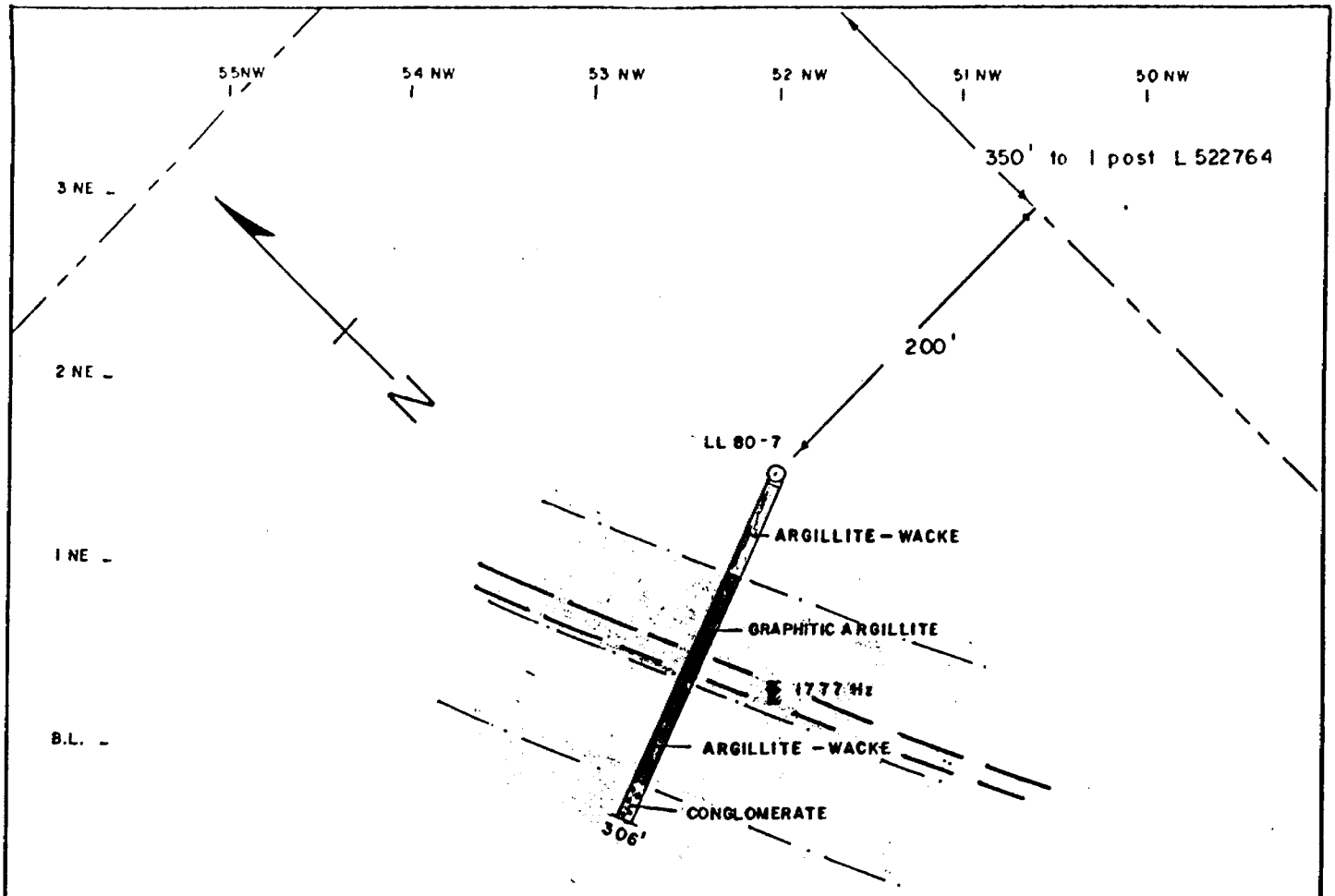
Form - Vroon Dryer



X - SECTION
LL 80-7
52+00 NW 1+50 NE
250° Looking N. W.

LARDER LAKE PROJECT
MISEMA NORTH - MELROY TWP.
CLAIM L 522764

0 50 100
FEET



PLAN VIEW
LL 80-7
52+00 NW 1+50 NE
LARDER LAKE PROJECT
MISEMA NORTH - M^{c}ELROY TWP.
CLAIM L 522764

0 50 100
FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No.	Lat.	Dep.	Elev.	Dip	Bearing	Depth	Core
LL 80-7	L 52 + 00 N W	1 + 50 N E		-50°	250°	306.0 Ft.	AQ

Working Place: LARDER LAKE PROJECT

Date Started: JUNE 11, 1980

Date Completed: JUNE 19, 1980

Compass Tests — Maq. Declination: Depth / Dip / T. Azim.

Acid Test: Depth 303 Ft / Dip -45° / Depth / Dip

MISEMA NORTH PROPERTY

McELROY TOWNSHIP CLAIM NUMBER L 522764

CONTRACTOR: McKNIGHT DIAMOND DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 10.0	Casing							
10.0 to 37.5	Interbedded Greywackes and Argillites	Grey to Grey Black	Sandy to Silty Fragments	Bedded to Massive	Bedding varies from 0 to 30° to C.A. Sharp truncations (slumping) of bedding throughout section (i.e. 24.6') Lamprophyre dyke at 18.3' to 19.0' Carbonate rich	Lacks apparent alteration	Trace Pyrite along slips and joints	
37.5 to 94.5	Silicified interbedded Greywackes and Argillite	Light grey to dark grey with creamy white to brown sections	Silts to sand sized grains	Massive	Bedding at a variety of angles to C.A. (from 0 to 40°) Truncation of bedding at 70° to 90° to C.A.	Intense silicification throughout section Finer grained sediments appear cherty. Serpentine in veinlet at 92.0' 1% - 2% carbonate veining associate with quartz veinlets	Trace Pyrite Trace Sphalerite in quartz veinlet at 84.4'	Silicification gradually decreases down section almost imperceptibly
94.5 to 186.0	Weakly Graphitic - Interbedded Argillites, Wackes and Pebblestone	Black to Light Grey	Pebbles to Silts	Massive	Bedding at 30° to 50° to C.A. - Tops down hole 107.5 and 109.0 - Dirty pebblestone screen at 120.4 to 132.0	Sections lacks alteration except for pebblestone screen which is very rich in carbonate Carbonate veinlets 1% - 2%	Trace Pyrite Trace Sphalerite and pyrite in carbonate veinlets from 137.0 to 186.0	Sections becomes weakly graphitic and weakly conductive intermittantly from 137.0 to 186.0 (Conductor) From 186.0 down section becomes more massive

Hole No. LL 80-7

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
186.0 to 274.8	Massive Wacke or Mafic Tuff With minor interbedded Argillite	Light Grey - Green with white speckles and black bands	Sand sized	Massive	Very structureless for most part. Occasional coarsening and fining of the grains. Wispy beds of argillaceous material at 45° to C.A. 231.0 - 231.8 Mafic Dyke	Mild carbonate alteration throughout section 1% - 2% free carbonate veinlets at random angles to core axis.	Trace Pyrite throughout 219.8 - trace chalcopyrite, sphalerite and galena in a 3 mm quartz veinlet	Section becomes more interbedded with argillaceous material down hole: i.e. after 239.0' Very blocky ground 239.0 down hole to 274.8'
274.8 to 306.0	Heterolithic Conglomerate with Argillite screens	Grey to Grey-Green	Sand to Cobble	Massive	Screens of argillite wacke at 45° - 50° to C.A.	3% - 4% carbonate veining at random angles to C.A.	Trace Pyrite Trace Sphalerite Chalcopyrite and pyrrhotite at 276.5 (3 cm)	Dirty conglomerate clasts of feldspar porphyry, argillite wacke mafic volcanic ?
306.0 END OF HOLE								

JFR 1834

GEOCHEMISTRY **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	PPM Zn	Oz. Ag	Oz. Au	PPM Mo	PROGRESSIVE TOTALS PPM Co	PPM Ni	PPM Fe	PPM Mg	PPM CaO	REMARKS AND AVERAGE ASSAYS PPM Na_2O	PPM K_2O	% SiO_2	% TiO_2	% Zn	Oz Ag	Oz Au	
	23290	10.0	20.0			10.0	54	85	0.01	.001	10	20	60	2.20	0.63	2.52	5.07	1.74	68.9	0.38	Sediments			
	23291	240.0	250.0			10.0	176	108	0.01	.001	20	70	470	3.65	1.95	3.81	3.21	1.78	57.9	0.57				

HOLE NO. LL 80-7

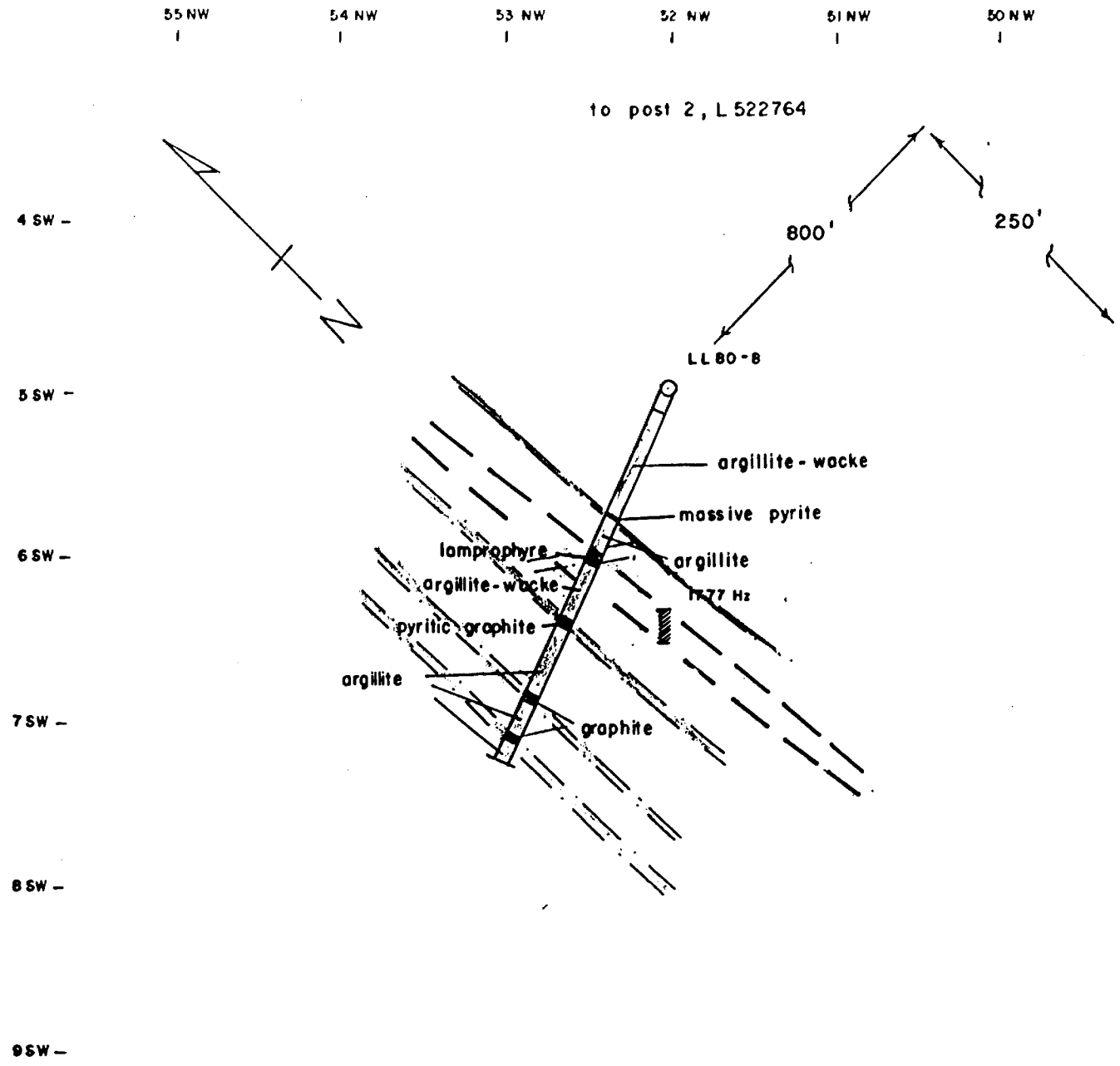
JFR 1624

SULPHIDES

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Pb	PROGRESSIVE TOTALS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS % Oz Ag	PROGRESSIVE TOTALS Ft. Oz Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	PPM Cu	PPM Zn	PPM Pb	Oz Au
	22867	132.0	137.0			5.0	97	305	0.02	.001	20	50	245			132.0	186.0	54.0'	100	308	25	
	22868	137.0	142.0			5.0	118	318	0.01	.001	25	50	240			Weakly Graphitic Argillite						
	22869	142.0	147.0			5.0	113	363	0.01	.001	20	45	230			"	"		"			
	22870	147.0	152.0			5.0	122	365	0.01	.001	30	50	255			"	"		"			
	22871	152.0	157.0			5.0	138	407	0.02	.001	25	50	280			"	"		"			
	22872	157.0	162.0			5.0	107	373	0.01	.001	25	45	235			"	"		"			
	22873	162.0	167.0			5.0	87	345	0.02	.001	25	45	245			"	"		"			
	22874	167.0	172.0			5.0	100	272	0.01	.001	25	50	245			"	"		"			
	22875	172.0	177.0			5.0	97	355	0.02	.001	20	45	280			"	"		"			
	22876	177.0	182.0			5.0	73	147	0.02	.001	30	65	540			"	"		"			
	22877	182.0	186.0			4.0	58	137	0.02	.001	30	90	780			"	"		"			
	22878	219.0	220.2			1.2	78	290	0.03	.001	55	45	370			"	"		"			
	22879	276.1	277.0			0.9	205	1260	0.03	.001	25	40	225			"	"		"			

HOLE NO. LL 80 -7



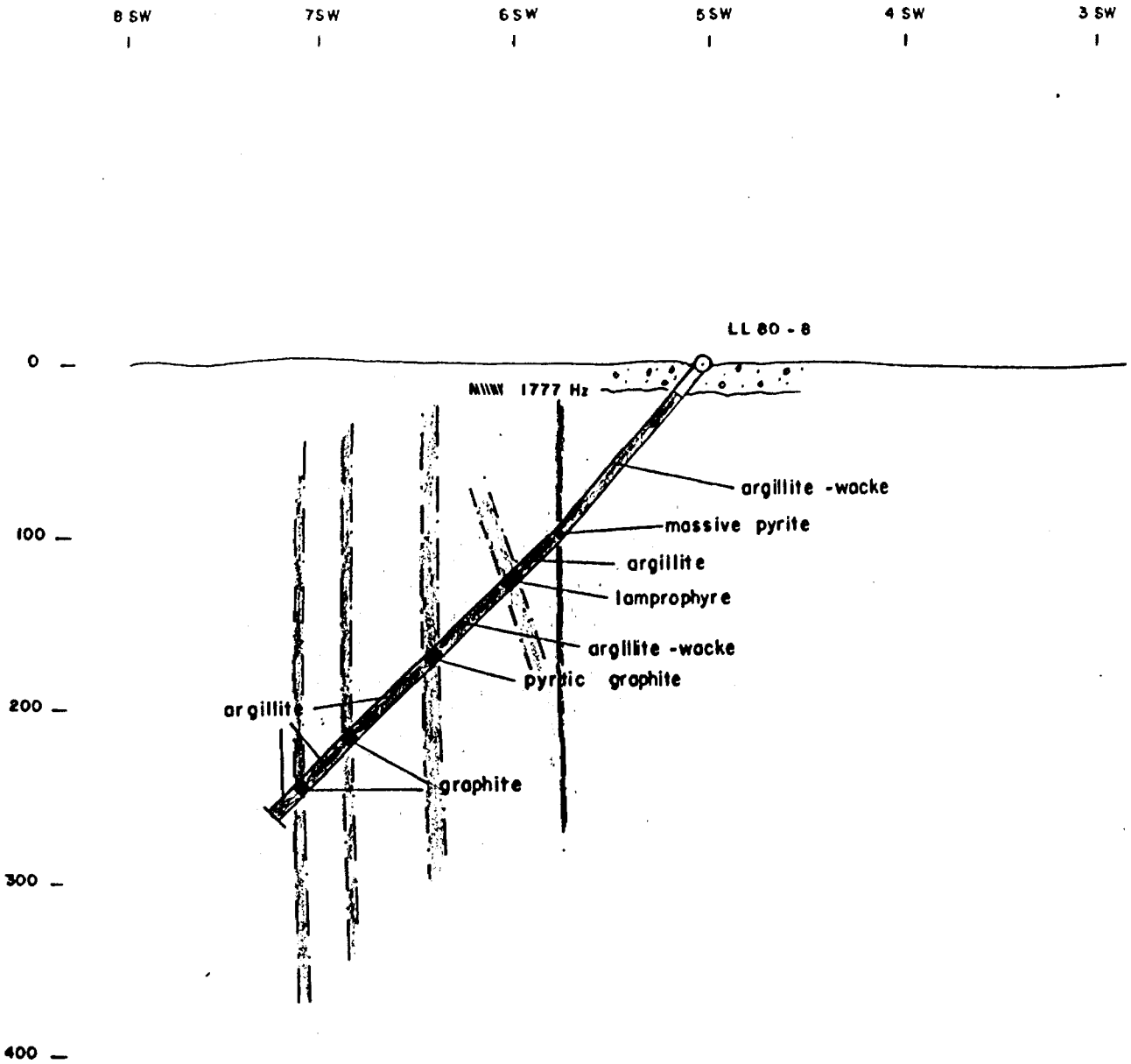
PLAN VIEW
LL 80-8
52+00 NW . 5+00 SW

LARDER LAKE PROJECT

MISEMA NORTH - McELROY TWP.

CLAIM L522764

0 50 100
FEET



X - SECTION
LL 80 - 8
52+00 NW 5+00 SW
250° Looking N. W.

LARDER LAKE PROJECT

MISEMA NORTH - McELROY TWP.

CLAIM L522764

0 50 100
FEET

Z.A.B.X

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80-8 | Lat. L 52 N W | Dep. 5 + 00 S W | Elev. | Dip - 50° | Bearing 250° | Depth 362.0' | Core AQ

Working Place: LARDER LAKE | Date Started: JUNE 23, 1980 | Date Completed: JUNE 26, 1980

PROJECT: MISEMA NORTH PROPERTY, McELROY TOWNSHIP

CLAIM NUMBER L 522764

CONTRACTOR: McKNIGHT DIAMOND DRILLING

Compass Tests — Maq. Declination

Depth	Dip	T. Azim.
300'	- 36°	

Acid Test

Depth	Dip

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0.0 to 22.0	Overburden	- 25' Casing						
22.0 to 126.3	Chaotic Interbedded Argillites Greywacke and Pebble-stone	Light grey to black banded cut by white veining	Clay to Silt to Pebble sized clasts	Massive to Bedded	Bedding shows range of angles to core (30 to 70°) Scale of bedding also varies from mm to meter scale. Generally coarsening down hole on beds 25.0 to 43.2 one bed argillaceous at top of section gradually coarsening to a pebble-stone at base Quartz carbonate veined section 68.0 - 71.3: Quartz Vein 112.9 - 113.6	Only trace carbonate noted in some of coarser beds. 1% - 2% free carbonate veining at random angle to C.A.	Trace to 1% Pyrite and pyrrhotite as fine disseminations) in sediments. Trace sphalerite in quartz veining 68.0 - 71.3 Trace sphalerite 99.0	Slumping with or without tectonic brecciation causes chaotic nature i.e. bedding changes, truncations of bedding. Matrix to pebble stone is argillitic. Pebbles of argillite, wacke, mafic volcanic
126.3 to 127.9	Semi-massive fuchite bearing pyrite bed	Brassy yellow with green streaks	Fine	Massive	Clot like forms of pyrite with coarse wacke in matrix	Fuchite (chrome mica) develops in the matrix 1% - 2%	50 - 60% Pyrite	Very vuggy nature to sulphide section - 20% open space with delicate pyrite crystals growing into open spaces.

Hole No. LL - 80 - 8

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
127.9 to 165.2	Bedded Argillitic Wackes and Minor Pebble-stone	Same Sequence as Described above.					Trace sphalerite at 130.2 in quartz carbonate veining 162.0 - 163.0 3% Py, 1% po and trace chalcopyrite as wisps in argillite 164.8 - 165.2 clot of pyrrhotite and pyrite.	
165.2 to 175.0	Lamprophyric Dyke	Dark grey with black -brown speckles	Fine	Microporphyritic in biotite	Angular xenolith of sediment included in dyke Contacts ragged	Pervasive carbonate alteration or primary ?		Sharp contacts with sediments
175.0 to 230.4	Interbedded Argillites and Greywackes	Black to Grey (Banded)	Silts to Sands	Massive	Bedding at 40° - 45° to C.A. Slump structure apparent. Scale of bedding from mm to 10's of cm. 216.8 to 217.0 pyrite rich mafic dyke at 45° to C.A.	Trace carbonate pervasive throughout section 1% - 2% free carbonate as fine veinlets in sections.	Trace to 1 % disseminated Pyrite	
230.4 to 237.0	Graphite with Pyrite nodules	Black with Brassy spots	Fine	Massive	Pyrite nodules or boudinaged beds up 4 cm in diameter. Elongation of nodules at 45° to C.A. Foliation in graphite at 45° to C.A. Bedding at 45° to C.A. Carbonated mafic dyke at 235.9 to 236.7'	Trace carbonate as fine veining	30% Pyrite as nodules throughout section. 236.8 to 237.0 10% - 15% pyrrhotite with trace chalcopyrite.	Highly conductive section. Last 0.2 ft. of section pyrrhotite rich.
237.0 to 362.0	Interbedded Graphitic Argillite & Greywacke	Dark Grey to black	Silts and sand		Bedding scale varies from mm to cm. Bedding @ 45° to C.A. Graded beds indicate tops uphole	Weak pervasive carbonate alteration - Section 258.7 to 280.6 strongly silicified to cherty argillites and wackes	1% to trace pyrite through most of section	

JES 1982

Hole No. LL 80 -8

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
237.0 to 362.0 continued					235.2 to 239.4 Pyrite graphite sequence		10% Pyrite as clots 2% - 3% pyrrhotite as nodules, 2 - 3 mm	Weakly conductive section
							Trace sphalerite in fractures at 258.6 and 260.3	
					289.0 to 304.0 weakly pyritic graphitic section		5% pyrite as disseminations as nodules up to 2 cm	Weakly conductive
					338.0 to 346.2 weakly graphitic section with 1 - 2% nodules		1 - 2% pyrrhotite as nodules and 3% - 4% pyrite as clots and disseminations	
					Section becomes more gritty in last 5 feet of core.			
362.0 END OF HOLE								

JVR 1434

SULPHIDES **DIAMOND DRILL CORE ASSAY RECORD**

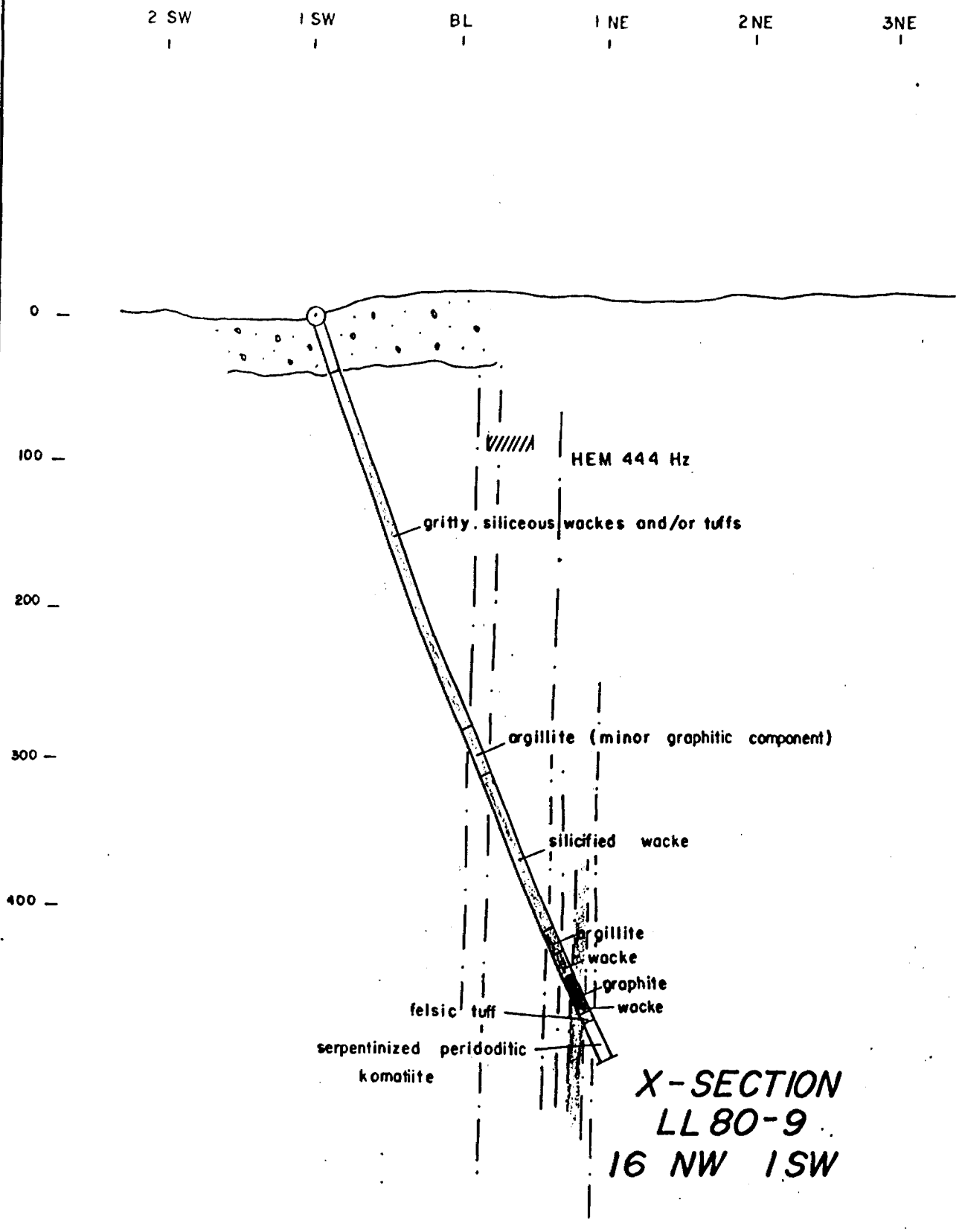
C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	PPM Zn	Oz. Ag	Oz. Au	PPM Co	PROGRESSIVE TOTALS PPM Ni	PPM Pb	Ft. Oz. Ag	Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz. Au	
	22880	68.0	71.3			3.3	288	313	0.01	.001	52	170	57							Quartz veining in sediments				
																				Semi-massive pyrrhotite				
	22881	126.3	127.9			1.6	323	78	0.04	.001	120	313	140							Semi-massive pyrrhotite				
	22882	162.0	165.2			3.2	173	383	0.01	.001	43	100	33							Argillite				
	22883	230.4	237.0			6.6	235	890	0.05	.001	80	140								Graphitic Sections				
	22884	238.2	239.4			1.2	292	1060	0.03	.001	85	180								Graphitic Section				
	22885	289.0	294.0			5.0	75	300	0.01	.001	30	75								Graphitic Section				
	22886	294.0	299.0			5.0	110	500	0.01	.001	35	80								Graphitic Section				
	22887	299.0	304.0			5.0	84	325	0.01	.001	20	70								Graphitic Section				
	22888	338.0	342.0			4.0	98	400	0.01	.001	30	70								Graphitic Section				
	22889	342.0	346.2			4.2	85	585	0.01	.001	25	90								Graphitic Section				

HOLE NO. LL80-8

GEOCHEMISTRY **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	PPM Zn	Oz. Ag	Oz. Au	PPM Pb	PROGRESSIVE TOTALS PPM Co	PPM Ni	% Fe	% Mg	%CaO	%Na_2O	%K_2O	%SiO_2	%TiO_2	REMARKS AND AVERAGE ASSAYS % Zn	Oz. Ag	Oz. Au	
	23292	25.0	35.0			10.0	101	130	0.01	.001	20	40	170	3.05	0.98	4.31	3.91	1.25	66.2	0.49	Argillitic wacke Pebbleston			
	23293	125.0	135.0			10.0	74	325	0.01	.001	10	35	180	3.10	0.54	1.34	3.07	3.08	67.6	0.51	Argillitic wacke-Pebbleston			
	23294	245.0	255.0			10.0													71.1	0.29				

HOLE NO. LL80-8



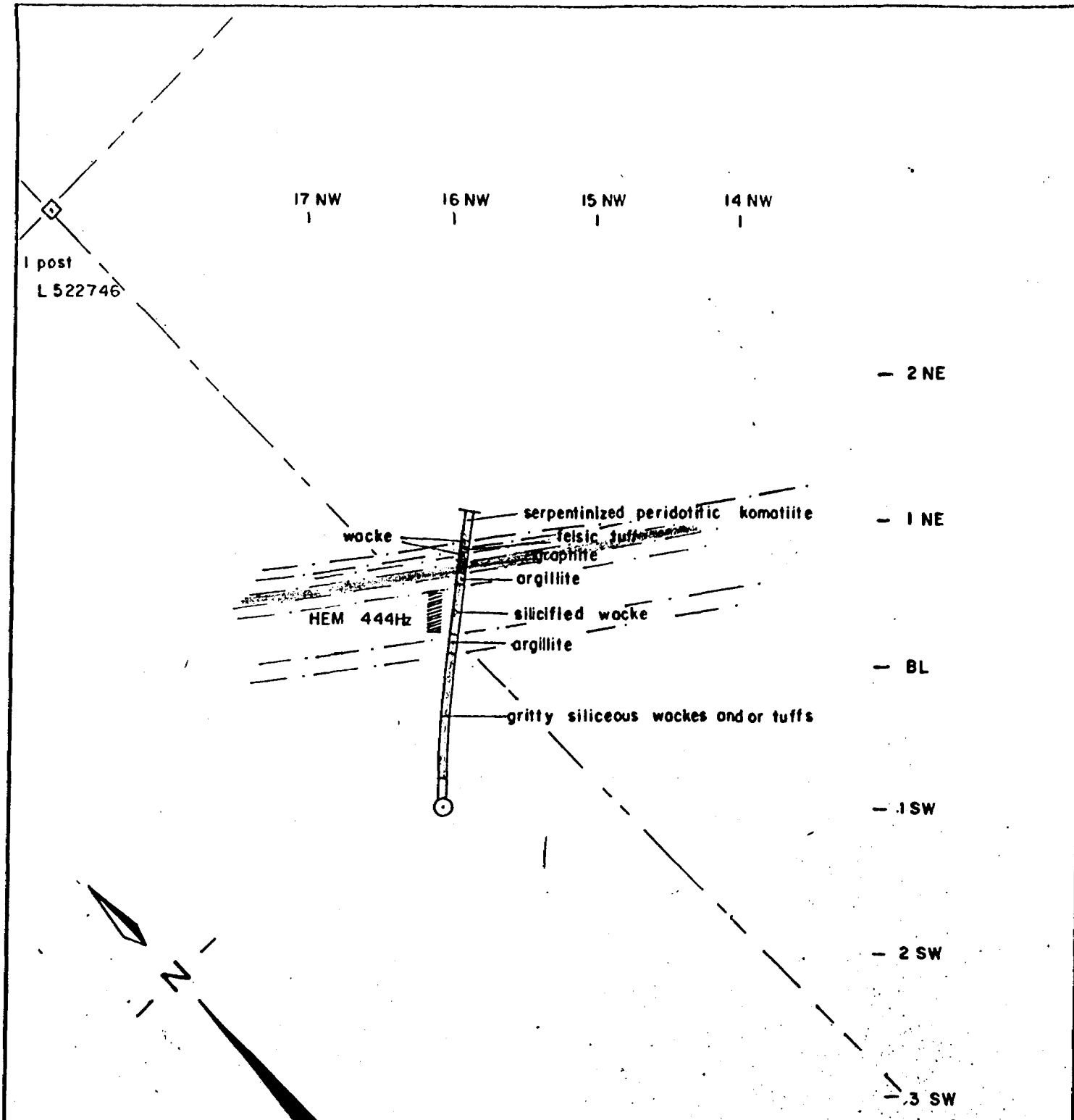
X-SECTION
LL 80-9
16 NW 1 SW

LARDER LAKE PROJECT

MISEMA NORTH - McELROY TWP.

CLAIM L 522746, L 522743

0 50 100
FEET



PLAN VIEW
LL 80-9

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522746 L 522743

0 50 100

FEET

Ont. B.C.X

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL80-9 | Lat. L 16 NW | Dep. 1 + 00 S E | Elev. | Dip - 70° | Bearing 0 45° | Depth 547.8' | Core AQ

Working Place: LARDER LAKE PROJECT, MISEMA NORTH PROPERTY, McELROY TOWNSHIP

Date Started: JULY 2, 1980

Date Completed: JULY 14, 1980

Compass Tests — Mag. Declination

Depth	Dip	T. Azim.
385.0'	66°	51° True

Acid Test

Depth	Dip	Depth	Dip
348.0'	68°		
537.8'	66°		

CLAIM NUMBERS L 522746 and L 522743

CONTRACTOR: McKNIGHT DRILLING COMPANY LIMITED

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0.0 to 44.2	Casing to (Boulders and Sand)	45.0'						
44.2 to 300.5	Siliceous Bedded Gritty Gritty Volcanoclastic (Tuff or sediment ?)	Light creamy white to grey to light green	Silts to Sands to Grits	Bedded	Bedding on a scale of 10's of cm to a meter Bedding at 45° to C/A Tops indicated by grading to be uphole Clasts of rhyolite, feldspar, porphyry, (chlorite-talc-serpentine) mafic or ultra mafic volcanics present Quartz vein 136.8 to 137.0' Quartz veining and shearing at 90° to C/A at 185.2 to 185.6'	Appears to be a pervasive silicification throughout section Trace epidote as clots at 60.2' 1 - 2% sericite, possibly talc ? present in matrix of coarse gritty sections Pinkish orange mineral develops marginal to carbonate veinlets i.e. 124.0' 157.0' 162.0' - 186.0' Section 187 to 233.6 highly silicified greywacke	Trace pyrite disseminated throughout	Probably represents the felsic, fine grained facies of the Calc-alkalic-komatiite volcanoclastic unit. Some beds more basic overall and some more rhyolitic overall Some material as encountered in hanging wall in Hole LL 80-2 and LL 80 - 3 Some beds are 90% rhyolitic fragments

Hole No. LL 80-9

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
					187 to 233.6 section of finer wacke, like bedded material, highly silicified cut by numerous lamprophyre dykes at: 201.8 to 205.4 210.3 to 215.7 217.8 to 217.9 219.1 to 219.3 233.6 to 241.0 Argillaceous screen at 285.3 to 285.6 Section coarsens to pebble-lapilli sized clasts from 292.0 to 299.5			
300.5 to 335.0	Bedded Argillite and Greywacke with minor Graphitic component	Black to grey-green banded	Silts to Sand	Bedded	Bedding at 45° to C/A - Tops uphole (by graded beds) Brecciation in section from 323 to 325 probably primary. Minor coarser screens of clastic described above intercalated with this sequence	Chlorite and/or talc on some slip surfaces	Only trace pyrite throughout section	Wacke is very mafic in composition These finer sediments are probably not all that different from the coarser material described above. Very weakly conductive only in dark black sections: 20% of section.
335 to 448.5	Intensly silicified Bedded; Gritty to Pebbly Volcan-oclastic	Light grey green to light beige to creamy white	Sand to Grit to Pebble	Bedded	Bedding scale varies cm scale in coarser sections: mm scale in finer grits and sands Tectonically brecciated carbonate invaded section from 386.5 to 394.3	Intense pervasive silic-ification - Free carbon-ate invasion in tecton-ically brecciated section 60%	1% Pyrite through-out section. Trace pyrrhotite in splashes.	375.0 to 400.0 considerable pro-portion of rhyolite fragments (80%) Assay breccia for Au.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
448.5 to 457.6	Bedded Argillite	Black to Dark grey	Silts to Sand	Bedded	Bedding at 45° to C/A on a m.m. scale	Weakly pervasively silicified	Bedded Sphalerite 450.5 to 450.7 (5%) Trace Sphalerite pyrite and pyrrhotite through rest of section.	Primary bedded Sphalerite similar to LL80-2 and 3 Very minor graphitic components as very weakly conductive
457.6 to 481.4	Massive Greywacke or Mafic Tuff	Green	Tuff - sand sized	Massive	Coarsens over section from fine silt (ash) to grit sized at base. (tops up hole) Fragments of mafic-ultramafic volcanic and rhyolite	Very weak pervasive carbonate alteration	Nil	
481.4 to 505.7	Bedded Graphitic Argillite and Greywacke	Black and Grey banded	Silts to Sand	Massive Bedded	Bedding at 45° to C/A mm to cm scale (Tops up-hole)	Very weak pervasive carbonate alteration 3% - 4% free carbonate veinlets	Trace to 1% disseminated pyrite increasing down-hole	Probably gives rise to conductor
505.7 to 508.0	Gritty Greywacke	Dark Grey	Sand to Grit	Massive	Bedding at 45°to C/A	Pervasively carbonate altered	0.5 to 1% disseminSphalerite - 1% Pyrite	
508.0 to 509.0	Graphitic Gritty Greywacke (Sphalerite - rich)	Dark Grey	Silt to Grit	Massive	Graphitic beds appear as wisps and contorted bands	3% - 5% free carbonate veining	4% - 5% Sphalerite associated with carbonate filled fractures	
509.0 to 517.0	Bleached Pyritic Sphalerite bearing Sediments	White to creamy grey with brassy streaks	Fine	Mottled Massive	Fabric at 45° to C/A as noted by bands of pyrite and what appears to have been bedding (grain size contrast)	Very highly bleached section (silicified) Fuchsitic smears evident to base of section.	Trace to 0.5% Sphalerite disseminated throughout section	Lower contact with peridotitic komatiite, very gradational

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
517.0 to 547.8	Serpentinized Brecciated Peridotitic Komatiite	Dark Green to blue-green	Fine to Coarse	Spinifex texture present Massive	Brecciated throughout Primary or tectonic? Spinifex evident, however not well preserved.	Significant talc-serpentine alteration	Trace pyrite throughout	Weakly magnetic
547.8 END OF HOLE								

JTR 1634

GEOCHEMISTRY **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS		ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
							$\%SiO_2$	$\%TiO_2$																
	23295	45.0	55.0			10.0	66.1	0.39												Felsic Clastic (siliceous				
	23296	145.0	155.0			10.0	61.6	0.39												Siliceous Sediment				
	23297	245.0	255.0			10.0	63.2	0.48												Siliceous Sediment				
	23298	325.0	335.0			10.0	55.0	0.52												Argillite				

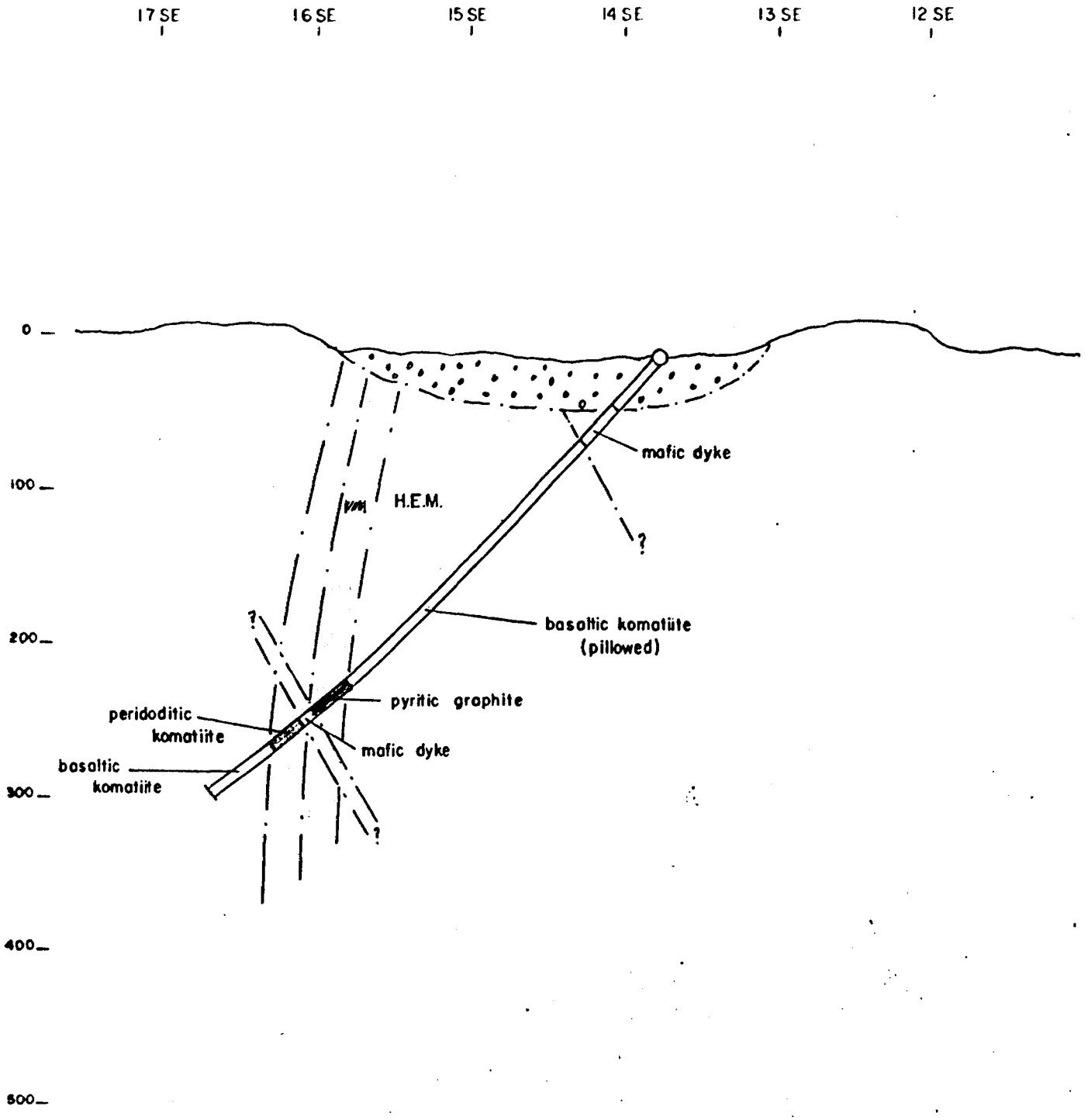
HOLE NO. LL 80-9

JTR 1634

SULPHIDES **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Co.	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au
	22890	386.5	394.3			7.8	43	62	0.01	.001	20	25							Rhyolite Breccia			
	22891	448.5	450.5			2.0	105	230	0.01	.001	55	490							Argillite			
	22892	450.5	450.7			.2	190	0.62%	0.03	.001	75	720							(0.2' Bedded	0.62% Zn) Sphalerite in graphitic argillite		
	22893	450.7	455.0			4.3	130	490	0.02	.001	70	530							Argillite			
	22894	455.0	457.6			2.6	120	380	0.02	.001	65	570							Argillite			
	22895	457.6	456.2			4.4	82	66	0.01	.001	40	80							Argillite			
	22896	481.4	485.0			3.6	100	278	0.01	.001	40	310							Graphitic Argillite/Wacke			
	22897	485.0	490.0			5.0	158	230	0.01	.001	50	270							Graphitic Argillite/Wacke			
	22898	490.0	495.0			5.0	84	210	0.01	.001	65	620							Graphitic Argillite/Wacke			
	22899	495.0	500.0			5.0	87	690	0.01	.001	75	720							Graphitic Argillite/Wacke			
	22900	500.0	505.7			5.7	115	270	0.01	.001	60	390				481.4	505.7	24.3	PPM Cu 109	PPMZn 337	PPM Ni 469	
	25301	505.7	508.0			2.3	86	775	0.01	.001	35	140							Gritty Wacke			
	25302	508.0	509.0			1.0	165	0.68%	0.02	.001	40	120							Graphitic Wacke (Sphalerite bearing)			
	25303	509.0	513.0			4.0	115	1080	0.01	.001	45	100							Graphitic Wacke (Sphalerite bearing)			
	25304	513.0	517.0			4.0	365	0.20%	0.02	.001	70	235							Graphitic Wacke (Sphalerite bearing)			
																508.0	517.0	9.0	PPM Cu 232	Zn % .20%		
																Including		1.0	165	0.68%		
	25305	517.0	522.0			5.0	130	130	0.01	.001	65	480							Peridotitic Komatiite			

HOLE NO. LL 80-9



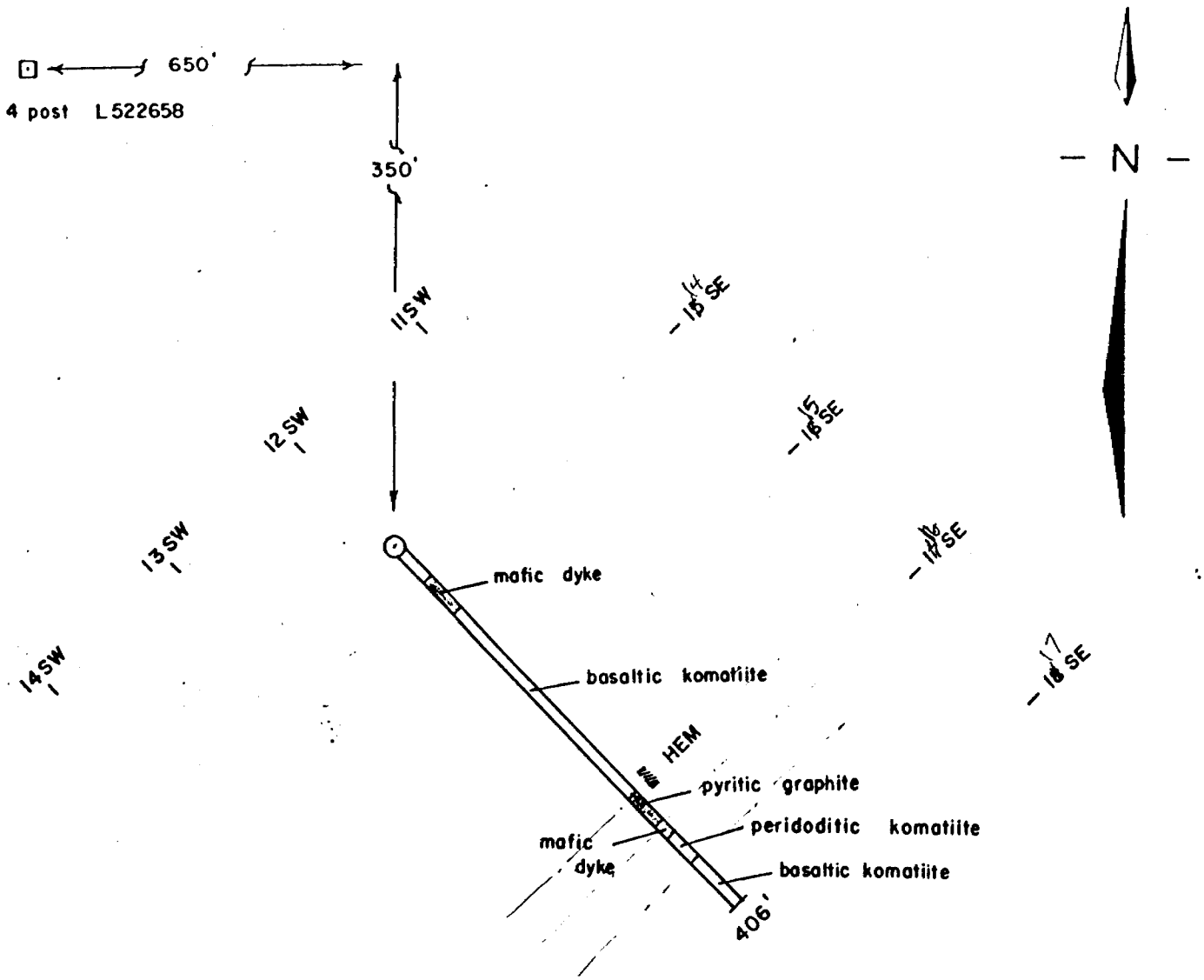
X-SECTION
LL 80-10
LINE 12SW

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L-522658

0 50 100
FEET



PLAN VIEW
LL 80-10

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522658

0 50 100

FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL80-10 | Lat. L 12 S W | Dep. 13 + 75 S E | Elev. | Dip -50° | Bearing 135° | Depth 406.6 | Core AQ

Working Place: Larder Lake | Date Started: JULY 20, 1980 | Date Completed: JULY 25, 1980 | Project

Compass Tests — Mag. Declination

Depth	Dip	T. Axim.
400'	40°	

Acid Test

Depth	Dip	Depth	Dip

LARDER LAKE EXTENSION, C F C
HEARST TOWNSHIP
CLAIM NUMBER L 522658

CONTRACTOR: McKNIGHT DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0.0 to 41.0	Overburden	Casing to	42.0 Feet					
41.0 to 62.0	Basic Carbonated Sheared and Quartz-Carbonate Brecciated Dyke	Light grey-green to green and pink speckled	Fine grained to medium grained dioritic	Massive	Brecciated by qtz-carbonate veining (10 - 15%) at low angles to C.A. Strong shear zone at 45° to C. A. from 52.0' to 53.0' (talc-chlorite schist)	Strong pervasive carbonate alteration. Chlorite developed in sheared - schistose section 52' - 53'	5% Pyrite and trace chalcopyrite in qtz-carbonate brecciated section 41.0 - 42.0 Trace to no pyrite through rest of section	Assay 41' - 42' for Au. This dyke may represent a fault along which movement may have occured prior to and post intrusion.
62.0 to 292.0	Foliated Locally Variolitic Pillowed Basaltic Komatiite	Light grey green with white mottled sections	Aphanitic to Fine grained	Massive	Foliation (schistosity) at 45° to C.A. Developed in varying intensities through section. Sections with blue grey quartz-carbonate veining, contains trace pyrrhotite at:	Greasy talc-chlorite feel along foliation planes Pervasive carbonate alteration throughout section. Qts. carbonate veining overall about 5 - 10% chlorite -carbonate in veinlet at 122.0'	Trace pyrite along slips. Trace pyrite and pyrrhotite in qtz veinlets (see structure) At 92.0 and 132.0 0.1 ft. of 30% banded pyrite in what appears to be pillow interstices.	Very soft Blue-grey quartz carbonate veining assayed for Au. At 76.3' a speck of yellow mineral Au.? visible. Pyrrhotite, pyrite, trace chalcopyrite and chlorite in pillow interstices.

Hole No. LL 80-10

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
62.0 to 292.0 cont'd					76.0 - 76.4 82.2 - 83.5 105.0 - 107.6 Carbonated basic dykes may have lampro-phyritic affinities at; 130.0 - 130.1 spotted 133.0 - 134. 140.4 - 140.8 147.2 - 149.0 151.0 - 152.0 152.0 - 153.6 154.3 - 156.9 163.9 - 166.0 167.9 - 170.0 171.4 - 172.2 176.7 - 177.4 214.5 - 215.0 224.7 - 226.1 227.6 - 228.6 Hyaloclastic pillow interstices and concentric cooling cracks evident at 172.0 - 207.0 In-situ brecciation weakly developed 186.0 - 192.0	Pillow margins and sulphide rich interstices chloritized from 172.0 to 291.0 251.0 - 251.5 white patchy carbonate mottling Section becomes progressively more bleached from 250.0 - 291.0 as carbonate alteration increases.	Pyrite, pyrrhotite chlorite in pillow interstices up to 1 cm thick 190.3 - 190.4 30 - 40% pyrrhotite with trace pyrite and chalcopyrite in a pillow interstice. Trace pyrrhotite and chalcopyrite in carbonate - chlorite shears at 278.6 - 279.0 and 282.0 - 282.5 Gradual increase in disseminated euhedral pyrite from 280.0 down section. 5% py 280 - 288 10% py 288 - 292	Schistosity progressively decreases down section - just as primary pillow textures and chloritization increase. Contact with sedimentary unit very gradational, brecciated and carbonate altered from 291.0 to 292.0
292.0 to 296.0	Carbonate Altered Pyritic Argillite	Light grey with brassy spots and streaks	Silt	Massive	Fabric at 60° to C.A. consisting of pyrite bands (probably reflect primary bedding)	Intense pervasive carbonate alteration	10% disseminated euhedral pyrite 292.0 - 293.0 25 - 30% disseminated and bleb like semi-continuous beds of fine grained pyrite 293.0 to 296.0	

JKB 1982

Hole No. LL80 - 10

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
296.0 to 296.1	Massive Pyrite	Brassy yellow	Fine	Massive	Bedding at 50° to C.A.	Intense carbonate alteration	90% pyrite 10% carbonate	Appears to be a single bed of pyrite.
296.1 to 322.4	Pyritic Graphite	Black with brassy bands	Silt	Massive	Fabric at 45° to C.A. consisting of pyritic bands and strong foliation light green, pyritic carbonate rich dykes at 298.0 - 298.2 298.9 - 300.0 306.0 - 306.3 307.5 - 308.6 These dykes contain smears of a very blue-green fuchsite like mineral (2 - 3%) and up to 5% pyrite.	Pervasive carbonate alteration significant 3 - 4% free carbonate veinlets at random angles to C.A. (up to 1 cm thick)	5 - 7% pyrite through section as fine disseminations and as thin beds up to 1 cm.	Lack of observable base metals
322.4 to 332.5	Basic or	Light green to brown with brassy specks	Fine	Massive micro-porphyritic in biotite	Carbonate-Quartz veinlets (1 cm) 330.0 - 331.0	Weak pervasive carbonate alteration	3 - 5% disseminated pyrite throughout	Dyke consists of biotite-talc carbonate and feldspar.
332.5 to 359.5	Peridotitic Komatiite Flow	Dark green to blue-green	Aphanitic to coarse grain olivine spinifex	Massive Spinifex locally present or preserved?	Schistose fabric at 45° to C.A. Ultrabasic Dykes at 334.2- 334.7 346.5- 346.9 353.0 - 355.0 - coarse olivine spinifex blades coarsening up hole therefore tops down hole ?	Pervasive carbonate alteration 5 - 10% Talc development throughout section - Green serpentine veinlets 2 - 3%	Trace pyrite scattered throughout section.	Spinifex is developed at what would appear to be the top of the flow. Shearing in flow obscures many primary textures.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
359.5 to 406.6	Chloritic Schistose Basaltic Komatiite	Light green to blue-green	Fine to aphanitic	Massive	Schistosity well developed at 45° to C.A.	Intense pervasive carbonate alteration throughout 1 - 2% free carbonate veinlets. Serpentine well developed in veinlets up to 1 cm. - Pervasive chloritic alteration	Trace Pyrite	Strongly chloritized schistose rock - is probably a basaltic komatiite.
406.6	END OF HOLE							

SULPHIDES

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au
	25306	41.0	42.0			1.0				.001									Quartz-carbonate brecciation				
	25307	76.0	76.4			0.4				.001									and veining in dykes and				
	25308	82.2	83.5			1.3				.002									basaltic komatiite				
	25309	105.5	107.6			2.6				.001									as above				
	25310	278.0	283.0			5.0	170	100	0.01	.001	80	100							Basaltic komatiite with chloritic shears				
	25311	283.0	288.0			5.0	90	97	0.01	.001	75	100							"		"	"	"
	25312	288.0	292.0			4.0	95	78	0.01	.001	70	100							"		"	"	"
	25313	292.0	296.0			4.0	90	570	0.01	.001	70	110							Pyritic Argillite - 20% Py				
	25314	296.0	298.0			2.0	700	0.68%	0.04	.001	75	140							Graphite (Pyritic)				
	25315	298.0	303.0			5.0	195	1040	0.01	.001	45	80							"		"		
	25316	303.0	308.0			5.0	160	690	0.01	.001	40	70				296	322.4	26.4	PPM Cu. Zn 318	0.18%			
	25317	308.0	313.0			5.0	275	1200	0.01	.001	50	120		including		296	298.	2.0	700	0.68%			
	25318	313.0	318.0			5.0	220	1620	0.01	.001	45	175				318	322.4	4.4	625	0.26%			
	25319	318.0	322.4			4.4	625	0.26%	0.02	.001	85	260											
	25320	322.4	327.4			5.0	90	280	0.01	.001	70	265							Pyritic Basic Dyke				
	25321	327.4	332.5			5.1	80	395	0.01	.001	60	155							"	"	"		

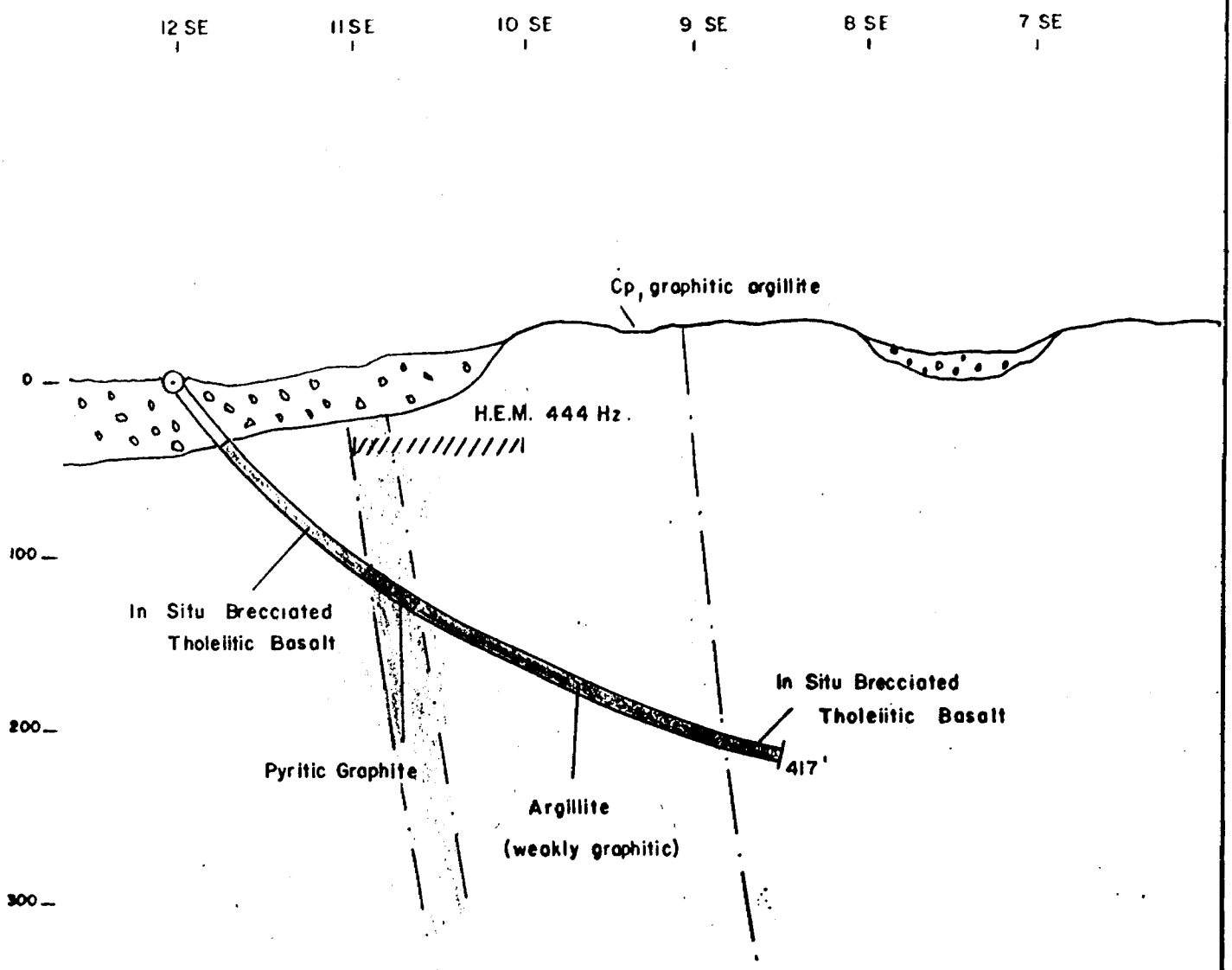
HOLE NO. LL 80 - 10

JYR 1634

GEOCHEM **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS $\%SiO_2$	ASSAYS $\%TiO_2$	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
	23300	87.0	97.0			10.0	45.7	1.28										Basaltic Komatiite						
	24552	187.0	197.0			10.0	45.0	1.50										Chloritized pillowed Basalt Komatiite ??						
	24553	268.0	278.0			10.0	47.3	1.28										Carbonate altered Pillowed Basalt						
	24554	338.0	348.0			10.0	37.0	0.45										Peridotite Komatiite						
	24555	396.0	406.0			10.0	40.5	0.64										Basaltic Komatiite - Chloritic						

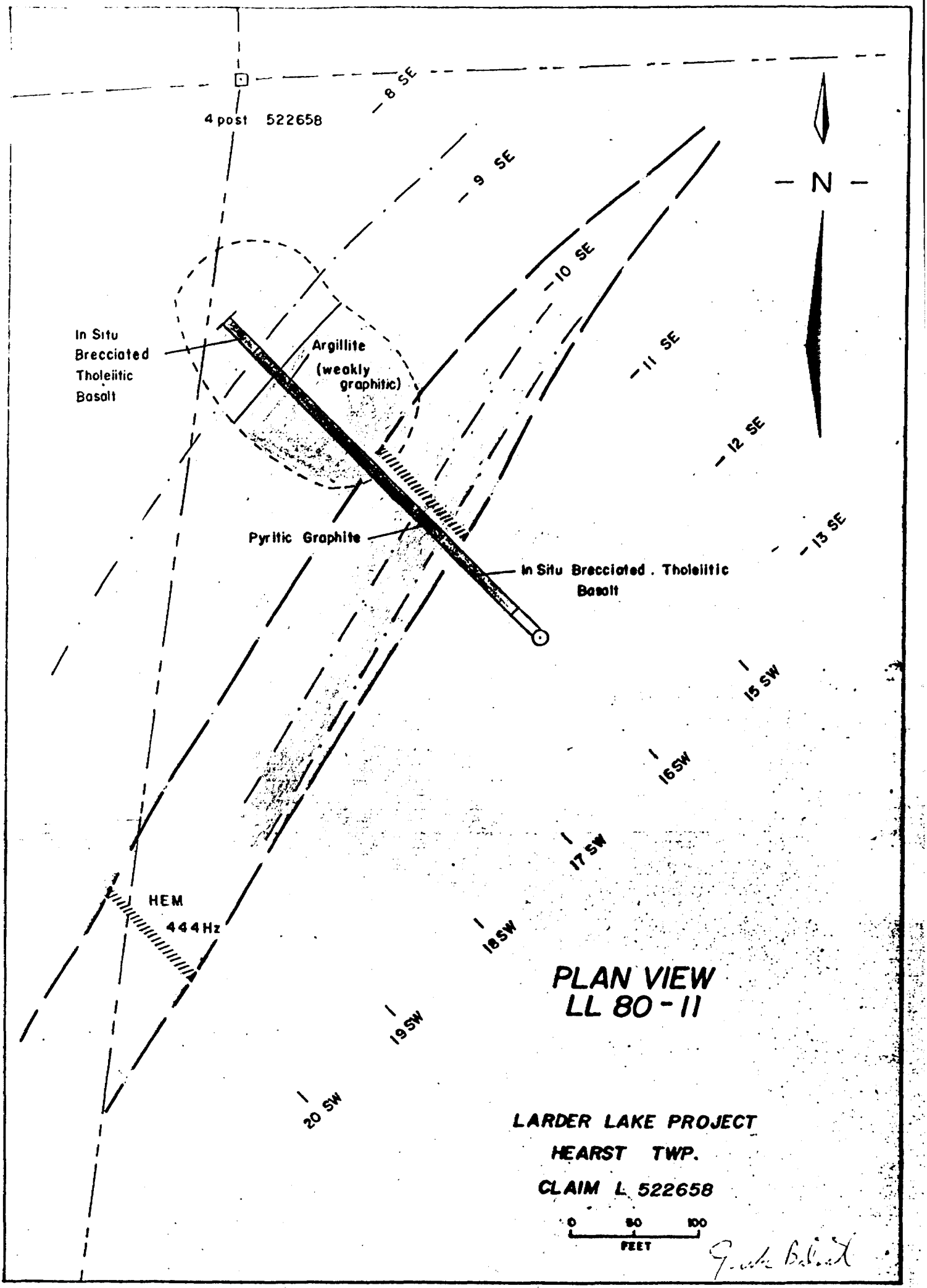
HOLE NO. LL 80 - 10



X-SECTION
LL 80-11
LINE 16 SW

LARDER LAKE PROJECT
HEARST TWP.
CLAIM L 522658

0 50 100
FEET


4 post 522658
8 SE
9 SE
10 SE
11 SE
12 SE
13 SE
N
In Situ
Brecciated
Tholeiitic
Basalt
Argillite
(weakly
graphitic)
Pyritic Graphite
In Situ Brecciated . Tholeiitic
Basalt
15 SW
16 SW
17 SW
18 SW
19 SW
20 SW
HEM
444 Hz
PLAN VIEW
LL 80 - 11
LARDER LAKE PROJECT
HEARST TWP.
CLAIM L 522658
0
50
100
FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL80-11 | Lat. L 16 + 00 SW | Dep. 12 + 00 SE | Elev. | Dip -50° | Bearing 345° | Depth 417 Ft. | Core AQ

Working Place: LARDER LAKE PROJECT

Date Started: JULY 31, 1980

Date Completed: AUG. 5, 1980

LARDER LAKE EXTENSION

HEARST TOWNSHIP

CLAIM NO. L 522658

Compass Tests

Depth	Dip	T. Azim.

Maq. Declination

Acid Test

Depth	Dip	Depth	Dip
200'	35°		
417'	20°		

CONTRACTOR: McKNIGHT DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 41.0	Overburden,	Casing to	44 Ft.					
41.0 to 156.0	In Situ Brecciated Tholeiitic Basalt	Light green to white speckled fragments with a dark green -grey matrix.	Aphanitic to fine grained	Massive brecciated 70% fragments 30% matrix	Elongation of fragments at 40° to C.A. 65.5 to 76.3 carbonated mafic dyke with chilled margins, carbonate veined contacts and apparently at a high angle to C.A. Leucoxene speckled carbonate mafic dyke at 137.5 - 139.7 Pyritic, black argillaceous (matrix material) in section from 148.0 - 156.0 (50% matrix) Barren Qtz. vein 154.0 - 154.4	Mild pervasive carbonate alteration throughout (weak reaction to dilute HCl) About 40% of the fragments speckled with leucoxene (3% - 4%) 3% - 4% free carbonate veinlets 148.0 - 156.0 intensely carbonate altered	Trace pyrrhotite as clots or fragments. Some up to 3 cm in size. Specks of chalcopyrite associated with the pyrrhotite.	Typical in situ breccia for Larder Lake. Matrix material chloritic and/or argillaceous, the lower contact gradational with graphitic argillites.

Hole No. LL 80 - 11

Logged by FRANK BALINT

Frk Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
156.0 to 190.0	Pyritic Graphite and Pyritic Graphitic Argillite	Black with brassy bands, specks and clots	Silt	Massive	Foliation at 45° to Pyritic graphite from 156.0 to 158.2 Graphite content decreased down hole Bedding (pyrite beds) at 45° to C.A. Pyritic carbonated dyke 158.2 - 159.0 (10% disseminated pyrite)	4% ramifying networks of carbonate veinlets. Mild pervasive carbonate soaking throughout section.	156.0 to 158.2 30% pyrite as fine beds and smeared out nodules Beds of massive fine grained pyrite 60% - 70% at 178.9 - 179.3 and 187.4 - 187.6 5% disseminated finely bedded and occasional nodules of pyrite through rest of section.	Fuchsite smears in pyritic section 156.0 - 158.2 (5%)
190.0 to 387.0	Weakly Graphitic Argillite with in situ brecciated Tholeiitic Basalt screens	Black with dark grey bands and wisps	Silt	Massive	Bedding and mild tectonic fabric parallel at 45° to C.A. Pyrrhotite-pyrite becoming light green-grey, fine grained intermediate dykes with sharp contacts at 45° to 60° to C.A. at: 197.1 - 198.5 199.5 - 201.9 213.3 - 213.6 220.9 - 221.0 231.0 - 234.0 237.1 - 237.8 239.5 - 240.2 249.3 - 249.4 251.5 - 251.7 252.2- 252.4 249.6 - 250.6 253.1 - 253.8	Free carbonate as veinlets (2 - 3%) None to weak pervasive carbonate alteration. Intense carbonate alteration in the in situ brecciated sections (see structure)	3% pyrite as disseminations and nodules up to 3 cm 235 to 242 - 2% pyrrhotite as clots or fragments with trace chalcopyrite associated. 2% pyrrhotite section with trace chalcopyrite 316.0 to 340.0 2% pyrrhotite with trace chalcopyrite and sphalerite 351.0 - 387.0	Section only weakly graphitic. Pyrite nodules few and far between Pyrrhotite restricted to short section (235 - 242). Chalcopyrite restricted to pyrrhotite bearing section.

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
190.0 to 387.0					254.0 - 255.0 259.5 - 261.3 262.3 - 263.0 Coarse clastic section, argillite matrix, mafic volcanic clasts, argillite clast at 267 - 277. Intensely carbonate altered in situ brecciated basalt sections: 322.0 - 323.6 325.2 - 327.4 330.7 - 331.4 334.8 - 338.7 340.6 - 342.7 371.0 - 374.2 Qtz. carbonate vein 363.0 - 363.6			
387.0 to 417.0	In situ Brecciated Tholeiitic Basalt	Light green to grey fragments (60%) with white speckles and a dark grey matrix 40%	Fine to aphanitic	Massive brecciated	Foliation (stretching)? of fragments at 70° to C.A.	Intense pervasive carbonate alteration	2% - 3% pyrrhotite in the matrix as smears and dots Trace disseminated pyrite	Typical in situ brecciated tholeiite
417.0	END OF HOLE							

JED 1982

Hole No. LL 80-11

JY.R 7624

GEOCHEM **DIAMOND DRILL CORE ASSAY RECORD**

C O	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS %SiO_2	ASSAYS %TiO_2	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	24556	50.0	60.0			10.0	52.3	1.42									Tholeiitic Basalt							
	24557	407.0	417.0			10.0	52.9	1.40									Tholeiitic Basalt							

HOLE NO. LL 80 - 11

JTR 1634

SULPHIDES #1 **DIAMOND DRILL CORE ASSAY RECORD**

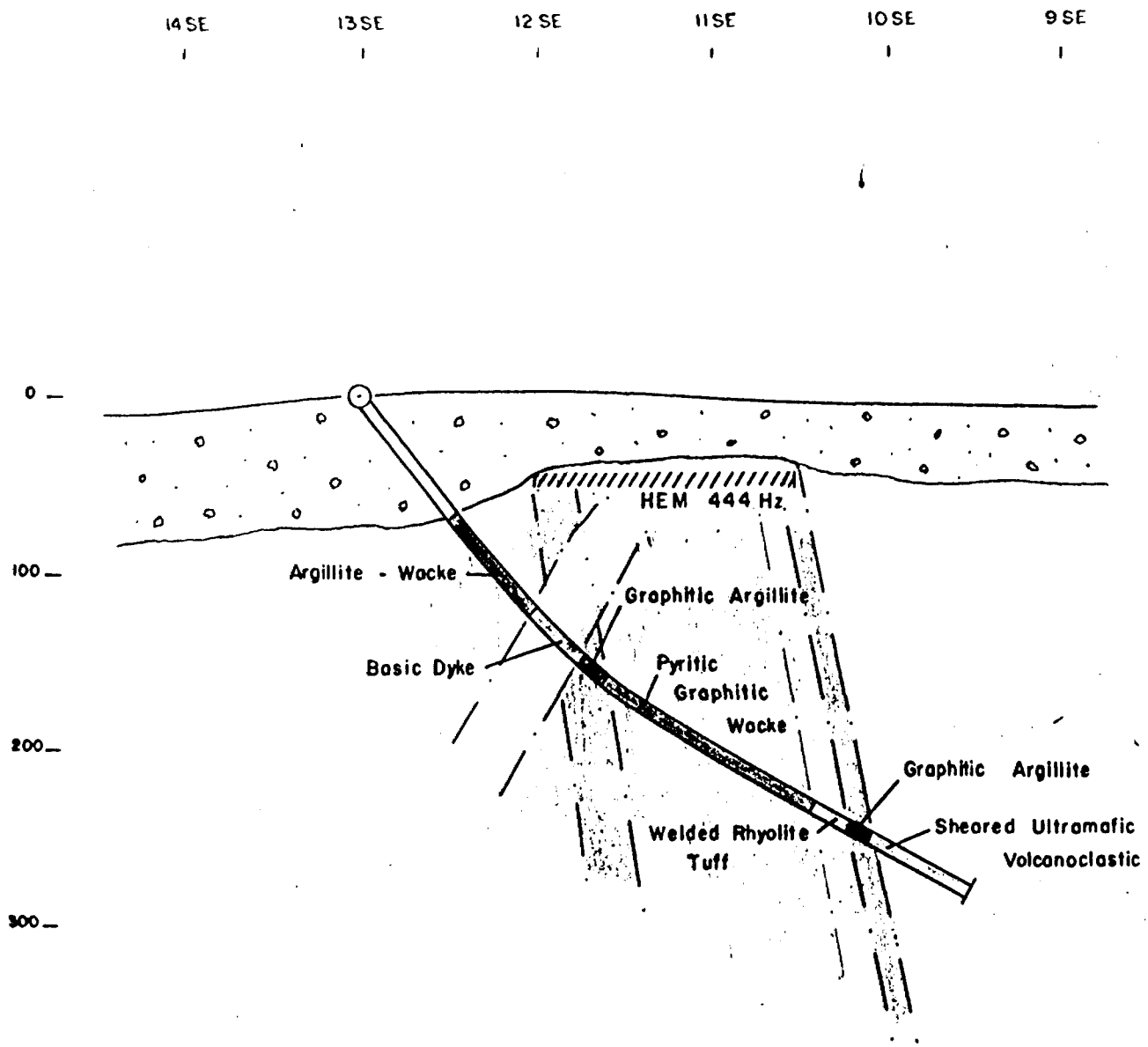
C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au
	25322	148	153			5.0	270	490	0.02	.001	75	155				10 -	15% Py in Tholeiitic Basalt					
	25323	153	156			3.0	175	385	0.02	.001	65	200				"	"		"	"		
	25324	156	159			3.0	306	1950	0.07	.001	80	380				30% py bedded nodules - graphite						
	25325	159	164			5.0	140	790	0.01	.001	20	80				Pyritic Graphite						
	25326	164	169			5.0	135	700	0.01	.003	20	85				"	"					
	25327	169	174			5.0	128	735	0.01	.001	25	85				"	"					
	25328	174	175.9			4.9	220	935	0.02	.001	30	130				"	"					
	25329	178.9	179.3			0.4	298	850	0.05	.001	90	770				60%	Pyrite over		0.4	ft.		
	25330	179.3	185			5.7	190	915	0.02	.001	30	110				Pyritic Graphite						
	25331	185	190			5.0	149	800	0.01	.001	30	90				156.0	190.0	34.0	PPM Cu 175	PPM Zn 797		
	25332	190	200			10.0	137	525	0.01	.001	30	85				Weakly graphitic argillite						
	25333	200	210			10.0	105	365	0.01	.001	25	70				"	"		"			
	25334	210	220			10.0	84	215	0.01	.001	20	50				"	"		"			
	25335	220	230			10.0	90	153	0.01	.001	15	40				"	"		"			
	25336	230	235			5.0	87	220	0.01	.001	40	80				"	"		"			
	25337	235	240			5.0	185	705	0.01	.001	35	95				"	"		"			
	25338	240	242			2.0	167	755	0.02	.001	30	110				"	"		"			
	25339	242	252			10.0	150	805	0.02	.001	25	85				"	"		"			
	25340	252	262			10.0	109	870	0.02	.001	20	80				"	"		"			
	25341	262	272			10.0	149	940	0.02	.001	30	105				"	"		"			

HOLE NO. LL 80 - 11

SULPHIDES # 2 **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
	25342	272	282			10.0	170	965	0.02	.001	30	140				Weakly Graphitic Argillite						
	25343	282	292			10.0	109	670	0.02	.001	25	70				"	"		"			
	25344	292	302			10.0	91	755	0.01	.001	25	75				"	"		"			
	25345	302	312			10.0	109	740	0.01	.001	25	80				"	"		"			
	25346	312	317			5.0	134	1000	0.01	.001	35	135				"	"		"			
	25347	317	322			5.0	191	1200	0.02	.001	40	170				"	"		"			
	25348	322	327			5.0	157	685	0.01	.001	85	560				"	"		"			
	25349	327	332			5.0	177	1210	0.02	.001	55	280				"	"		"			
	25350	332	337			5.0	119	670	0.02	.001	90	590				"	"		"			
	25501	337	342			5.0	75	260	0.01	.001	70	460				"	"		"			
	25502	342	347			5.0	70	270	0.01	.001	30	85				"	"		"			
	25503	347	352			5.0	160	1100	0.01	.001	40	130				"	"		"			
	25504	352	357			5.0	200	1510	0.01	.001	50	160				"	"		"			
	25505	357	362			5.0	260	1140	0.02	.001	55	185				"	"		"			
	25506	362	367			5.0	125	440	0.01	.001	35	120				"	"		"			
	25507	367	372			5.0	185	1070	0.02	.001	60	200				"	"		"			
	25508	372	377			5.0	143	985	0.01	.001	60	200				"	"		"			
	25509	377	382			5.0	160	545	0.02	.001	65	225				"	"		"			
	25510	382	387			5.0	180	1200	0.01	.001	45	150				"	"		"			
																190.0	387.0	197.0	PPM Cu 134	PPM Zr 230		

HOLE NO. LL 80- 11



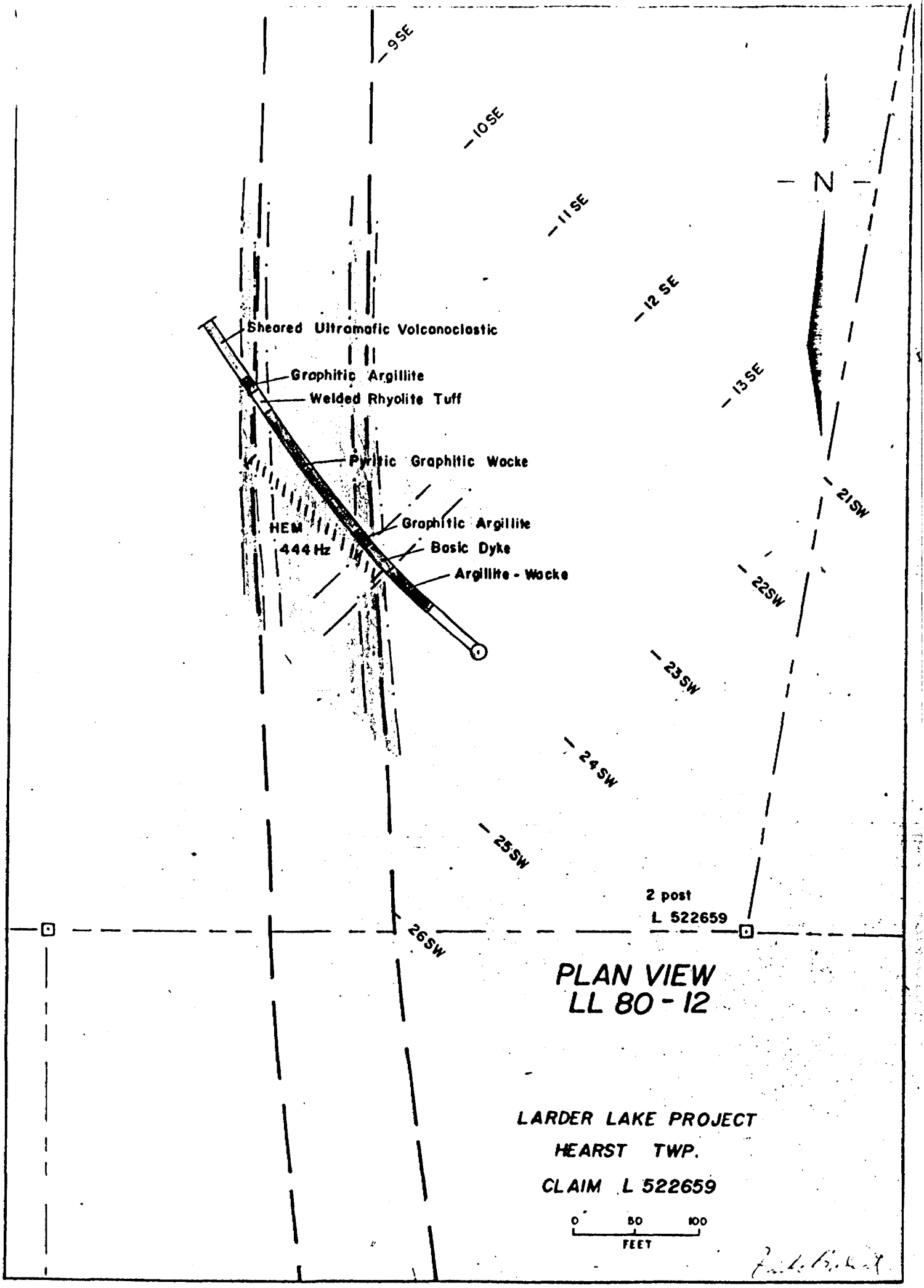
X-SECTION
LL 80-12
LINE 24 SW

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522659

0 50 100
FEET



PLAN VIEW
LL 80 - 12

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522659

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80 -12 | Lat. L 24 + 00 SW | Dep. 13 + 00 SE | Elev. | Dip - 50° | Bearing 315° | Depth 454 FT. | Core AQ

Working Place: LARDER LAKE EXTENSION

Date Started: AUGUST 6, 1980

Date Completed: AUGUST 11, 1980

Compass Tests — Mag. Declination

Depth	Dip°	T. Azim.
450'	-28°	324°

Acid Test

Depth	Dip°	Depth	Dip
400'	-30°		

HEARST TOWNSHIP

CLAIM NUMBER L 522659

CONTRACTOR: McKNIGHT DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0.0 to 77.5	Overburden	79 Ft. of Casing						
77.5 to 158.0	Weakly Graphitic Argillite with Grey-wacke inter-calations	Black, dark grey to light grey bands with white veinlets	Silts to sand	Massive bedded	Bedding on a scale of mm to a few cm at 45° to C.A. Carbonated sulphide rich mafic dykes at: 86.5 - 87.7 119.6 - 120.3 125.3 - 127.0 139.0 - 140.4 150.5 - 152.0	Minor to no pervasive carbonate alteration. 2% - 3% free carbonate veining. Dykes are significantly carbonate altered.	1% to 5% pyrite throughout section as fine beds, dissemination and nodules up to 0.5 cm. Trace sphalerite evident sporadically throughout section as fine disseminations 10% - 15% disseminated pyrite in mafic dykes. 152.0' - 158.0' 2% sphalerite in fractures and disseminations.	Weakly conductive overall with about 5% strongly conductive graphitic bands. Sphalerite section 152' - 158' is riddled by a network of carbonate mafic dykelets at high angles to C.A. (20%)
158.0 to 194.7	Carbonated weakly pyritic Mafic to intermediate dyke.	Light grey green speckled with white	Fine to medium in centre	Massive	2% - 3% free carbonate veinlets at random angles - contacts ragged but sharp	Pervasive, strong carbonate alteration	5% disseminated pyrite throughout	Check sampled 175.0' - 185.0' (representative of dyke)

Hole No. LL 80 - 12

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
194.7 to 219.6	Weakly Graphitic Argillite-wacke.	Light to dark grey bands.	Silt to sand	Bedded Massive	Bedding at 45° to C.A.	1% - 2% free carbonate veining. Silicified section 204 to 208	2% - 3% disseminated pyrite throughout Trace disseminated sphalerite 194.7 - 198.0	Sphalerite evident marginal to dyke as in section above.
219.6 to 355.0	Pyritic Strongly Graphitic Pebble to Gritty wacke	Black with brassy bands and nodules.	Silt to sand to grit to pebble	Massive	Foliation at 60° to C.A. Bedding at 45° to C.A. Carbonated mafic dykes at: 120.3 - 121.0 127.8 - 128.7 Clasts of pyrite argillite, wacke and rhyolite (1%) in a graphitic matrix. Crude grading, coarse pyrite rich base and finer argillite top up hole at 178.2' Carbonated sphalerite bearing dyke 308.0' - 308.5' Carbonated basic pyritic (5%) dykes at 312.5' - 314.1' 315.2' - 320.2' 324.9' - 325.7' 328.7' - 329.4' 331.2' - 339.2' 340.8' - 342.3' 342.8' - 343.3'	Weakly pervasive carbonate alteration 1% - 2% free carbonate veining.	5% - 10% pyrite overall as nodules disseminations and fine beds, Section up to 30% pyrite at 277.4 to 278.2 2% sphalerite disseminated throughout dyke 308.0 - 308.5' 1% sphalerite trace chalcopyrite in veinlets and disseminations in graphite between dykes 314.1' - 315.2' trace chalcopyrite and sphalerite in dyke from 315.2' - 315.8' 1% disseminated sphalerite 340.8' - 342.3' 1% sphalerite 343.3' - 344.0'	Highly conductive section.
355.0 377.4	Pyritic Weakly feldspar porphyritic rhyolite (welded tuff?)	Creamy white to grey with brassy speckles	Aphanitic with remnant 1 - 2 mm feldspar crystals.	Weakly porphyritic in feldspar and perhaps quartz	Clastic breccia from 355.0' to 359.2' (rhyolite fragments in a graphitic matrix)	Pervasive carbonate alteration (reacts well with dilute HCl)	5% - 8% pyrite disseminated throughout.	Very hard throughout. May be a flow with a brecciated flow top or a welded tuff.

JES 1982

Hole No. LL-80-12

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
355.0 to 377.4					Carbonated mafic dykes at: 356.0' - 356.4' 357.0' - 357.4' 357.7' - 359.0'		3% Sphalerite in the graphitic matrix 356.4' - 357.0'	
377.4 to 391.1	Graphitic Argillite	Black	Silt	Massive	Weak bedding at 45° to C.A. Rhyolite tuff (10% coarse disseminated py) at 379.0' - 379.1' 383.5' - 383.8' 386.0' - 386.5'	Weak pervasive carbonate alteration	5% pyrite as disseminations and as thin beds	Rhyolite tuff beds conformable contain 1% - 2% quartz eyes and trace fuchsite.
391.1 to 452.0	Sheared Ultramafic Volcano-clastic	Dark green to blue green with white fragments	Clasts up 1.5 cm.	Massive Clastic	Smearing or elongation of fragments at 45° to C.A. Less competent mafic - ultramafic clasts smeared out to wisps Rhyolite clasts 5% not smeared out. Graphitic argillite screens at 403.6' - 407.6' 416.2' - 417.0'	Pervasive carbonate alteration (very strong).	1% - 2% disseminated pyrite throughout.	Probably related to the Komatiite - Calc-Alkaline volcanoclastic unit.
452.0	END OF HOLE							

JTR 7634

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
	25511	77.5	83.0			5.5	142	790	0.01	.001					Graphitic Argillite						
	25512	83.0	86.5			3.5	145	1010	0.01	.001					Graphitic Argillite						
	25513	86.5	87.7			1.2	90	234	0.01	.001					Pyritic Dyke						
	25514	87.7	93.0			5.3	170	1350	0.01	.001					Graphitic Argillite						
	25515	93.0	98.0			5.0	78	840	0.01	.001					Graphitic Argillite						
	25516	98.0	103.0			5.0	61	493	0.01	.001					"	"					
	25517	103.0	108.0			5.0	62	605	0.01	.001					"	"					
	25518	108.0	113.0			5.0	85	780	0.01	.001					"	"					
	25519	113.0	118.0			5.0	112	1190	0.01	.001					77.5	158.0	80.5	PPM Cu 111	PPM Zn 807		
	25520	118.0	123.0			5.0	48	180	0.01	.001				Including	152.0	158.0	5.0	340	0.3%		
	25521	123.0	127.0			5.0	82	265	0.01	.001					Graphitic Argillite						
	25522	127.0	132.0			5.0	48	283	0.01	.001					Graphitic Argillite						
	25523	132.0	137.0			5.0	65	222	0.01	.001					"	"					
	25524	137.0	142.0			5.0	60	360	0.01	.001					"	"					
	25525	142.0	147.0			5.0	180	1110	0.01	.001					"	"					
	25526	147.0	152.0			5.0	100	620	0.01	.001					"	"					
	25527	152.0	158.0			6.0	340	3000	0.01	.001					"	"					
															77.5	158.0	80.5	2% Sphalerite			
	25528	175.0	185.0			5.0	85	149	0.01	.001					158.0	194.7	36.7	Dyke			

HOLE NO. LL 80 - 12

JT.B 1624

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	PROGRESSIVE TOTALS Ft. % Cu	Ft. % Zn	Ft. Oz. Ag	Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
	25529	194.7	200.0			5.3	84	655	0.01	.001						Wacke - Argillite					
	25530	200.0	205.0			5.0	69	336	0.01	.001						"		"			
	25531	205.0	210.0			5.0	35	200	0.01	.001						"		"			
	25532	210.0	215.0			5.0	99	351	0.01	.001						"		"			
	25533	215.0	219.6			4.6	40	315	0.01	.001						"		"			
	25534	219.6	225.0			5.4	415	1100	0.01	.001						Graphitic Sediment					
	25535	225.0	230.0			5.0	220	910	0.01	.001						"		"			
	25536	230.0	235.0			5.0	127	525	0.01	.001						"		"			
	25537	235.0	240.0			5.0	156	1160	0.01	.001					219.6	355.0	135.4	PPM Cu 292	PPM Zn 1208		
	25538	240.0	245.0			5.0	143	1510	0.01	.001					Including						
	25539	245.0	250.0			5.0	295	2145	0.01	.001					308.0	308.5	0.5	410	.83%		
	25540	250.0	255.0			5.0	243	1055	0.01	.001					314.1	315.2	1.1	430	.52%		
	25541	255.0	260.0			5.0	265	1280	0.01	.001						Graphitic Sediment					
	25542	260.0	265.0			5.0	182	1330	0.02	.001						"		"			
	25543	265.0	270.0			5.0	220	1150	0.02	.001						"		"			
	25544	270.0	275.0			5.0	240	1850	0.02	.001						"		"			
	25545	275.0	280.0			5.0	225	1140	0.01	.001						"		"			
	25546	280.0	285.0			5.0	282	1850	0.02	.001						"		"			
	25547	285.0	290.0			5.0	275	1600	0.01	.001						"		"			
	25548	290.0	295.0			5.0	235	1430	0.01	.001						"		"			

HOLE NO. LL 80 - 12

JTR 1634

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE CU	ESTIMATE ZN	LENGTH FT.	ASSAYS PPM CU	ASSAYS PPM ZN	ASSAYS OZ. AG	ASSAYS OZ. AU	PROGRESSIVE TOTALS FT. % CU	PROGRESSIVE TOTALS FT. % ZN	PROGRESSIVE TOTALS FT. OZ. AG	PROGRESSIVE TOTALS FT. OZ. AU	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% CU	% ZN	OZ. AG	OZ. AU
	25549	295.0	300.0			5.0	235	1260	0.02	.001							Graphitic Sediment				
	25550	300.0	305.0			5.0	215	1120	0.01	.001							"		"		
	25601	305.0	308.0			3.0	315	1055	0.01	.001							Graphite				
	25602	308.0	308.5			0.5	310	8300	0.03	.001							2% sphalerite in dyke				
	25603	308.5	312.5			4.0	415	1340	0.02	.001							Graphite				
	25604	312.5	314.1			1.6	74	93	0.02	.001							Dyke				
	25605	314.1	315.2			1.1	430	5190	0.02	.001							Graphite				
	25606	315.2	320.2			5.0	135	450	0.02	.001							Dyke				
	25607	320.2	325.0			4.8	420	2040	0.02	.001							Graphite				
	25608	325.0	331.2			6.2	227	860	0.01	.001							Graphite				
	25609	331.2	339.2			8.0	136	210	0.01	.001							Dyke				
	25610	339.2	340.8			1.6	215	365	0.01	.001							Graphite				
	25611	340.8	342.3			1.5	115	1820	0.04	.001							Dyke				
	25612	342.3	344.0			1.7	330	2480	0.02	.001							Graphite				
	25613	344.0	349.0			5.0	100	900	0.02	.001							Graphite				
	25614	349.0	355.0			6.0	225	966	0.01	.001							Graphite				
	25615	355.0	359.0			4.0	375	1075	0.02	.001							Pyritic weakly feldspar porphyritic rhyolite (tuff ?)				
	25616	359.0	364.0			5.0	100	144	0.01	.001							"	"	"	"	"
	25617	364.0	369.0			5.0	90	870	0.01	.001							"	"	"	"	"
	25618	369.0	374.0			5.0	92	85	0.01	.001							"	"	"	"	"

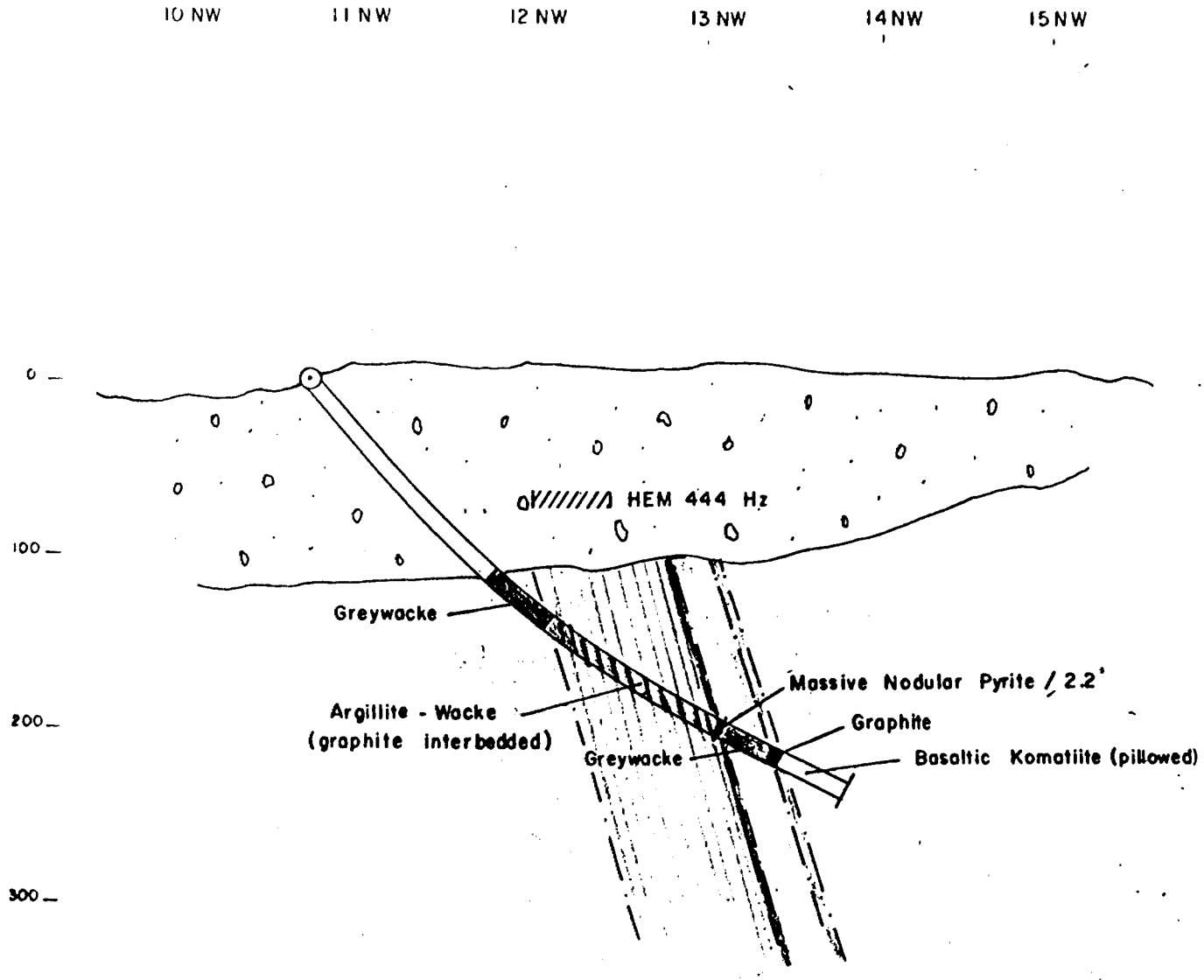
HOLE NO. LL 80-12

JYR 7624

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	Ft. % Zn	Ft. Oz Ag	Ft. Oz Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
	25619	374.0	377.4			3.4	265	378	0.01	.001							Pyritic weakly feldspar prophyritic rhyolite (tuff?)							
	25620	377.4	383.0			5.6	372	2510	0.01	.001							Graphitic Argillite							
	25621	383.0	386.0			3.0	380	2150	0.01	.001							Graphitic Argillite							
	25622	386.0	386.5			0.5	75	313	0.01	.001							"		"					
	25623	386.5	391.1			4.6	285	1130	0.01	.001							377.4	391.1	13.7'	PPM Cu 334	PPM Zn 1888			

HOLE NO. LL 80 - 12



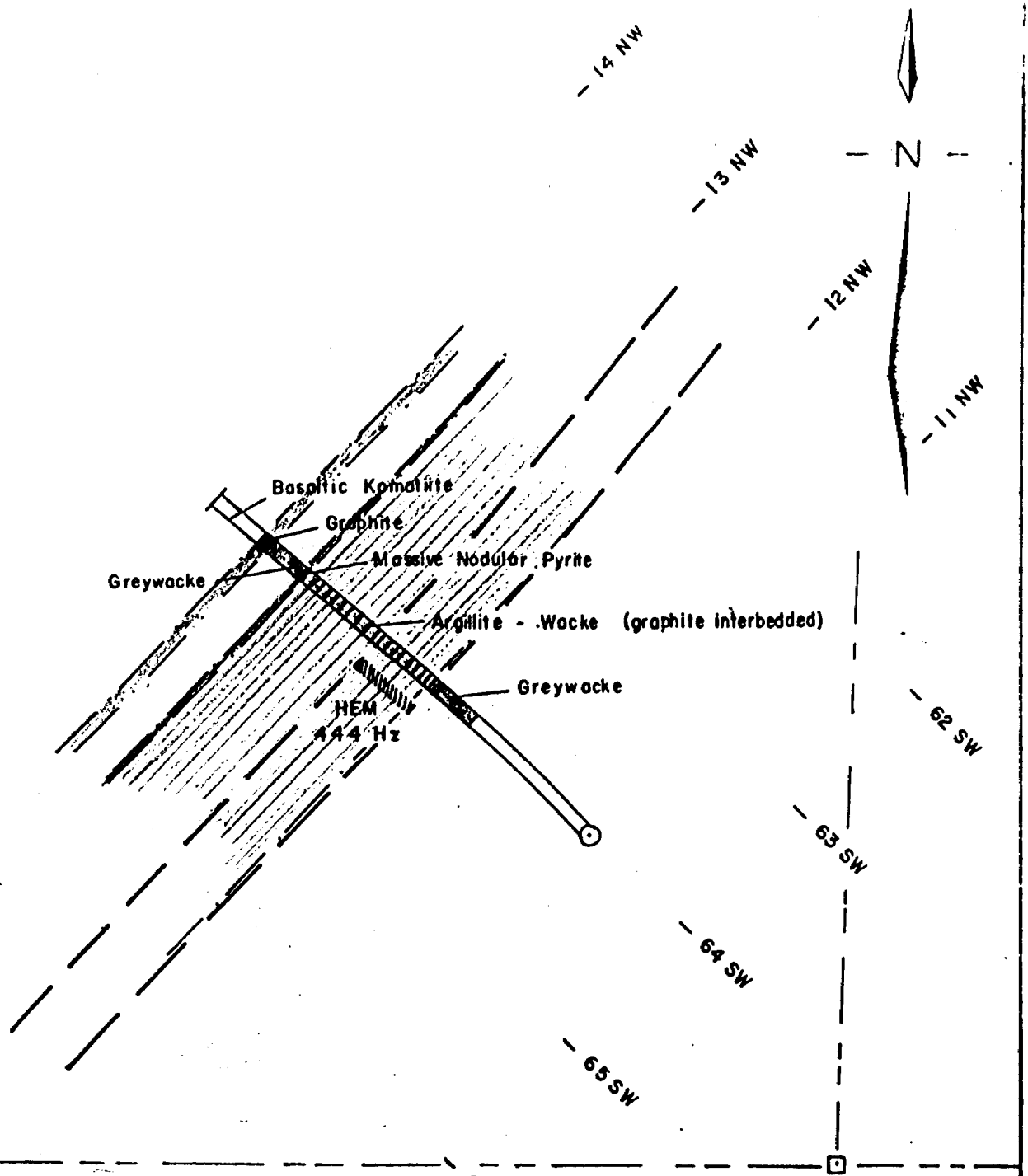
X-SECTION
LL 80-13
LINE 64 SW

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522662

0 50 100
FEET



PLAN VIEW
LL 80-13

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 522662

0 50 100

FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80 - 13 | Lat. L 64 S W | Dep. 10 + 75 NW | Elev. | Dip - 50° | Bearing 315° | Depth 389' | Core AQ

Working Place: LARDER LAKE

Date Started: AUGUST 18, 1980

Date Completed: AUGUST 25, 1980

Compass Tests — Mag. Declination: Depth 190 Ft., Dip 39°, T. Azim. 311°

Acid Test: Depth 165', Dip -44°; Depth 390', Dip -29°

PROJECT: LARDER LAKE EXTENSION
HEARST TOWNSHIP

CLAIM NUMBER L 522662

CONTARACTOR: McKNIGHT DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 158.0	Overburden	Casing	to 160.0	Ft.				
158.0 to 198.7	Sericite Altered Greywacke with minor Argillitic Intercalations	Banded light and dark grey	Sand to Silt	Massive bedded	Bedding to core axis varies from 20° at top of section to 45° by 198.7' Carbonated intermediate dyke with 30% disseminated pyrrhotite 174.0' to 177.0'	Weak carbonate alteration in coarser lighter beds Pervasive weak sericite developed throughout.	Trace sphalerite and pyrrhotite as splashes and specks from 163.8 to 174.0'	Section assayed from 163.8' to 174.0' for zinc. Unusual mineralization in wackes
198.7 to 310.3	Intercalated Argillite and Greywackes with minor graphitic bands.	Grey - green to black banded	Silt to sand	Bedded on a mm to 10's cm's scale	Bedding at 45° to C.A. Minor slumping apparent 40% argillite 55% wacke 5% graphite in bands up to 0.2 ft. Top determination on one graded bed, tops up hole. Conglomeratic screen 276.4 to 281.0' truncated by a qtz filled fault at 75° to C.A.	Very weak pervasive carbonate alteration 298.0' - 301.6' strongly silicified	Trace pyrite as disseminations and as fine bands in graphitic horizon Trace pyrrhotite 299.0' - 301.0'	

Hole No. LL 80-13

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
310.3 to 312.5	Massive Nodular Pyrite Bed	Brassy yellow with grey fragments	Fine grained	Nodules and beds Massive	Nodular forms up to 2 cm. Fabric at 40° to C.A. reflected in stretching on nodules	Minor carbonate	70% pyrite 30% dirty sediment as fragments and as matrix	Conductive horizon
312.5 to 341.0	Greywacke with minor argillaceous screens.	Light grey green with black bands	Silts to Sands	Massive to weakly bedded	Bedding at 45° to C.A. Greywacke is in situ brecciated with an argilliceous matrix towared the bottom of section.	Pervasive carbonate alteration throughout Creamy yellow staining may be sericite alteration in in situ brecciated section.	Trace pyrite throughout section	
341.0 to 346.0	Graphite with a weak Greywacke component	Black to light grey in bands	Silt to Sand	Massive to bedded	Bedding at 45° to C.A. Quartz carbonate veining 343.0 - 343.5'	Weak pervasive carbonate alteration	Overall 10% pyrrhotite as blebs and nodules with trace chalcopyrite 343.0 to 344.0 10% pyrite as fracture fillings. 343.0 to 346.0 2% sphalerite as fine disseminations and as fracture fillings.	Highly conductive section.
346.0 to 362.7	Brecciated Basaltic Komatiite with Graphitic Matrix and beds.	Light green with black bands and matrix.	Fine grained volcanic silty sediment	Massive	Bedding and tectonic fabric at 45° to C.A	Strong pervasive carbonate alteration	Overall 5% disseminated pyrite and pyrrhotite concentrated in matrix material.	Transition zone from pillowed basaltic komatiite to sedimentary section
362.7 to 389.9	Pillowed Basaltic Komatiite	Light green	Fine grained	Massive pillowed	Concentric cooling cracks well developed Pillow interstices contain pyrite	Chloritic patches throughout section	Trace pyrite in pillow interstices.	
389.9	END OF HOLE							

JFR 5534

GEOCHEM **DIAMOND DRILL CORE ASSAY RECORD**

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS % Cu	ASSAYS % Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	24559	378.0	388.0			10.0																		

HOLE NO. LL 80 -13

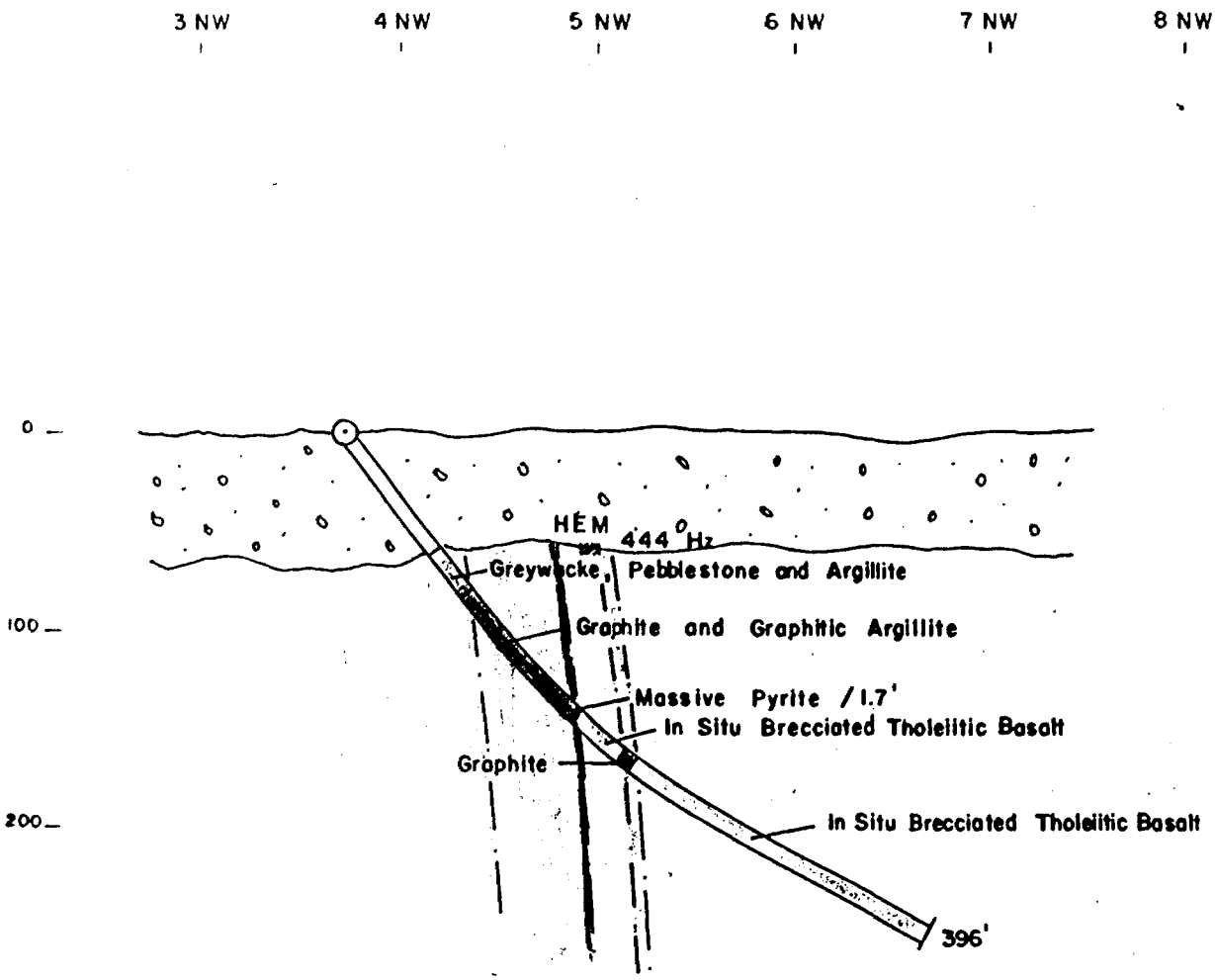
PAGE 3

JTR 1634

DIAMOND DRILL CORE ASSAY RECORD

C.D.	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	PPM Zn	Oz. Ag	Oz. Au	PPM Pb	PROGRESSIVE TOTALS PPM Co	PPM Ni	Ft. Oz Ag	Ft. Oz Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz Au	
	25624	163.8	169.0			5.2	153	475	0.01	.001	15	12	18					Trace	Sphalerite in greywacke				
	25625	169.0	174.0			5.0	86	880	0.01	.001	15	10	23					"	"		"		
	25632	200.0	210.0			10.0	74	255	0.01	.001	20	20	57					Graphitic horizon within greywacke					
	25626	310.3	312.5			2.2	88	100	0.03	.001	75	70	90					Massive pyrite nodules					
	25627	341.0	346.0			5.0	830	0.72%	0.04	.001	75	87	210					Graphite with 2% sphalerite over					3'
	25628	346.0	351.0			5.0	238	543	0.03	.001	55	78	128			341.0	346.0	5.0'	PPM Cu 830	PPM Zn .72%			
	25629	351.0	356.0			5.0	128	443	0.05	.001	40	80	120					Brecciated basaltic Komatiite with graphitic matrix					
	25630	356.0	361.0			5.0	138	478	0.05	.001	45	73	108					"		"	"	"	
	25631	361.0	362.7			1.7	545	0.19%	0.02	.001	35	68	110					"		"	"	"	

HOLE NO. LL 80 - 13



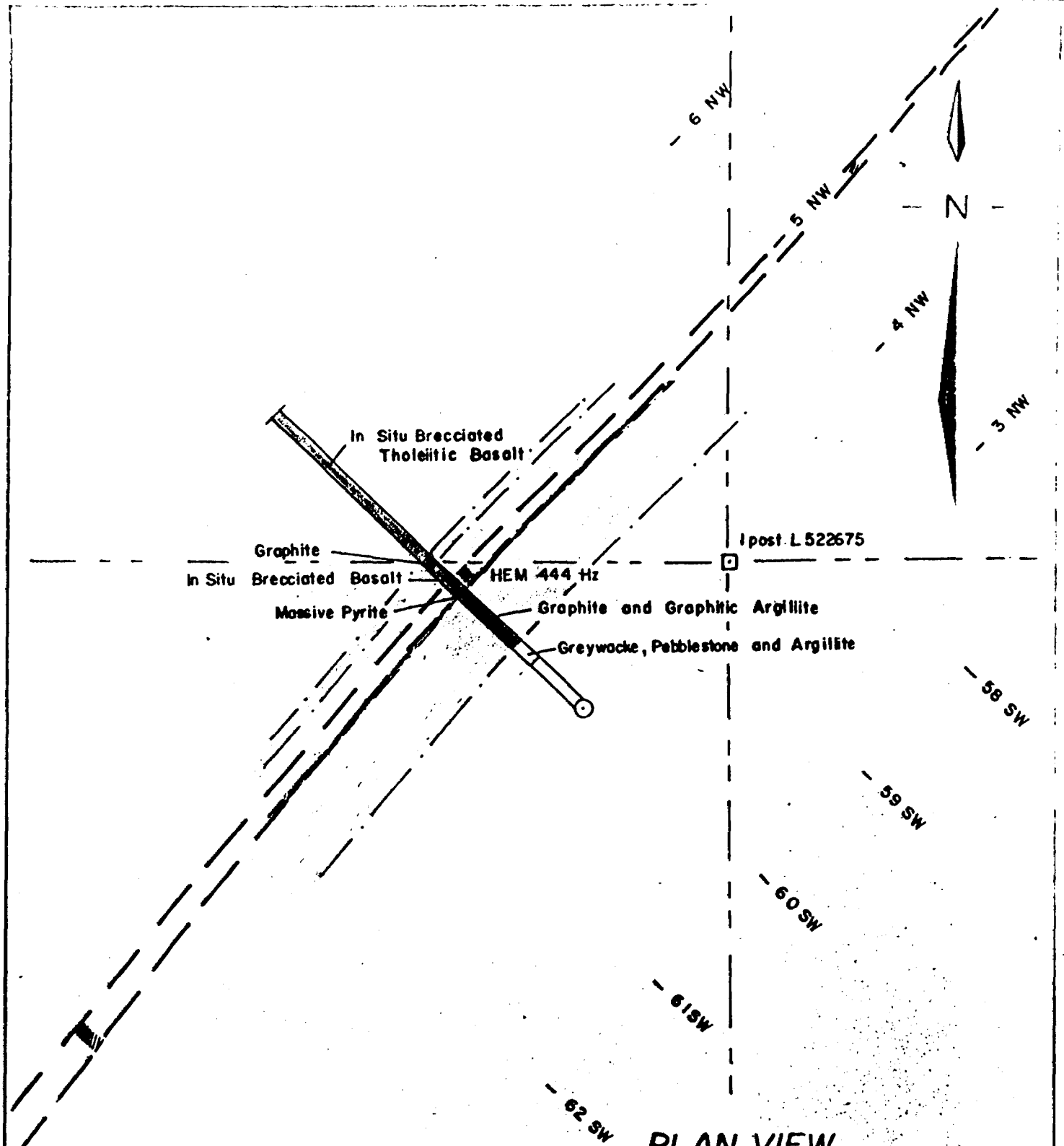
X-SECTION
LL 80-14
LINE 60 SW

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L522675 & L522663

0 50 100
FEET



PLAN VIEW
LL 80 - 14

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L522675 L522663

0 50 100
FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80 - 14 | Lot. L 60 SW | Dep. 3 + 75 NW | Elev. | Dip -50° | Bearing 315° | Depth 396 | Core AQ

Working Place: LARDER LAKE PROJECT

Date Started: AUGUST 25, 1980

Date Completed: SEPTEMBER 3, 1980

Compass Tests: Depth 396' | Dip -30° | T. Azim.

Maq. Declination

Acid Test: Depth | Dip | Depth | Dip

LARDER LAKE EXTENSION

HEARST TOWNSHIP

CLAIMS NUMBERS: L 522675 and L 522663

CONTRACTOR: McKNIGHT DRILLING

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 77.0	Overburden	Sand and	Clay 77'	Casing				
77.0 to 103.9	Interclated Greywacke Gritty Pebblestone and Argillite	Light grey to black	Silts to sands to pebbles	Massive beds	Large scale bedding over a few feet. Beds coarsen down hole. Bedding at 45° to C.A. Argillite screen at 93.0 to 96.0	Strong pervasive carbonate alteration 10% free carbonate veining	93.0 - 96.0 5% fine bedded pyrite in argillite	Assay 93.0 - 96.0 tops uphole.
103.9 to 186.0	Graphite with intercalated graphitic Argillite	Black with small brassy bands and specks	Silt	Massive to weakly bedded	Foliation at 45° to 30° to C.A. Bedding parallel to foliation 148.2 - 148.6 carbonate veining 179.5 to 183.2 pyritic carbonated mafic dyke 183.2 to 185.7 quartz veining with trace pyrite.	Carbonate in free veinlets 1% - 2%	Trace sphalerite chalcopyrite as fringes to pyrite clots and beds Overall pyrite 5% Chalcopyrite and galena in carbonate vein 148.2 - 148.6	Trace sphalerite throughout section.

Hole No. LL 80 - 14

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
186.0 to 187.7	In Situ Brecciated Silicified Greywacke	Grey with black veining	Silt to Sand	Massive	In situ brecciated Matrix of graphite	Pervasive carbonate alteration. Pervasive silicification.	5% pyrite as disseminations and as veining	
187.7 to 189.4	Massive Pyrite	Brassy yellow with black matrix	Silt- fine grained	Massive	Delicate network texture throughout Matrix of fragments of wacke and graphite	Carbonate throughout matrix material	70% pyrite	
189.4 to 215.0	In Situ Brecciated Tholeiite Basalt	Light green - grey with black infillings	Fine grained fragments Silty Matrix	Massive	70% fragments 30% argillaceous matrix	Pervasive carbonate alteration throughout fragments	Trace pyrite	Typical Larder Lake in situ brecciated tholeiite
215.0 to 221.0	Graphite	Black	Silt	Massive to finely bedded	Bedding very contorted at all angles to C.A.		Trace sphalerite throughout 1% - 2% finely disseminated pyrrhotite	
221.0 to 396.0	In Situ Brecciated Pillowed Tholeiite Baslat	Light green-grey fragments Black matrix	Fine grained	Massive	Evidence of concentric cooling cracks indicative of pillows 70% fragments 30% graphitic matrix Mafic Dykes at: 336.0 - 337.3 363.0 - 363.5 392.4 - 396.0	Pervasive carbonate alteration	2% - 3% sulphides throughout section concentrated in matrix (pyrite and pyrrhotite) Pyrrhotite bed 281.6 (½") Pyrite-graphite bed 289.0' (½")	Pillowed basalt flowing into a wet muddy sediments, shattering and infilling with argillaceous sediment
396.0	END OF HOLE							

Hole No. LL 80 - 14

JXB 76M

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Pb	PROGRESSIVE TOTALS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	25633	93.0	96.0			3.0	197	940	0.01	.001	30	48	270						Finely bedded Py in argillaceous section					
	25634	104.0	109.0			5.0	165	625	0.01	.001	30	52	385						Graphite					
	25635	109.0	114.0			5.0	84	200	0.02	.001	35	70	630						"					
	25636	114.0	119.0			5.0	212	688	0.01	.001	70	45	263						"					
	25637	119.0	124.0			5.0	170	950	0.01	.001	75	50	268						"					
	25638	124.0	129.0			5.0	133	233	0.03	.001	60	68	680						"					
	25639	129.0	134.0			5.0	103	287	0.03	.001	100	72	600						"					
	25640	134.0	139.0			5.0	124	.24%	0.05	.001	540	53	437						"					
	25641	139.0	144.0			5.0	148	.13%	0.02	.001	320	60	210						"					
	25642	144.0	149.0			5.0	180	.26%	0.02	.001	330	40	220						"					
	25643	149.0	154.0			5.0	116	.16%	0.01	.001	80	38	248						"					
	25644	154.0	159.0			5.0	187	.11%	0.02	.001	80	45	245						"					
	25645	159.0	164.0			5.0	245	.14%	0.03	.001	65	33	163						"					
	25646	164.0	169.0			5.0	442	.18%	0.02	.001	100	48	255						"					
	25647	169.0	174.0			5.0	245	.17%	0.04	.001	65	50	218						"					
	25648	174.0	179.5			5.5	450	.27%	0.04	.001	410	72	243				134.0	179.5	45.5	PPM Cu 237	PPM Zn 0.19%	PPM Pb 221	PPM Co 49	PPM Ni 249
	25649	179.5	183.2			3.7	197	478	0.03	.001	75	65	313						Mafic Dyke					
	25640	183.2	186.0			2.8	94	450	0.02	.001	45	40	100						" Quartz Vein					
	25701	186.0	187.7			1.7	.11%	118	0.02	.001	70	63	142						Silicified Greywacke					

HOLE NO. LL 80 - 14

JFR 7634

DIAMOND DRILL CORE ASSAY RECORD

C.D.	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Pb	PROGRESSIVE TOTALS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	
	25702	187.7	189.4			1.7	515	100	0.22	.002	120	180	675			
	25703	215.0	221.0			6.0	128	.21%	0.04	.001	30	62	210			

REMARKS AND AVERAGE ASSAYS								
FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
			Massive Pyrite				
			PPM Cu	PPM Zn	Ag. Oz.		PPM Ni
187.7	189.4	1.7	515	100	0.22		675

HOLE NO. LL 80-14

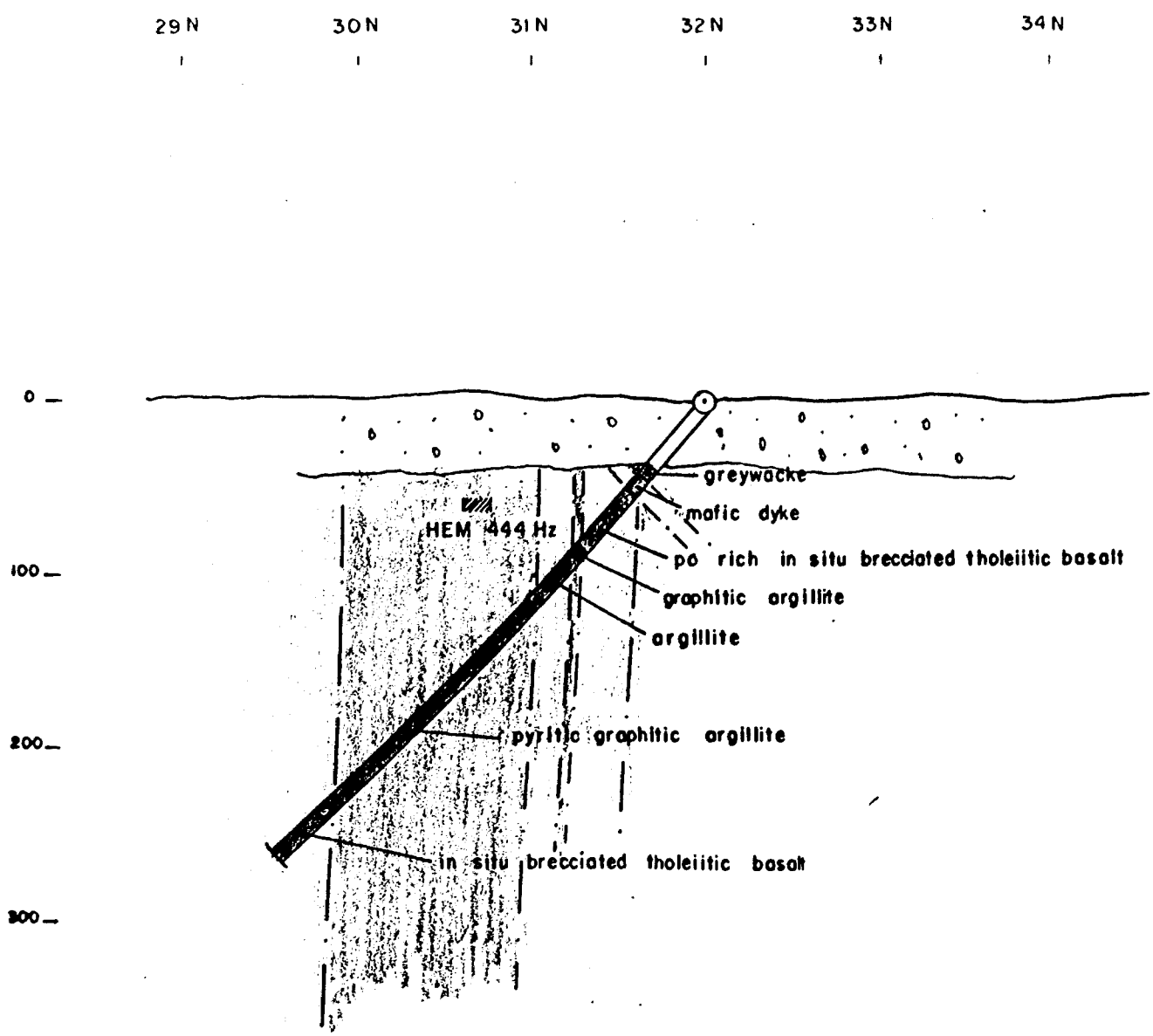
JTR 1614

GEOCHEMISTRY

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS % Cu	ASSAYS % Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz Ag	Oz. Au	
	24560	278.0	288.0			10.0	50.6	1.30																
	24561	382.0	392.0			10.0	52.6	1.30																

HOLE NO. LL 80-14



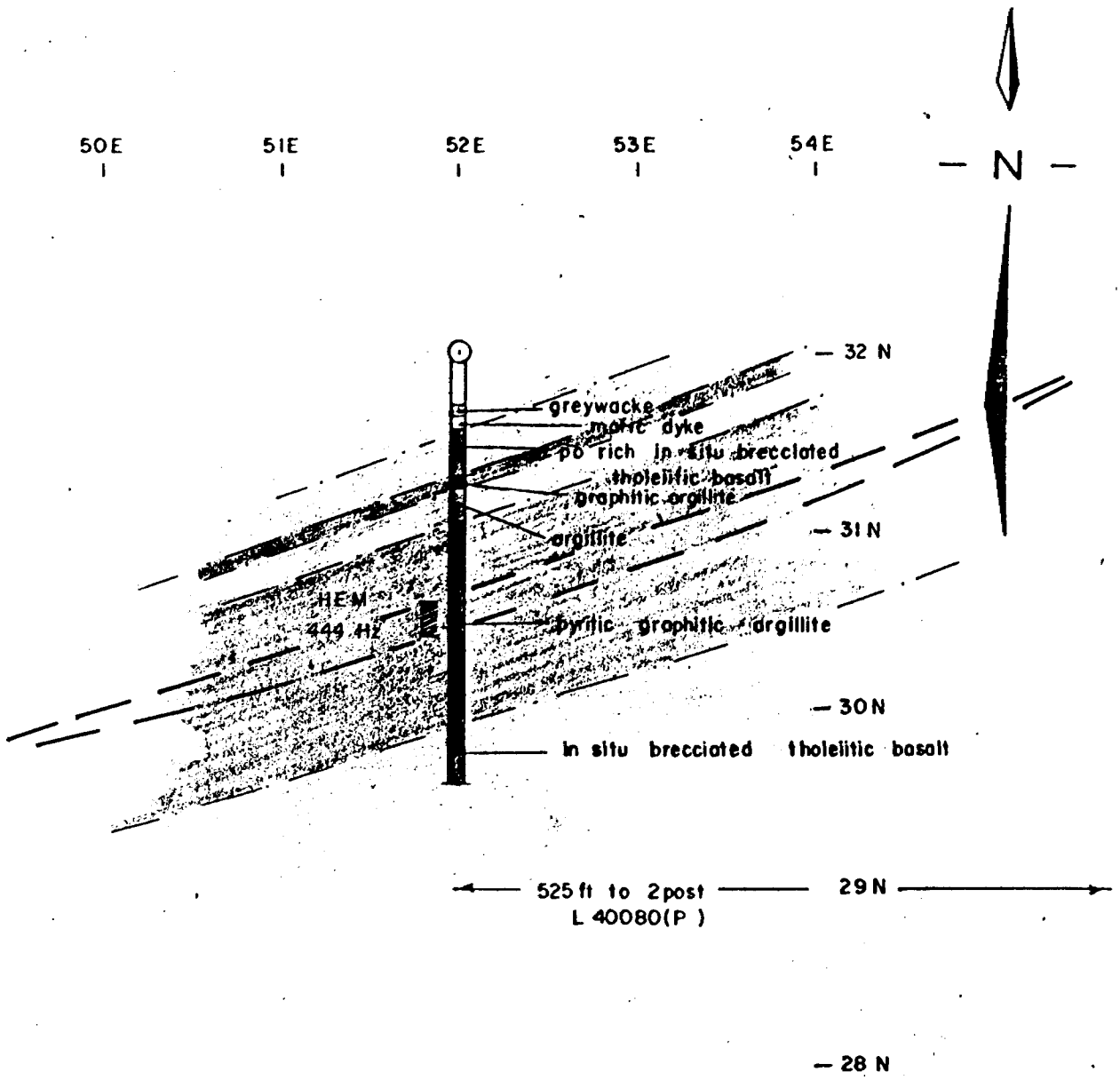
X-SECTION
LL 80-15
LINE 52 E

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 40080 (P)

0 50 100
FEET



PLAN VIEW
LL 80 - 15

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 40080 (P)

0 50 100

FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80 - 15 | Lat. L 52 E | Dep. 32 N | Elev. | Dip - 50° | Bearing 180° | Depth 356.4 | Core AQ

Working Place: LARDER LAKE PROJECT, MANY METALS OPTION, HEARST TOWNSHIP

Date Started: SEPTEMBER 8, 1980

Date Completed: SEPTEMBER 12, 1980

Compass Tests — Meq. Declination

Depth	Dip	T. Azim.

Acid Test

Depth	Dip	Depth	Dip
326.0'	44°		

CLAIM NUMBER L 40080 (Patented)

CONTRACTOR: McKNIGHT DRILLING COMPANY

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 48.0	Overburden Sand and Clay, boulder till base			Casing to 48.0 Feet				
48.0 to 49.0	Carbonated Basic Dyke	Light green	Fine grained	Massive	Contact sharp at 40° to C.A.	Pervasively carbonate altered	Trace pyrite as disseminations	
49.0 to 53.2	Bedded Greywacke	Light grey	Silt to Sand		Bedding at 40° to C.A. on a mm - cm scale	Weak to no carbonate alteration	Trace pyrite along slips	
53.2 to 65.0	Carbonated Basic Dyke	Same as 48.0 - 49.0			Upper and lower contact at 30° to C.A.			Probably represents a faulted - sediment - volcanic contact
65.0 to 105.9	Pyrrhotite Rich in situ Brecciated Tholeiitic Basalt	Light green to light grey fragments with a black matrix	Aphanitic to fine grained fragments with a silty matrix	Massive Brecciated	In situ brecciated 80% fragments 20% argillaceous matrix Foliation at 30° to C.A.	Matrix and fragments are pervasively carbonate altered	5% - 10% pyrrhotite as clots or fragments in matrix. 2% - 3% pyrite as fracture fillings Trace chalcopyrite associated with the pyrrhotite	Similar section to AMAX conductor

Hole No. LL 80 - 15

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
105.9 to 112.6	Graphitic Argillite	Black	Silt	Massive	Schistosity at 45° to C.A.	Strong pervasive carbonate alteration Free carbonate veining 5%	Trace to 1% sphalerite in carbonate veinlets 1% - 2% disseminated pyrite	
112.6 to 147.2	Slumped Intercalated Argillite and dirty wackes.	Black to light grey banded	Silt to sand	Massive	Schistosity at 45° to C.A. - probably reflects bedding Beds are broken up (slumped) Carbonate mafic dykes (pyrite rich) at: 117.0 - 118.0 127.8 - 128.0 132.4 - 133.2	Pervasive carbonate alteration 2% - 3% free carbonate veining	Trace pyrite	Primary slump breccia
147.2 to 305.7	Weakly Pyritic Graphitic Argillite	Black with brassy spots	Silt	Massive	Bedding at 40° - 45° to C.A. Carbonated pyritic mafic dykes at: 166.2 - 166.8 167.9 - 168.4 169.3 - 169.6 170.4 - 175.0 175.3 - 175.7 176.6 - 177.0 179.0 - 181.0 184.7 - 185.3 187.0 - 187.8 188.4 - 189.6 212.7 - 214.4 228.3 - 229.8 238.4 - 239.1 239.9 - 240.3 243.1 - 243.7 254.7 - 260.4 264.8 - 266.0 270.0 - 271.0 272.0 - 272.4	Strong pervasive carbonate alteration 2% - 3% free carbonate veining throughout Intense silicification from 297.0 to 307.0' marginal to lampro-phyre dyke.	3% - 5% pyrite as as fine beds and nodules up to 5 mm in diameter. Trace sphalerite and chalcopyrite noted throughout section as fracture filling with carbonate	20% of section is dyke Similar to AMAX conductor in that footwall - hanging wall same rock types, graphite thickness similar and similar dyking present. Lacks base metals.
cont'd								

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
147.2 to 305.7					289.4 - 290.0 291.0 - 292.4 294.0 - 295.0 295.3 - 295.6 296.7 - 297.3 298.2 - 298.8 Lamprophyre dyke at 302.0' - 304.0'			
305.7 to 356.4	In Situ Brecciated Tholeiitic Basalt	Light green fragments dark black matrix	Fine to aphanitic fragments silty matrix	Massive	Foliation at 45° to C.A. Hyaloclastic screens throughout Carbonated mafic dykes: 312.7 - 322.0 323.4 - 324.7	Weak carbonate alteration	Pyrrhotite as clots or fragments 3% - 5% with trace chalcopyrite associated	Typical in situ breccia
356.4	END OF HOLE							

FORM 7614

SULPHIDES

DIAMOND DRILL CORE ASSAY RECORD

C.D.	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	ASSAYS PPM Pb	PROGRESSIVE TOTALS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	25704	105.0	112.6			7.6	202	0.19%	0.02	.001		28	63							Grey Argillite				
	25705	147.2	152.0			4.8	213	0.13%	0.03	.001		27	65							Pyritic Graphitic Argillite				
	25706	152.0	157.0			5.0	178	0.13%	0.02	.001		30	68							"		"	"	
	25707	157.0	162.0			5.0	196	0.17%	0.02	.001		28	100							Graphite				
	25708	162.0	167.0			5.0	315	0.19%	0.03	.001	60	55	107				147.2	167.0	19.8	PPM Cu 226	PPM Zn 0.16%	PPM Co 35	PPM Ni 94	
	25709	167.0	172.0			5.0	95	233	0.02	.001	45	48	113							Dyked Section				
	25710	172.0	177.0			5.0	170	475	0.03	.001	65	50	97							Dyked Section				
	25711	177.0	182.0			5.0	282	0.14%	0.02	.001	45	42	88							Graphite				
	25712	182.0	187.0			5.0	222	0.25%	0.04	.001	40	33	105							"				
	25713	187.0	192.0			5.0	303	0.22%	0.02	.001	75	46	92							"				
	25714	192.0	197.0			5.0	246	0.28%	0.04	.001	75	42	110							"				
	25715	197.0	202.0			5.0	200	735	0.01	.001		25	67							"				
	25716	202.0	207.0			5.0	203	0.10%	0.01	.001		38	75							"				
	25717	207.0	212.0			5.0	156	0.14%	0.03	.001		30	78				177.0	212.0	35.0	PPM Cu 230	PPM Zn 0.17%	PPM Co 36	PPM Ni 97	
	25718	212.0	217.0			5.0	138	258	0.02	.001		33	66							Graphite				
	25719	217.0	222.0			5.0	163	890	0.02	.001		30	100							Graphite				
	25720	222.0	227.0			5.0	200	958	0.02	.001		27	98							"				
	25721	227.0	232.0			5.0	148	425	0.01	.001		25	75							"				
	25722	232.0	237.0			5.0	127	605	0.01	.001		45	82							"				

HOLE NO. LL 80 - 15

JTR 1624

DIAMOND DRILL CORE ASSAY RECORD

C D	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS PPM Co	PROGRESSIVE TOTALS PPM Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	25723	237.0	242.0			5.0	240	0.12%	0.01	.001		45	82							Graphite				
	25724	242.0	247.0			5.0	150	0.11%	0.01	.001		23	52				237.0	247.0	10.0	PPM Cu 195	PPM Zn 0.12%	PPM Co 34	PPM Ni 67	
	25725	247.0	252.0			5.0	126	393	0.01	.001		15	27							Graphite				
	25726	252.0	257.0			5.0	68	195	0.01	.001		38	88							"				
	25727	257.0	262.0			5.0	72	155	0.01	.001		50	108							"				
	25728	262.0	267.0			5.0	83	200	0.01	.001		37	60							"				
	25729	267.0	272.0			5.0	88	318	0.01	.001		20	47							"				
	25730	272.0	277.0			5.0	86	240	0.01	.001		18	42							"				
	25731	277.0	282.0			5.0	80	272	0.01	.001		12	13							"				
	25732	282.0	287.0			5.0	92	490	0.01	.001		10	20							"				
	25733	287.0	292.0			5.0	63	176	0.01	.001		32	55							"				
	25734	292.0	297.0			5.0	80	488	0.03	.001		40	47							"				
	25735	297.0	302.0			5.0	60	150	0.02	.001		23	25							"				
	25736	302.0	307.0			5.0	138	508	0.02	.001		45	70							"				

HOLE NO. LL 80 -15

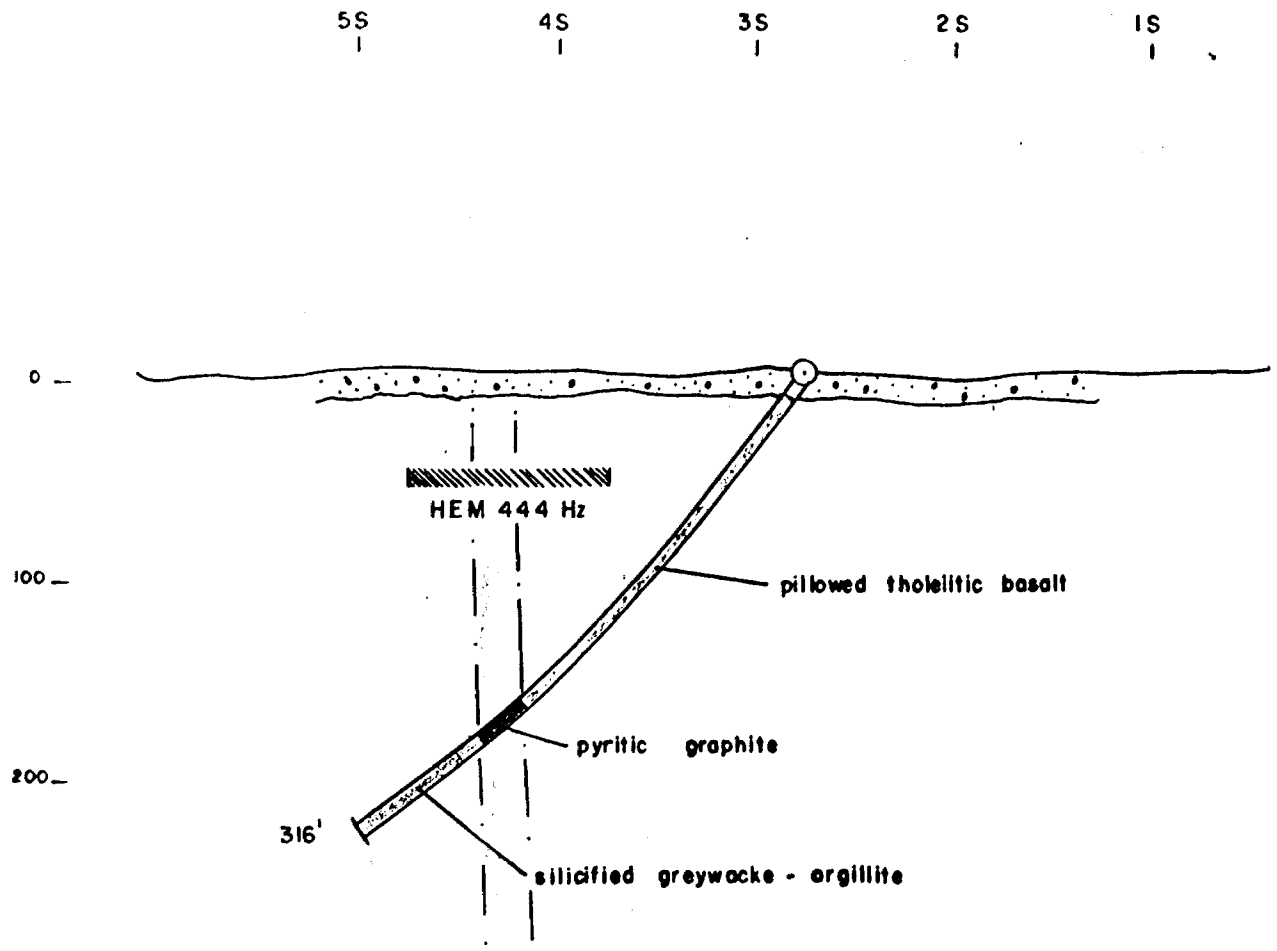
JTR 7634

GEOCHEMISTRY **DIAMOND DRILL CORE ASSAY RECORD**

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE CU	ESTIMATE ZN	LENGTH FT.	ASSAYS % CU	ASSAYS % ZN	ASSAYS OZ. AG	ASSAYS OZ. AU		PROGRESSIVE TOTALS FT. % CU	PROGRESSIVE TOTALS FT. % ZN	PROGRESSIVE TOTALS FT. OZ AG	PROGRESSIVE TOTALS FT. OZ. AU		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% CU	% ZN	OZ AG	OZ AU	
	24562	75.0	85.0			10.0	SiO_2 52.6	TiO_2 1.69																
	24563	129.0	139.0			10.0	72.4	.41																
	24564	346.0	356.0			10.0	55.9	1.76																

HOLE NO. LL 80 - 15

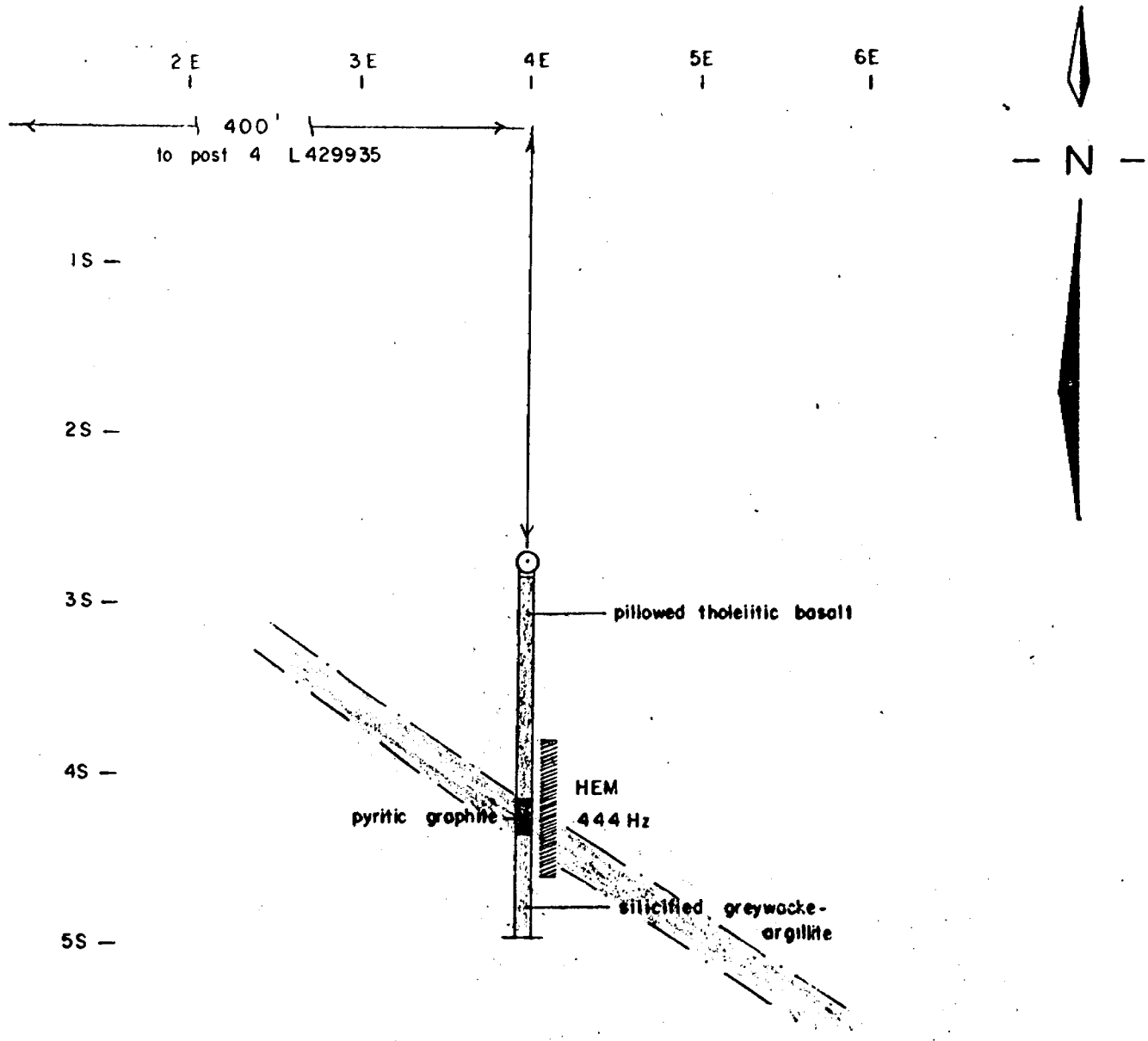
PAGE 6



X-SECTION
LL 80-16
LINE 4 E

LARDER LAKE PROJECT
HEARST TWP.
CLAIM L 429935

0 50 100
FEET



PLAN VIEW
LL 80-16

LARDER LAKE PROJECT

HEARST TWP.

CLAIM L 429935

0 50 100

FEET

FALCONBRIDGE COPPER LTD.

LAKE DUFAULT DIVISION

DRILL HOLE RECORD

Hole No. LL 80 - 16 | Lat. L 4 E | Dep2 + 75 S | Elev. | Dip - 50° | Bearing 180° | Depth 316 Ft. | Core AQ

Working Place

Date Started: SEPTEMBER 15, 1980

Date Completed: SEPTEMBER 18, 1980

Compass Tests: Depth | Dip | T. Asim. — Meq. Declination — Acid Test: Depth | Dip | Depth | Dip

316 Ft. -40°

LARDER LAKE PROJECT
MANY METALS OPTION
HEARST TOWNSHIP

CLAIM NUMBER L 429935

CONTRACTOR: McKNIGHT DRILLING COMPANY

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
0 to 15.0	Overburden	Clay - sand						
15.0 to 216.5	Mildly Brecciated Silicified Pillowed to Massive Tholeiitic Basalt.	Light grey to green	Aphanitic to fine grained	Massive to pillowed	The entire section is mildly brecciated (appears to be in situ) Pillow selvedges and interstices evident throughout section. No discernable fabric. Contact with sediments sharp at 45° to C.A.	Patchy pervasive carbonate alteration. Entire section seems to be pervasively weakly silicified 1% - 2% free carbonate veinlets from 1mm to 2 cm at random angles to core. Fine hairline fractures filled with orange carbonate (.5%) Quartz veinlets with trace pyrite 1%. Dramatic increase in silicification in last 4 to 5 feet of section at contact with sediments reflected by bleaching.	Trace pyrite noted in pillow interstices and in some quartz carbonate veinlets	Entire section is apparently mildly silicified Samples for Si Ti at: 20.0' - 30.0' 120.0' - 130.0' 200.0' - 210.0'
216.5 to 240.0 cont'd	Interbedded	Sections of light grey, dark grey	Silt to sand	Bedded sequence	Bedding is contorted and microbrecciated	Pervasive carbonate and silica alteration	121.8 trace sphalerite in carbonate veinlet	Conductor

Hole No. LL 80 - 16

Logged by FRANK BALINT

Frank Balint

DEPTH	ROCK TYPE	COLOUR & % FELSIC	GRAIN SIZE	TEXTURE	STRUCTURE	ALTERATION	SULPHIDES	REMARKS
216.5 to 240.0	Graphitic Argillite, Pyritic Graphitite and Silicified Wackes	black and creamy white			In general bedding to C.A. is 45°. Entire section is brecciated, the voids filled with orange carbonate, white carbonate and pyrite. Predominantly graphite sections are: 222.6 - 223.8 227.5 - 229.0 231.4 - 233.5 234.7 - 240.0	The wacke sections are intensely silicified Ramifying carbonate veinlet make up 5% - 7% of section. Serpentine in veinlet at 121.8	5% pyrite as clots and nodules 222.6 - 223.8 10% pyrite on broken beds and nodules in graphite 227.5 - 229.0 231.4 - 233.5 234.7 - 240.0 Trace pyrite in rest of sediments as fracture filling.	
240.0 to 316.0	Interbedded Silicified Greywackes and Argillite	Mottled creamy white to grey with black to grey beds	Silt to Sand	Bedded	Bedding at 45° to 50° to C.A. Slumping and micro-brecciation throughout section. Intense fracturing with carbonate infilling throughout. Estimate for section 70% dirty wacke 25% argillite 5% graphitic argillite Pyritic graphitic beds at: 288.8 - 289.5 and 290.1 - 290.8	Intense pervasive carbonate alteration throughout section. Entire section is silicified, however wacke beds appear most highly altered	Trace to 2% pyrite throughout section as hairline fracture filling. 40% pyrite as beds and nodules 288.8 - 289.5 30% pyrite as beds and nodules 290.1 - 290.8	Very blocky ground 240.0 - 257.0 261.0 - 262.0 275.0 - 283.0
316.0	END OF HOLE							

SULPHIDES

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS PPM Cu	ASSAYS PPM Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au		PROGRESSIVE TOTALS PPM Co	PPM Ni	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au		REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au	
	25737	216.5	222.0			5.5	227	928	0.01	.001		36	48					Weakly graphitic argillitic graphite						
	25738	222.0	227.5			5.5	57	193	0.01	.001		20	20					"	"		"	"		
	25739	227.5	229.0			1.5	84	82	0.02	.001		28	50					"	"		"	"		
	25740	229.0	231.4			2.4	50	150	0.01	.001		13	10					"	"		"	"		
	25741	231.4	233.5			2.1	120	148	0.01	.001		50	43					"	"		"	"		
	25742	233.5	234.7			1.2	72	275	0.01	.001		18	12					"	"		"	"		
	25743	234.7	240.0			5.3	115	500	0.01	.001		38	50					"	"		"	"		
	25744	288.8	289.5			0.7	220	98	0.02	.001		135	103					Pyritic Graphite						
	25745	290.1	290.8			0.7	188	90	0.03	.001		67	97					Pyritic Graphite						

HOLE NO. LL 80 -16

JTR 1634

GEOCHEMISTRY

DIAMOND DRILL CORE ASSAY RECORD

C B	SAMPLE NUMBER	FROM FT.	TO FT.	ESTIMATE Cu	ESTIMATE Zn	LENGTH FT.	ASSAYS % Cu	ASSAYS % Zn	ASSAYS Oz. Ag	ASSAYS Oz. Au	PROGRESSIVE TOTALS Ft. % Cu	PROGRESSIVE TOTALS Ft. % Zn	PROGRESSIVE TOTALS Ft. Oz. Ag	PROGRESSIVE TOTALS Ft. Oz. Au	REMARKS AND AVERAGE ASSAYS FROM	TO	LENGTH	% Cu	% Zn	Oz. Ag	Oz. Au
	24565	20.0	30.0			10.0	54.3	1.38										Silicified		Tholeiite	
	24566	120.0	130.0			10.0	50.4	1.32										Silicified Tholeiite			
	24567	200.0	210.0			10.0	50.9	1.35										"		"	
	24568	300.0	310.0			10.0	69.4	.48										"		"	

HOLE NO. LL 80 -16

APPENDIX "B"

REPORT OF WORK

Ministry of Natural Resources
Ontario

A separate form is required for each type of work to be recorded.

THE MINING ACT REPORT OF WORK

To the Recorder of LARDER LAKE Mining Division

I, CORPORATION FALCONBRIDGE COPPER T-556
name of Recorded Holder Prospector's Licence

P. O. BOX 40, COMMERCE COURT WEST, TORONTO, ONTARIO M5L 1B4
Post Office Address

do hereby report the performance of 3,183 days of AQ DIAMOND DRILLING
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
SEE SCHEDULE "1" ATTECHED					

All the work was performed on Mining Claim (s) L 522745, L 522746, L 522748, L 522752, L 522764
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)
L 522743

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

LL 80-2 to LL 80-9 Inclusive for a total footage of 3,183 feet, see attached Schedule "2".

Drilled March 25, 1980 to September 18, 1980

Contractor: McKnight Drilling Company Ltd.
P. O. BOX 906,
Haileybury, Ontario. P0J 1K0

Core Logs and Sketches in accompanying report.

Date DECEMBER 15, 1980 .....
Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, FRANK BALINT - AGENT FOR CORPORATION FALCONBRIDGE COPPER
410 RED RIVER ROAD, THUNDER BAY, ONTARIO P7B 1B3
(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed hereto, having performed the work or witnessed same during and/or after its completion.

2. That the annexed report is true.

Dated DECEMBER 15 19 80 Frank Balint
Signature

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

SCHEDULE "1"

CORPORATION FALCONBRIDGE COPPER - 1980 DRILL PROGRAM

MISEMA - SUPERIOR NORTHWEST BLOCK - McELROY TOWNSHIP - ONTARIO

CLAIM NUMBER	DAYS
L 512333	60
L 512334	60
L 512335	60
L 512336	60
L 512337	60
L 512338	60
L 512339	60
L 512340	60
L 512341	60
L 512342	40
L 512343	40
L 512344	40
L 512345	40
L 512345	40
L 512346	40
L 512347	40
L 512348	40
L 512349	40
L 512350	40
L 512351	40
L 539591	60
L 539593	60
L 522718	60
TOTAL	1,120 DAYS - APPLIED
	2,063 DAYS - RETAINED FOR FUTURE USE

SCHEDULE "2"

CORPORATION FALCONBRIDGE COPPER - 1980 DRILL PROGRAM

MISEMA NORTH - SUPERIOR NORTHWEST BLOCK - McELROY TOWNSHIP - ONTARIO

HOLE	FOOTAGE	DIP	AZMUTH	CORE SIZE	CLAIM NUMBER
LL 80-2	383	-50°	045°	AQ	L 522745
LL 80-3	365	-50°	045°	AQ	L 522745 and L 522746
LL 80-4	605	-50°	075°	AQ	L 522748
LL 80-5	307	-50	090°	AQ	L 522748
LL 80-6	307	-50°	270°	AQ	L 522752
LL 80-7	306	-50°	250°	AQ	L 522764
LL 80-8	362	-50°	250°	AQ	L 522764
LL 80-9	548	-70°	045°	AQ	L 522746 and L 522743
TOTAL	3,183 FEET				

Ministry of Natural Resources
Ontario

A separate form is required for each type of work to be recorded.

THE MINING ACT REPORT OF WORK

To the Recorder of LARDER LAKE Mining Division

I, CORPORATION FALCONBRIDGE COPPER T - 556
name of Recorded Holder Prospector's Licence

P. O. BOX 40, COMMERCE COURT WEST, TORONTO, ONTARIO M5L 1B4
Post Office Address

do hereby report the performance of 3,188 days of AQ DIAMOND DRILLING
type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
SEE ATTACHED SCHEDULE					

All the work was performed on Mining Claim (s) L 476663, L 522658, L 522659, L 522662, L 522663
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)
L 522674, L 429935

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations – Names and addresses of the men who performed the work and the dates and hours of their employment.
For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.
For Compressed Air or Other Power Driven or Mechanical Equipment
Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.
For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.
With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.
For Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate with the Minister within 60 days of recording.
For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

LL 80-1 and LL 80-10 to LL 80-16 inclusive drilled as per attached Schedule 2

Drilled March 25, 1980 to September 18, 1980

Contractor: McKnight Drilling Company Ltd.,
P. O. Box 906
Haileybury, Ontario, P0J 1K0

Core Logs and Sketches in accompanying report.

Date DECEMBER 15, 1980

Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, FRANK BALINT, AGENT FOR CORPORETION FALCONBRIDGE COPPER

410 RED RIVER ROAD, THUNDER BAY, ONTARIO P7B 1B3
(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed hereto, having performed the work or witnessed same during and/or after its completion.

2. That the annexed report is true.

Dated DECEMBER 15 19 80

Frank Balint
Signature

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS $500. OR SIX MONTHS IMPRISONMENT OR BOTH

768 (8/77)

SCHEDULE "2"

CORPORATION FALCONBRIDGE COPPER 1980 DRILL PROGRAM

LARDER LAKE BLOCK

McELROY - HEARST TOWNSHIPS

HOLE NUMBER	FOOTAGE	DIP	AZMUTH	CORE SIZE	CLAIM NUMBER
LL 80-1	811	-50°	270°	AQ	L 476663
LL 80-10	407	-50°	135°	AQ	L 522658
LL 80-11	417	-50°	345°	AQ	L 522658
LL 80-12	452	-50°	315°	AQ	L 522659
LL 80-13	389	-50°	315°	AQ	L 522662
LL 80-14	396	-50°	315°	AQ	L 522663 and L 522674
*LL 80-15	356	-50°	180°	AQ	L 40080 (P)
LL 80-16	316	-50°	180°	AQ	L 429935
TOTAL	3,544 FEET				

* LL 80-15 - Drilled on Patented Claim and not eligible for assessment credit

3,544' less 356' = 3,188 Feet Eligible for Assessment Credit.

SCHEDULE "I"

CORPORATION FALCONBRIDGE COPPER CLAIMS

LARDER LAKE GROUP

McELROY - HEARST TOWNSHIPS

CLAIM NUMBER	DAYS
L 522643	80
L 522644	80
L 522645	80
L 522646	80
L 522647	80
L 522648	80
L 522649	80
L 522650	80
L 522653	80
L 522673	80
L 522699	40
L 522700	40
L 522701	40
L 522702	40
L 522703	40
L 522704	40
L 511494	40
L 511495	40
L 511496	40
L 511497	40
L 522758	40
L 522759	40
L 522760	40
L 522761	40
L 495048	40
L 495049	40
L 496276	40
L 496277	40
L 496442	40
L 476443	45
L 476642	40
L 476446	40
L 496600	40
L 496601	40
L 506235	40
L 506236	40
TOTAL ---	1,840 DAYS