OMEP-81-5-C

41010NE0035 63.4004 CUNNINGHAM

010

PRELIMINA
EVALUATION

MW RESOURCES LIMITED

Cu.-Zn-Ag-Au PROPERTY

CUNNINGHAM TOWNSHIP
ONTARIO

BY

Dennis Fairbairn, P.Eng.,

May 1, 1981

- 593.4310.
JOHN Milledge

EVALAUATION

BASED ON

MAY 1st., 1981 INFORMATION

1.	Tonnage	80,000 tons plus.	
2.	Grade	3.9% Copper; 6.2% Zinc; 1.2 OPT Silver; 0.03 OPT Gold.	
3.	Mining Costs..	Loaded, rail cars, $35.00/ton.	
4.	Transp.,rail..	$12.50/ton.	
5.	Milling costs.	$12.00/ton.	
6.	Production ...	40,000 tons per year, 200 TPD, 2years.	
7.	Metal Prices..	Copper ... $1.05/lb., Canadian. Zinc ..... $0.50/lb., " Silver ... $16.00/oz., " Gold ..... $600.00/oz., "	
8.	Recovery	Copper, mill, 90% Zinc, mill, 85% Silver, mill, 90%; conc., 90%. Gold, mill, 90%; conc., 90%.	
9.	Payment.....	Copper ... 75¢/lb. Cu. in mill conc. Zinc ..... 22¢/lb. Zn. in mill conc. Silver ... $16.00/oz./oz./ over 0.2oz./ton. Gold ..... $600.00/oz. in conc..	
10.	Net Smelter ..	Copper ... 3.9(0.90)(0.75)(20)	$ 52.65/ton.
		Zinc ..... 6.2(0.85)(22)(20)	23.20/ton
		Silver ... 0.9(0.9)(1.2-0.2)(16.00)	12.95/ton
		Gold ..... 0.9(0.9)(600.00)(0.03)..	14.60/ton
		Net Smelter Returns	$103.40/ton
11.	Profit	N.S.R.: 80,000($103.40)	$8,272,000
		Mining Costs .. 80,000($35.00)	$2,800,000
		Transp. ..... 80,000($12.50)	1,000,000
		Milling ..... 80,000($12.00)	960,000
		Pre Production.....	150,000
		Total Costs, Direct, ...	$4,910,000
		Continuing O.H., Taxes, Net Capital Outlay, Interest, Contingency, ...	$1,200,000
		Total Costs, ...	$6,110,000
		Profit, 2 years, ...	
		$8,272,000 - $6,110,000	$2,162,000

HISTORY

The property has been intensively explored for stratigraphically-controlled mineralization, of large tonnage, to supply a proposed on-site mill to be fed from an underground and/or open-pit operation. Results have been negative. Diamond-drilling has outlined several million tons, but with values sub-commercial.

Placer Development's late 1980 withdrawal was the end of such exploration. Since then, the target of in-Company engineering has been the locating of suspected narrow, higher-grade mineralization, which, by underground methods, would yield profitable shipping-ore. One such zone has been located. Potentially, there are ~~two~~ three additional zones, both uninvestigated.

LOCATION & ACCESS

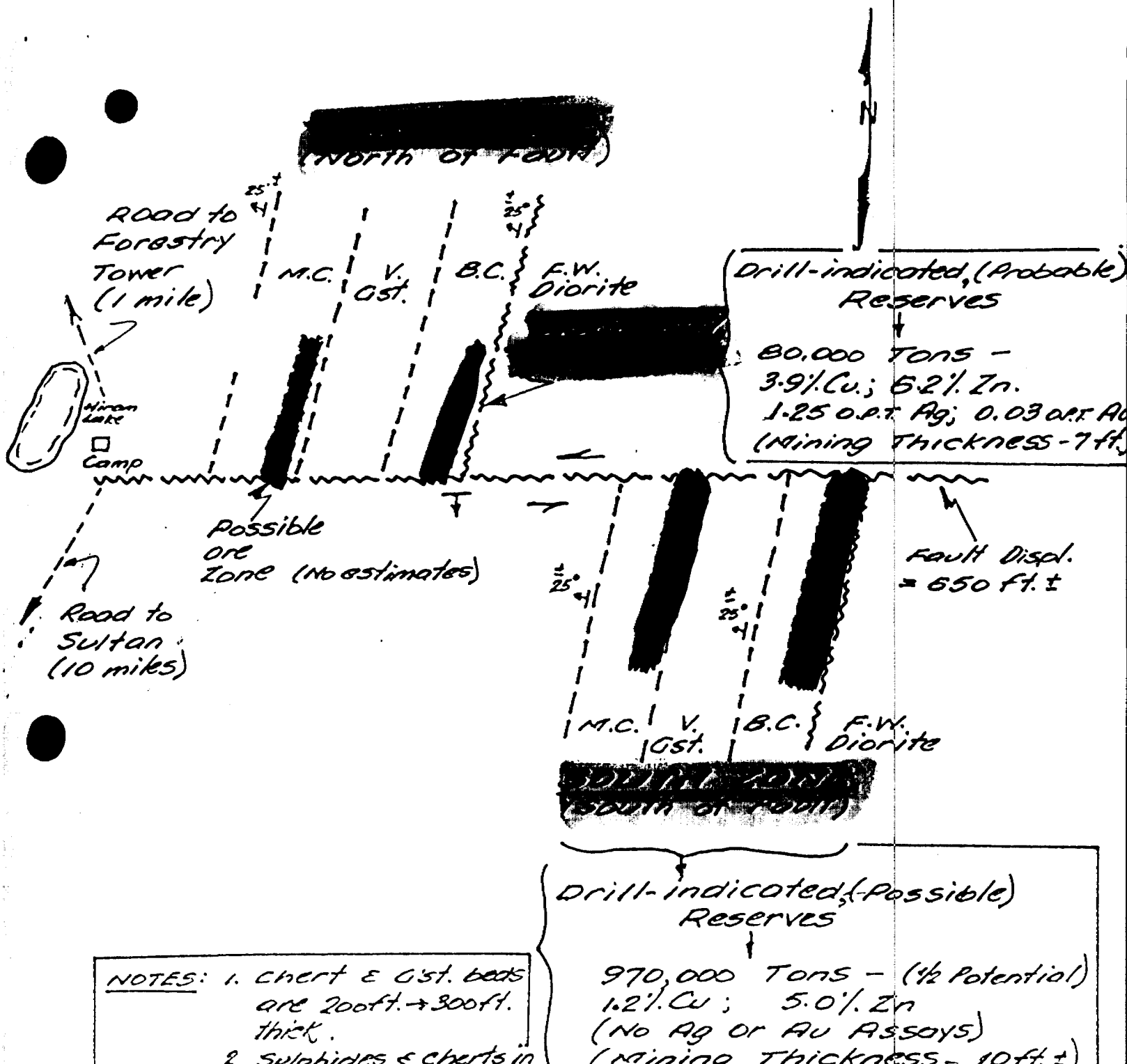
There are 64 claims, 20 of which are patented, 10 are leased, and 34 are staked. These are in Cunningham Township, Ontario, 85 air-miles S.W. of Timmins, and 120 air-miles N.W. of Sudbury. Minor road work on the existing but unused 10-mile Swayze road from Sultan to the property would provide good trucking-road connections to both Timmins and Sudbury. The C.P.R. main line passes through Sultan.

GENERAL GEOLOGY

The property lies in the Swayze greenstone belt, which is S.W. of the Timmins greenstone belt. The Timmins belt contains the Texas Gulf Cu-Zn-Ag mine, and others such as Hollinger and Dome. In the Swayze belt, the M.W.R. property contains the best Cu-Zn-Ag deposit.

GEOLOGY & MINERALIZATION

The westerly-dipping cherty iron formation is locally separated into an upper and lower chert ~~chert~~ member by an interlayered variolitic greenstone. Each is about 250 feet thick. The base of the lower chert, which contains the ore zone of current interest, is in fault-contact with the later diorite intrusive.



NOTES:
1. Chert & Cst. beds are 200 ft. → 300 ft. thick.
2. Sulphides & cherts in ore zones are typically banded or stratified (exhalative)
3. M.C. = Middle Chert
   V. Cst. = Variol. Cr'st.
   B.C. = Basal Chert

M.W. RESOURCES LTD
PLAN VIEW GEOLOGY & MINERAL ZONES CUNNINGHAM T'W'P. ONTARIO
Drawn by Dennis Fairbairn. P.Eng. May, 1981 N.T.S.

OBSERVATIONS

1. Basic and prerequisite to this proposal is proving the North Zone Basal Chert orebody as a result of surface stripping, trenching, and sampling the ore zone where it reaches the surface at its northern extremity, and of fill-in or confirmatory diamond-drilling of up to 25 short holes, (with a maximum length of about 150 Ft.) The estimated cost of this program is $134,000.00 .

2. The South Zone, faulted off, could contain a similar ore-zone in the Basal Chert, and of considerably larger tonnage. This zone has not as yet been investigated.

   Both the North and South Zones in the Middle Chert probably contain mineralized zones of tonnages equal to those in the Basal Chert, but of lower copper and higher zinc content. There have been no Gold or Silver assays on any of the drill core from the South Zone.

3. In the North Zone Basal Chert, there could be an additional 50,000 tons of shipping ore above the assumed ore horizon. For example, DDH 77 intersected 34 ft. of 4.6% Copper and 1.3% Zinc. In our calculations, we used only 5.6 ft. of 15.5% Cu., and 3.0% Zn.. (DDH 77 is a vertical hole). Such material could be mined simultaneously and profitably where and when incremental costs of mining, hauling,and milling are less than net smelter returns.

4. Under a tentative agreement reached with a Noranda subsidiary, ore will be milled at its Cu-Zn-Ag-Au concentrator. Empty returning concentrate cars would haul from the main C.P.R. line at Sultan to the mill.

5. Time to completion would be about two years from the completion of the first-phase stripping, trenching, and confirmatory diamond-drilling program..... a total period of about three years ... in the North Zone Basal Chert deposit.... .

6. Under favourable circumstances, Dennis Fairbairn, P.Eng., (Mining), would be available to direct the operations.

BACIC ASSUMPTIONS

1. No environmental problems.

2. Production - 200 T.P.D. -(8'x10'x30'), 1 shift per day,
   - 2 drills.

3. Mining Method - modified room-and-pillar, with escape and ventilation raises and almost all underground work in ore.

4. Maximum adverse grades in decline and stopes -- about 15 deg.

5. A five-day work week and week-ends "at home", (1-hour drive to Chapleau and 2-hour to Timmins and Sudbury).

6. Possibly, portable primary crusher on site, if mine-run shipments not feasible.

7. That pre-production stripping, trenching, bulk-sampling and test-milling, confirm the expected quantity and value of the ore and the metallurgical amenability of the ore.

8. That recoveries at the concentrator are 90%, 85%, 90%, and 90%, for Cu., Zn., Ag., and Au., respectively.

9. That prices, remain at"current"levels of $1.05/lb., Cu., $0.50/lb. Zn., $16.00/oz. Ag., and $600.00 Au.,(Canadian).

10. That the milling toll, Noranda, is $12.00 per ton.

11. That the existing 10-mile Swayze road, from Sultan to the property, can be made serviceable, with Government assistance, at nominal cost to MW R . (the existing"Grandoro" road from the east can be made serviceable with minor bulldozer work).

12. For estimating puposes, the underground work would be contracted, and that, based on detailed estimates by the writer, the cost, loaded, will be $35.00 per ton. There would therfor be only minor attendant MWR capital expenditures.

13. That production and shipment be on a 12-month - per year basis.

GRADE ESTIMATES

Section Number	DDH Number	Copper %	Zinc %	Inters. ft.	Apparent Width	Silver Assay
16	25	1.9	3.7	5.0	150 ft.	
	75	1.8	13.1	5.2		3.2 oz
	Av.	1.9	8.4	5.1	150 ft.	
17	17	2.7	?	7.4	150 ft.	
	20	0.9	7.5	11.0		
	21	2.4	6.4	2.5		
	22	10.4	Tr.	2.6		
	Av.	4.1	3.5	5.9	150 ft.	
18	77	15.5	3.0	5.6	170 ft.	1.06 oz
	79	1.0	5.3	7.7		0.55 oz
	Av.	8.2	4.2	6.7	170 ft.	
19	60	1.8	0.8	5.5	120 ft.	0.48 oz
	80	4.8	2.2	8.3		
	Av.	3.6	1.6	6.9	120 ft.	
20	26	10.4	0.5	7.0	140 ft. ?	
	35	0.5	3.9	10.0		
	33	3.3	7.8	6.0		
		4.2	3.9	7.7	140 ft. ?	
21	5	3.4	Av.	8.7	130 ft. ?	
25	8	1.9	17.0	4.0	60 ft. ?	
						0.8 oz (DDH 76)
Approximate Arithmetical Averages.		3.9%	6.2%	7.0 ft.	130 ft.	1.2 oz.

Note: "Section Number" refers to vertical section prepared by DF, June, '78.
Assays and intersections are from independent consultants' logs.
Very few Ag. assays made, but when samples were taken from this cre zone, the results were always positive... with respect to Ag.

MW Resources Ltd.
Cunningham Township
Ontario

CASH FLOW & OPERATING PROFIT from DEVELOPMENT & PRODUCTION of 80,000 Tons Cu-Zn-Ag Ore 1981-1982-1983

Preliminary Estimates

1982 Month	Production (tons)	Shipments (tons)	Cash Out (MWR) $ M	Cash Out (Dir. C) $ M	Cash Out (Total) $ M	Receipts (NSM & Grant)
Jan.	nil	nil	1.0	7.1	8.1	nil
Feb.	nil	nil	1.0	7.2	8.2	nil
Mar.	nil	nil	2.5	8.7	11.2	25.0
Apr.	1,000	nil	0.5	90.0	90.5	nil
May.	2,000	nil	0.5	107.0	107.5	nil
June	4,000	6,000	1.0	168.0	169.0	nil
Jul.	4,000	4,000	1.0	168.0	169.0	nil
Aug.	4,000	4,000	1.0	168.0	169.0	422.0
Sep.	4,000	4,000	1.0	168.0	169.0	282.0
Oct.	4,000	4,000	1.0	168.0	169.0	282.0
Nov.	4,000	4,000	0.5	168.0	168.5	282.0
Dec.	4,000	4,000	nil	175.0	175.0	282.0
Year	31,000	30,000	11.0	1,403.0	1,414.0	1,575.0

Cash Flow, 1982 --	$ 162,000
Receivable, Nov-Dec-	564,000
Operating Profit -	$ 726,000

Year, 1983	49,000	50,000	12.0	2,036.0	2,048.0	3,523.0 (incl. 564.0 Rec.

Cash Flow, 1983 -------	$1,475,000
Operat. Profit, 1983 --	$1,475,000
Operat. Profit, 1982 --	726,000
Op. Pr., '82-'83 .. ----	$2,201,000
Less '81 Pre-Prod. ----	134,000
Cash Flow, '81-'82-'83	$2,067,000
Balancing, (O.R.) -----	31,000
Budgeted Profit, '81-'83 (bef. taxes & interest)	$2,098,000

Cash On Hand (start)	Cash On Hand (dec) inc	Cash On Hand (end)	Cash, Borrow, (Month)	Notes
44.0	(8.1)	35.9	nil	
35.9	(8.2)	27.7	nil	
27.7	13.8	41.5	nil	
41.5	(90.5)	(49.0)	49.0	--- (plus $50,000 working capital)
(49.0)	(107.5)	(156.5)	107.5	
(156.5)	(169.0)	(325.5)	169.0	
(325.5)	(169.0)	(494.5)	169.0	--- (total borrow. $494,500)
(494.5)	254.0	(240.5)	(254.0)	
(240.5)	113.0	(127.5)	(113.0)	
(127.5)	113.0	(14.5)	(113.0)	
(14.5)	113.5	99.0	(113.5)	
99.0	107.0	206.0	(107.0)	
44.0	162.0	206.0	nil	
162.0	1,475.0	1,649.0	nil	

May 1st., 1981.

Note: These estimates were prepared early in 1981 and are based on some assumptions wich are somwhat different from those current. The order-of-magnitude remains relatively unchanged.

CONFIDENTIAL

March 10, 1981

MEMO TO: Ross Weeks
FROM: J.A. Gibson

SUBJECT: M.W. Resources Cu-Zn Property,
Cunningham Township, Ontario
(Formerly Shunsby Mines Ltd.,)

Further to our phone conversation last week and yours and Mr. Fairbairn's conversations with Mr. Schmitt* re, the above property, I called Dennis Fairbairn of M.W. Resources to confirm that, subject to certain conditions, Geco would be prepared to mill ore from the M.W. property.

Mr. Fairbairn is in the process of obtaining financing by private placement from existing shareholders for the purpose of developing the property. In order to do this he requires a letter from Geco stating that they would be prepared to mill M.W's ore subject to whatever conditions Geco would state at this time. Mr. Fairbairn can be reached at:

R.R. 3
Mount Hope, Ontario
L0R 1W0
Phone # 416-765-6534

For your information, the parameters relating to the M.W. property are:

80,000 tons reserves
3.9% Cu, 6.2% Zn, 1.2 opt Ag,
0.015 opt Au

*Mr. Schmitt — Senior V.P. Mines, — Noranda.

...../2

Production - 40,000 tons ore/year, for 2 years (mid 1982 to mid 1984)

Metallurgy (Mines Branch IR 58-42, attached)

	Recovery	Conc. Grade	Production
Cu	90%	26%	5400 tpy
Zn	85%	51%	4400 tpy
Ag	?	4 opt (in Cu conc.)	

Metal Prices (1981 $)

	Market	Net
Cu	1.15	0.80
Zn	0.485	0.22
Ag	14.50	-

Cu - Zn ore occurs in the basal cherts of the Ridout series which are in fault contact with older Keewatin volcanics. The mineralized zone of interest contains massive chalcopyrite and sphalerite and has a drill indicated width of 150 feet, thickness of 7 feet and length of 1,000 feet. The zone apparently reaches the surface at its northern extremity and dips 10° to south. Vertical depth from surface is about 150 feet.

Development work would involve shallow diamond drilling and stripping and exposure of the ore zone at its northern extremity. Removal of 5 feet of overburden would expose the zone and permit bulk sampling.

Jim Gibson

JAG:jag

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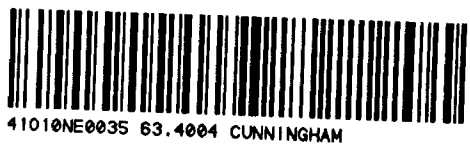

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REVIEW OF 1981 DIAMOND DRILLING PROGRAMME
COPPER-ZINC-SILVER-GOLD PROPERTY
CUNNINGHAM TOWNSHIP, ONTARIO
NTS 41 0 10

Prepared for

MW RESOURCES LIMITED

Arctex Engineering Services
Locke B. Goldsmith, P.Eng.
Consulting Geologist

November, 1981

OM 81-5-C-55

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REVIEW OF 1981 DIAMOND DRILLING PROGRAMME
COPPER-ZINC-SILVER-GOLD PROPERTY
CUNNINGHAM TOWNSHIP, ONTARIO
NTS 41 0 10

SUMMARY

The 1981 drill programme has been successful in obtaining high-grade intersections of copper-zinc mineralization and increasing the economic potential which extends from surface to shallow depths with a dip of ±30° westerly and plunge of ±10° southerly. Dimensions of the zone are in the order of 1000 feet long, 130 feet wide, and ±7 feet thick. Lower-grade material is known from previous drilling to extend outwards from the higher-grade zone. A detailed report is now being prepared by MW Resources Limited. Model studies of open pit versus underground mining plans should be commenced when the report is completed. A small programme of perhaps 2000 feet of confirmatory drilling may be advisable to assist in completing the grade and tonnage estimates.

An EM-17 survey over the high-grade zone is recommended to provide base data with which to re-evaluate EM-17 anomalies which have been located on other portions of the property.

INTRODUCTION

This review of activities was prepared at the request of the directors of MW Resources Limited. A study of geological maps and sections, drill logs, geophysics and geochemistry preceded an inspection of the property October 3-5, 1981, while the drilling was in progress. Discussions with Dennis Fairbairn, P.Eng., President, MW Resources Limited, who was on-site drill supervisor, contributed greatly to the visualization of the spatial configuration within the deposit. Available assay data to the date of this report were provided by Mr. Fairbairn.

An extensive data file has been accumulated throughout several periods of active exploration and is available in the offices of MW Resources Limited. Discussion of the obvious potential in each portion of the property is beyond the scope of this report. Of immediate interest is the horizon known as the North Zone, which has been the target for confirmatory drilling during 1981. An evaluation of EM-17 surveys and diamond drilling performed by Placer Development Ltd. during 1980 is included in the section entitled Geophysics, and comments upon individual EM-17 anomalies are listed in the Appendix.

LOCATION AND ACCESS

The MW property is located in central Cunningham Township, Porcupine Mining Division, Ontario. The centre of the property is approximately 85 air miles southwest of Timmins and 120 air miles northwest of Sudbury. Access to the property is possible with a 4-wheel drive vehicle on an unused logging road, or with an All Terrain Vehicle on the old Swaze Road to the camp site at Hiram Lake. Helicopter service from Timmins also provides access to the property.

CLAIM GROUP

The property consists of the following:

(1) Twenty patented mining claims:

Claim No.	Parcel No.
S.34944	11110
S.34945	11111
S.34946	11112
S.34947	11113
S.43946	15413
S.43947	15414
S.43948	15945
S.57536	18417
S.57537	18416
S.57538	18415
S.57539	18414
S.57540	18413
S.57541	18412
S.57542*	18411
S.57543*	18410
S.57544*	18409
S.57585	18408
S.61828	18420
S.61829	18419
S.61830	18418

*Parts not covered by water

(2) License of Occupation No. 13525 dated February 8, 1963, comprising those parts of claims S.57542, S.57543 and S.57544 covered by the waters of Edwards Lake, comprising 23.32 acres.

(3) Ten patented mining claims held under ten Mining Leases:

Claim No.	Mining Lease No.	Parcel No.	Registered No.
S.90411	100921	742-LSWS	1717-LSWS
S.90412	100920	739-LSWS	1714-LSWS
S.90413	100919	740-LSWS	1715-LSWS
S.90414	100918	741-LSWS	1716-LSWS
S.90415	100917	743-LSWS	1718-LSWS
S.121598	102270	904-LSWS	278782
S.147118	102271	906-LSWS	278784
S.147117	102272	905-LSWS	278783
S.121596	102273	902-LSWS	278780
S.121597	102274	903-LSWS	278781

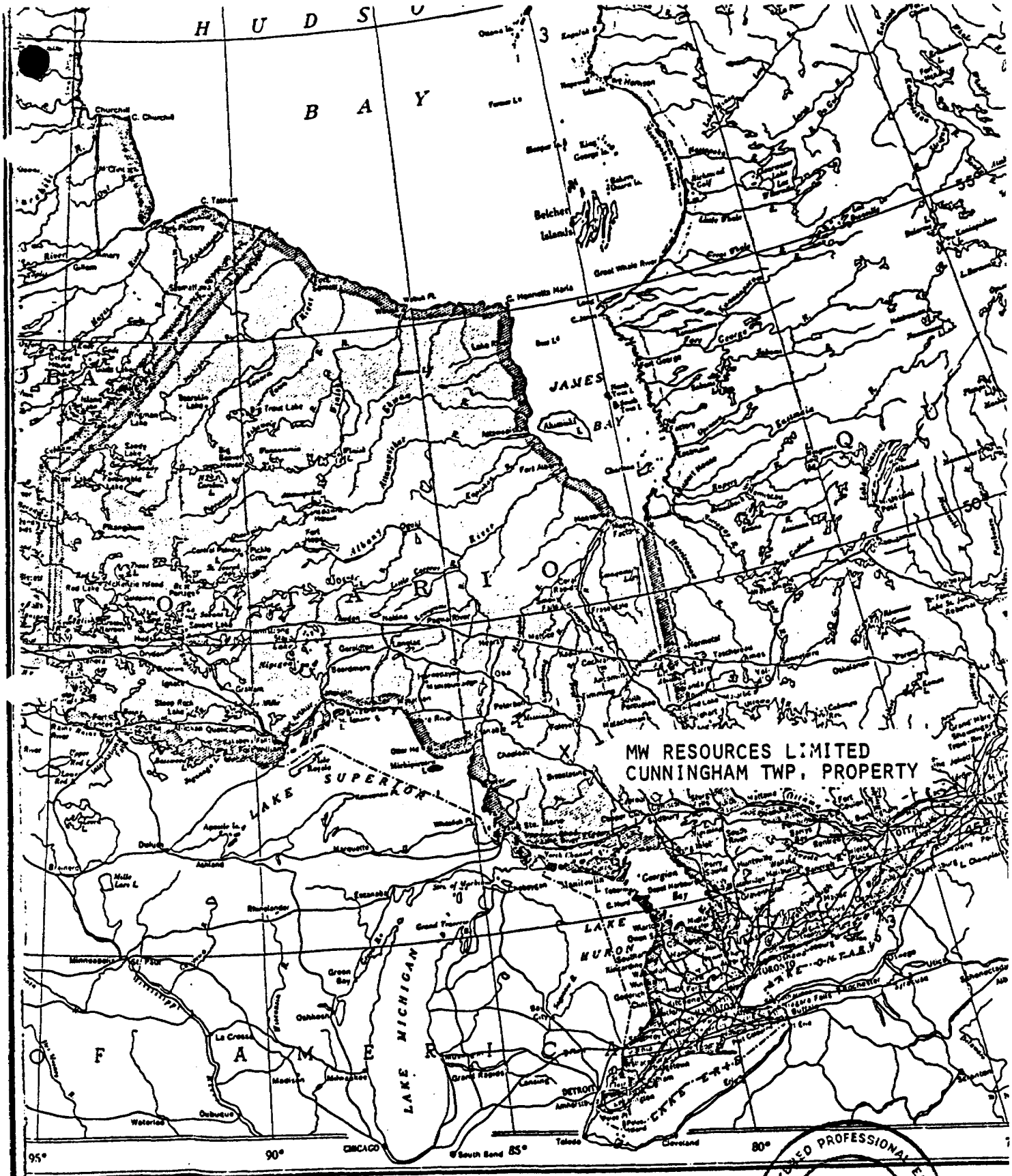
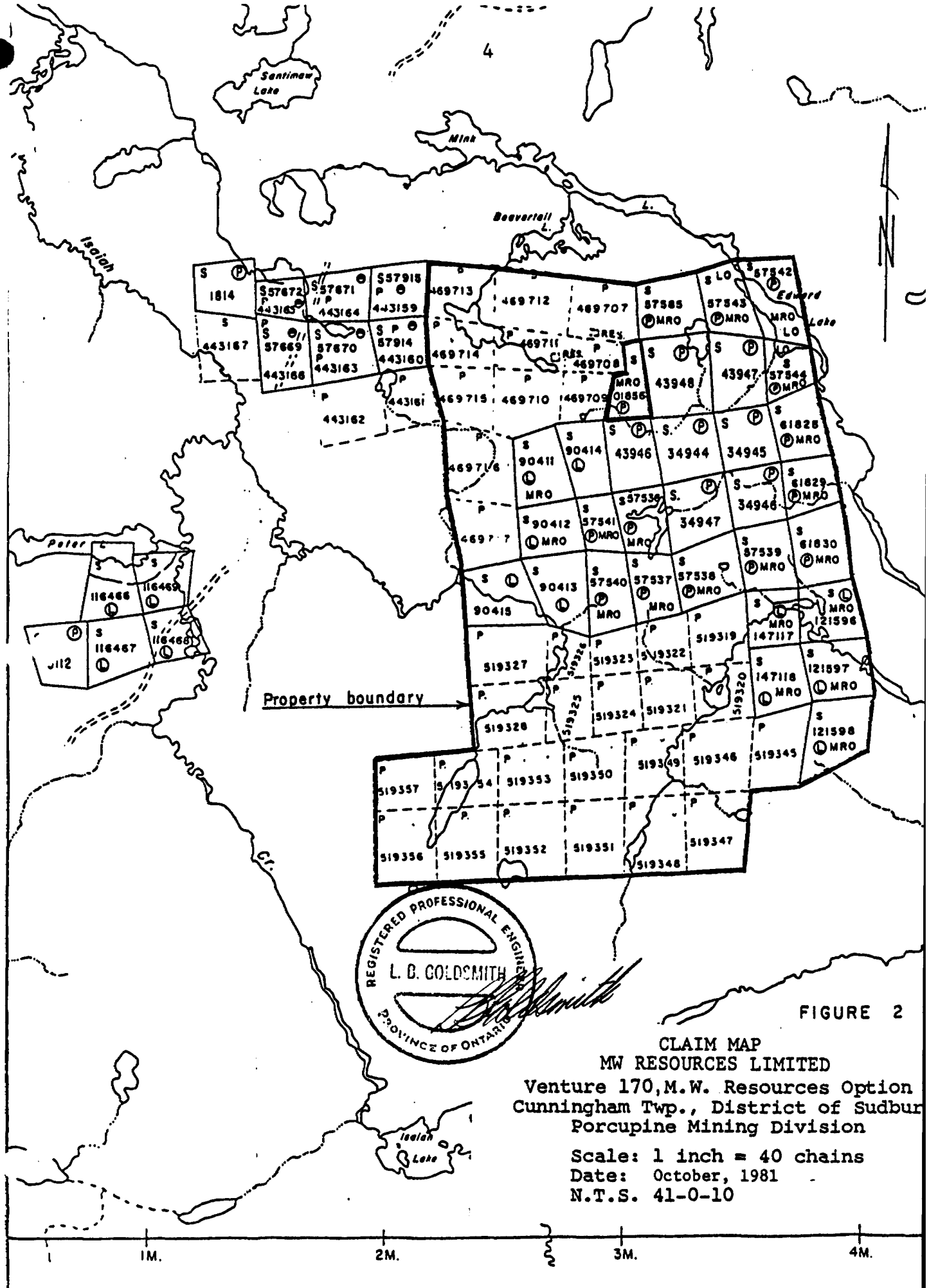


FIGURE 1 GENERAL LOCATION MAP

200 miles

200 km

REGISTERED PROFESSIONAL ENGINEER
L. B GOLDSMITH
PROVINCE OF ONTARIO



REGISTERED PROFESSIONAL ENGINEER
L. B. GOLDSMITH
PROVINCE OF ONTARIO

FIGURE 2

CLAIM MAP
MW RESOURCES LIMITED
Venture 170, M.W. Resources Option
Cunningham Twp., District of Sudbury
Porcupine Mining Division

Scale: 1 inch = 40 chains
Date: October, 1981
N.T.S. 41-O-10

(4) Thirty-four unpatented mining claims:

Claim No.	Claim No.
P.469707	P.519325
P.469708	P.519326
P.469709	P.519327
P.469710	P.519328
P.469711	P.519345
P.469712	P.519346
P.469713	P.519347
P.469714	P.519348
P.469715	P.519349
P.469716	P.519350
P.469717	P.519351
P.519319	P.519352
P.519320	P.519353
P.519321	P.519354
P.519322	P.519355
P.519323	P.519356
P.519324	P.519357

TOPOGRAPHY

A series of low ridges striking roughly N-S with swampy ground between are the typical topographical features on the claim group. The fire tower hill in the northwest corner of the property is at an elevation of ±300 feet above the surrounding area. There are several lakes and streams on the property providing adequate drainage.

HISTORY

Numerous investigators have examined the property with different concepts and requirements for target sizes/grades of ore. It is important to note that most drill holes in the past encountered base metal mineralization of economic interest Many of the early records are vague concerning the location and attitude of holes. Total footage drilled through 1980 is approximately 65,000'. The disjointed, discontinuous programmes have generated varying estimates of the tenor of mineralization.

Evaluation in the past was usually directed towards developing a medium- to large-tonnage, medium- to low-grade deposit which could be bulk-mined. While this is still a very distinct possibility, the present operators are obtaining encouraging results in delineating a relatively high-grade, near-surface horizon within the section termed the North Zone.

GENERAL GEOLOGY

Within Cunningham Township a suite of Precambrian mafic volcanics which contains subordinate rhyolite, trachyte, dacite, tuff, agglomerate, and iron formation is overlain by the Ridout Series of conglomerate, quartzite, and greywacke. Granite, diorite, diabase, and peridotite intrude both volcanics and sediments.

Host rocks near the base metal mineralization are cherts and argillaceous cherts, with an intercalated variolitic andesite, all subtended by diorite and cut by quartz-feldspar porphyry and digestive diorite dykes. A stylized cross-section of the North Zone is shown below.

UPPER CHERT.	Chert and chert breccia	+40'	Mineralized in part
	Variolitic andesite	±40'	Unmineralized, Marker horizon
BASAL CHERT. ZONE OF CURRENT INTEREST.	Argillite, graphitic	±6'	Mineralized, with high-grade sections
	Argillaceous chert	±12'	Mineralized, with high-grade sections
	Chert and chert breccia	±30'	Mineralized, with high-grade sections
	Chert breccia	± 4'	Unmineralized or lightly mineralized
	Diorite		Unmineralized

Economic minerals are chalcopyrite, sphalerite, lesser amounts of galena, and low values in silver and gold.

Strata and mineralization dip 30° westerly and plunge approximately 10° southerly. East-west-trending reverse faults with shallow southerly dips of 20°-30° elevate the south blocks of the north-south-striking mineralization.

Nature of the sulphides and host rocks suggests a distal facies of an exhalative volcanogenic (massive) sulphide deposit, possibly formed in channels in a partially restricted basinal environment. It is clear that some sulphides have been remobilized with little (?) transport into fractures which crosscut bedding. Particularly in argillaceous sections sulphides can be observed on bedding planes. Intrusion of diorite may have acted to drive metals from chert proximal to the contact outwards into fractures to create an upgraded concentration of mineralization which is the target of the 1981 drilling.

An earlier total estimate of grade and tonnage in both the North and South Zones was 2.4 million tons grading 0.39% copper, 2.37% zinc, within a strike length of 3000 feet and a dip length of 1000 feet. Silver and gold content was not included in the valuation.

1981 DIAMOND DRILLING

Study of previous drill data by Dennis Fairbairn, P.Eng. indicated that the 1981 programme should consist of drilling short vertical holes on a closely spaced grid over the North Zone, as allowed by topography. Prior to commencing the current drilling, a preliminary estimate of 80,000 tons grading approximately 3.9% copper, 6.2% zinc, 1.2 oz Ag/ton, and 0.03 zo Au/ton, contained in an area measuring 1000 feet long, 130 feet wide and at least 7 feet thick was calculated. The north end of the deposit outcrops on a ridge and has a westerly dip of 30° and southerly plunge of 10°.

Results from the 1981 drilling are not yet tabulated. Unsplit core from DDH 81-25 was observed by myself on the property. Continuous mineralization from 109.5' to 157.5' with a high-grade chalcopyrite interval between 144'-147.5' was noted. Some assay data have since been provided by Mr. Fairbairn and are included in the Appendix. From inspection of the hole locations and assays it appears that the preliminary estimate will be substantiated, with a probable increase in the tonnage.

It is worthy to note that the present drilling is developing a high-grade mineral deposit within an area which had been subjected to saturation drilling at varying attitudes, thus rendering correlation difficult and misleading.

GEOPHYSICS AND DIAMOND DRILLING, 1980

Conductive zones outlined by EM-17 surveys were related to geological maps. It is felt that insufficient resolution was used in the summary by Placer Development Ltd. in positioning and discussing anomalies with respect to geology and previous drill holes. Examples are provided in the Appendix, which indicate different interpretations. It appears that examination of conductor axes may not have been made after the data had been compiled and before the report was completed.

All drill holes by former operators are not plotted on the Placer composite geology map, drawing number 170-17, from which some of the interpretation must have been made.

A hole on the North Grid at coordinates 3+00S, 4+50W was recommended to test aonomaly 7 which may be on the extension of a mineralized zone to the north which was tested by 6 holes. The hole was not drilled during 1980 because of "swampy conditions", and should be planned for part of a future programme regardless of conditions.

MILLING

A letter of intent has been received from Geco Mines at Manitowadge wherein their mill will accept the MW Resources Limited mineralization; negotiations on rates would be required. Transport would involve a truck haul for 14 miles from the property to Sultan, and approximately 200 miles rail from Sultan to Manitowadge.

A milling arrangement at Timmins should be investigated. A truck haul of approximately 220 miles round-trip could possibly be coordinated to back-haul supplies.

If an adequate reserve of mill feed can be developed,on-site beneficiation should be considered. A base metal mill owned by Selco at Uchi Lake is currently idle and available.

CONCLUSIONS

The 1981 drill programme has been successful in expanding the potential of the high-grade, near-surface, base metal mineralization. Evaluation should continue using the same method of grid drilling in short vertical holes. Necessity for grid drilling on all targets of merit is emphasized, in particular the partially-explored South Zone.

Exploration and confirmatory drilling as may be required should proceed vigorously to acquire adequate data upon which to prepare economic and mining models.

All intervals above the base of the chert should be assayed to provide information on waste:ore ratios for an open pit model. Both pit and underground concepts should be investigated by modelling.

RECOMMENDATIONS

1. Subject to the conclusions of the drilling report in preparation, a continuance of the confirmatory drilling may be warranted during the winter. At this time it is thought that 2000' of additional coring may be required.

2. Models of underground and open pit designs should be commenced upon completion of the drill summary. Economic models for variations in metal prices should be fitted to the optimum physical plans.

3. Data within the North Zone have been re-examined with a concept of high-grade, lower tonnage potential. In view of the results, data from other portions of the property should be reassessed and short hole, vertical drilling on a grid basis considered.

4. a) An EM-17 survey should be completed over the North Zone and the results extrapolated to aid in evaluating EM-17 anomalies in other portions of the claim group.

b) The EM-17 conductors from 1980 work should be field checked and related to drill holes and geology.

c) This information, 1980 raw EM-17 readings, a copy of this review, and all other background data should be re-evaluated by a geophysicist.

5. An upgrading of one of the access roads will be a necessity if a mining operation is feasible. Overtures to the provincial government for a Roads to Resources grant and cost-sharing arrangement should be made. An estimate of the expense of construction and thence the net cost to the company should be calculated for use in a projection of cost per ton mined.

COST ESTIMATE

An itemized budget forecast should await a report of the season's drilling. Perhaps $150,000 would be adequate to advance the property to a production decision.

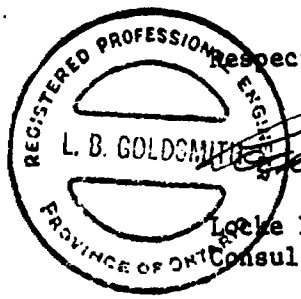
All of which is respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B. C.
November 8, 1981

ENGINEER'S CERTIFICATE
LOCKE B. GOLDSMITH

1. I, Locke B. Goldsmith, am a Registered Professional Engineer in the Province of Ontario and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B. C.
2. I have a B.Sc. (Honours) degree from Michigan Technological University and have done postgraduate study in Geology at Michigan Tech, University of Nevada and the University of British Columbia. I am a graduate of the Haileybury School of Mines and am a Certified Mining Technician. I am a member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 23 years.
4. I have authored the report entitled, "Review of 1981 Diamond Drilling Programme, Copper-Zinc-Silver-Gold Property, Cunningham Township, Ontario," dated November, 1981. The report is based upon a property inspection October 3-5, 1981, and literature research by the author.
5. I have no ownership in the property. I currently hold 666 shares of MW Resources Limited, acquired in 1977 prior to a 3-for-1 rollback.
6. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.



Respectfully submitted,

Locke B. Goldsmith, P.Eng.
Consulting Geologist

Vancouver, B. C.
November 8, 1981

REFERENCES

Fairbairn, Dennis, P.Eng.: Preliminary Evaluation, MW Resources Limited Cu-Zn-Ag-Au Property, Cunningham Township, Ontario. May 1, 1981.

MW Resources Limited: Various maps, sections, drill logs.

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A P P E N D I X

MW RESOURCES LIMITED

CUNNINGHAM TOWNSHIP, ONTARIO

PARTIAL ASSAYS

Hole No.	Footage (feet) From	To	Length (feet)	Cu %	Zn %
81-1	36	42	6	0.39	3.08
	61	65	4	0.25	2.83
	65	69	4	1.84	12.59
	91	97.5	6.5	0.03	2.74
	97.5	100	2.5	3.65	4.78
	103	109	6	1.81	0.05
	109	114	5	1.32	0.03
	114	117.5	3.5	3.75	0.05
	117	119.5	2	19.38	0.05
	119.5	123	3.5	0.55	0.02
81-2	68	73	5	0.83	1.29
	73	78	5	1.70	2.30
	78	83	5	2.0	2.96
	83	88	5	1.72	3.00
	88	93	5	1.34	4.86
	110	113	3	1.29	0.72
	114.5	118	3.5	2.80	0.12
	119.5	124	4.5	1.99	1.28
	124	128	4	0.45	2.00
81-3	76	79	3	2.04	1.96
	81	85	4.5	2.98	0.54
	92	92.5	0.5	12.56	0.85
81-6	169	173.5	4.5	6.4	6.4
81-8	170	180	10	3.6	7.7
81-10	Values, 9'-56.5'				
81-11	28.5	30	2	4.31	0.20
	30.5	33	2.5	0.36	2.36
	33	37	4	0.83	3.84
	37	42	5	0.35	3.37
	42	47	5	0.11	1.36
	47	52.5	5.5	0.04	0.50

Hole No.	Footage (feet) From	To	Length (feet)	Cu %	Zn %	
81-12	17	21.5	4.5	3.28	1.71	
	21.5	31.0	9.5	0.38	1.62	
	21	34	3	0.84	5.26	
	34	36.5	2.5	6.15	1.95	
	37	42	5	0.60	0.30	
	85.5	88.5	3	2.11	0.19	
81-13	52.5	61	8.5	0.33	2.07	
81-14A	95.5	97	1.5	4.1	0.6	
81-15	26	30.2	4.2	6.54	0.82	
	30.2	42	11.8	0.14	0.18	
81-16			1.2	5.4	6.0	
81-22	12	16	4.0	0.70	4.77	
	17	21	4	0.17	1.68	Possibly Confusion ?
	21	32.5	11.5	0.05	0.68	
81-24	20	24	4	0.16	7.50	
	24	29	5	0.45	3.19	
	96.5	100	3.5	2.26	1.93	
	100	102.5	2.5	0.57	0.56	
	102.5	104.5	2	1.14	0.13	
81-25	60	65	5	0.14	5.91	
		67.5	2.5	0.60	3.79	
		72.5	5	1.73	6.48	
	109	115.5	6.3	2.84	2.56	
		121.5	6	5.16	0.39	
		127.5	6	0.94	0.27	
		134.0	6.5	3.08	0.48	
		137	3	6.18	0.24	
		144	7	0.44	1.04	
		147.5	3.5	10.10	2.31	
		152	4.5	1.54	0.39	
		158	6	1.32	0.69	

Hole No.	Footage (feet) From	To	Length (feet)	Cu %	Zn %
81-30	16	23	7	0.56	2.72
	23	28	5	0.31	2.66
	28	34	6	1.38	5.77
	48	55	7	0.26	0.89
	62	66	4	0.48	3.45
	72	74.5	2.5	1.84	6.33
	105.5	110	4.5	1.14	0.54
	110	112	2	1.0	0.24
	112	117	5	8.76	0.11
81-31	89.5	94	4.5	1.76	1.64

REVIEW OF EM-17 ANOMALIES, MAGNETICS, AND GEOLOGY
PLACER DEVELOPMENT LIMITED, 1980

All anomalies should be field checked.

NORTH GRID

Anomaly 1

The location of the anomaly as taken from Placer Map 170-11 (EM-17 Profiled Data, North Grid) extends from approximately 3380' on L16S at 0+75W to 4180' on L24S at 2+00E due south of a point near the southwestern corner of Tower Lake. Using the same point on Tower Lake for reference, and scaling the collar of DDH Jim 2 from Placer Map 170-17 (Summarized Geology), the hole location is 3240' south and 680' west, which is approximately 17+80S, 7+40W on the Placer grid.

Using the southeast corner of the outline on Placer Map 170-17 designated "Cons. Shunsby Mines Tower (North) Group, Aug. 1970" and assuming that the southeast claim corner on Map 170-11 is the same location, then the plot of DDH Jim 2 is at coordinates 17+80S, 1+80E.

The trace of hole Jim 2 on Map 170-17 indicates that 120' of horizontal distance was transected. This is incorrect because 357' of horizontal distance can be calculated from the drill log.

If the hole is at the first coordinate location, the length of the hole is not sufficient to have probed EM-17 anomaly 1. If the hole is located at the second coordinate location it was directed away from the conductor axis and is unlikely to have tested the anomaly, which is interpreted from the EM-17 data to dip steeply easterly.

It may be that hole Jim 2 did, indeed, intersect the anomaly but reference to original drill logs and maps cannot establish the fact; sulphides in chert were cut in the drill hole. Interpretation remains ambiguous; the site of the drill hole should be ascertained on the ground with relation to the EM-17 anomaly.

Location of the pyrite and copper reported in a trench should be related to the EM-17 anomaly. One easterly strike-southerly dip on chert is at right angles to the conductor. If possible, a precise geological map of the

immediate vicinity should be prepared if resolution of the old mapping is inadequate. Rocks in the area of interest have been mapped by different investigators as both cherts and iron formation. Important copper-zinc deposits elsewhere on the property are hosted in the chert units.

Magnetic high-low pairing of anomalies with up to ±4500 gammas above background is associated with the EM-17 anomaly, thus enhancing the importance of the EM responses.

There is a suggestion from the magnetic contours and the EM profiles that another anomaly is present to the east of anomaly 1 near the east end of the grid. An extension of the geophysical surveys should be completed to the east, with additional lines to the south to close off the extension of anomaly 1.

The ground to the south appears to be part of the MW group and is held by claim S.90415.

If it cannot be established that hole Jim 2 tested the conductor, two angled holes should be drilled on line 16S from the hangingwall (east) side of the anomaly to probe both the EM and magnetic responses. Subsequent to the evaluation of the recommended geophysics, holes to probe the southern portion of anomaly 1 in the vicinity of L24S may be warranted. Exact location, lengths and attitudes of holes should be planned on site.

EM-17 Anomaly 2

The response appears to be located within the favourable chert horizon. A magnetic association of approximately 1000 gammas above background is displayed in a broad contour pattern. Although the anomaly is not a high-priority target, one drill hole should be planned in conjunction with testing of anomaly 1.

Anomaly 3

The reasoning within the discussion of the geophysics as related to the geology is unclear. A diorite-chert contact is not shown on the Shunsby geological map on the compilation by Placer (Map 170-17). Perhaps the andesite-chert contact is meant; the response is approximately parallel to this contact. The old baseline does not parallel the contact, nor does it parallel EM-17 anomaly 3.

The anomaly trace does not appear to truncate magnetic features but rather is coincident with elongated magnetic highs throughout much of its length, possibly excepting the portion south of L12S. A rather tenuous joining of two sections of anomaly 3 between L8S and L12S in an area where three EM-17 responses converge makes the trace appear to cross a magnetic contour pattern. It seems more probable that there is a fault zone trending north-northeasterly approximately parallel to the old baseline, which has offset magnetic patterns, and that anomaly 3 is better shown as two anomalies. The southern ends of EM-17 anomalies 4, 5, 6, and possibly 12, might be defined by this linear. If it truncates anomaly 6, the structure may postdate the fault zone which is mapped as being coincident with 6.

Imprecision in plotting the unnumbered drill holes near the old baseline makes it impossible from the data at hand to determine if anomaly 3 has been tested near L12S.

Pyrite and pyrrhotite in chert is noted near the trace of the anomaly.

Anomaly 3, at least from 8S to 12N, appears to be formational.

It is possible that hole 27 penetrated the northern end of anomaly 3 near L12N. Logs of this hole show copper-zinc mineralization between 41'-46', 122'-135', and 160'-183' in chert and chert breccia, probably in the basal chert.

Geological investigation along the trace of the anomaly should be completed prior to committing to a drill test. Conductivity thicknesses should be calculated for several locations along the zone.

Anomaly 4

While there is not a strong magnetic high associated with the anomaly an elongate magnetic contour pattern coincides with the trace of the EM conductor.

It is not clear is a drill hole has tested the zone. Pyrite and pyrrhotite are noted nearby.

Anomaly 5

The EM trace lies on the east flank of an elongated magnetic anomaly. If the conductor dips westerly as suggested by the profiles, the magnetics may correspond with the EM. Conductivity thicknesses are required.

Dips recorded in chert to the northwest are 45° off the direction of the conductor. However, these may have been obtained in the vicinity of L4N where magnetic contours would parallel bedding attitudes.

Anomaly 6

A fault zone is mapped along much of the course of the EM-17 response. Generally low magnetic contours suggest possible destruction of magnetite/pyrrhotite along a zone of crushing with attendant oxidation. The south end may merge or be terminated at a north-northeast-trending discordance.

Field checking, particularly where the anomaly appears to be strongest, is recommended.

Anomaly 7

Definition of the anomaly is incomplete because the coverage on lines 0, 4N, 8N and 12N was not extended far enough to the east. EM-17 should be rerun on the east-west grid to detail the conductor. A different pattern, perhaps linking anomalies 7 and 21, may emerge.

Magnetic contours parallel the conductive zone. Disjointed highs on Base Line No. 2 contour raggedly because the high values are the last readings on the lines. Additional magnetic data should be acquired at the time of extension of the EM-17 survey.

One dip within greenstone parallels the conductor. Mapping indicates that the conductor passes from chert into greenstone and back into chert, suggesting a structural explanation.

The conductor has not been tested by holes 19 through 25. Hole 25 alone may have intersected the extreme northern tip of anomaly 7. Logs of hole 25 are not available at this time. Field checking is required before undertaking the recommended hole, which was not attempted in Placer's 1980 drill programme.

Anomaly 8

A discrete magnetic high of 2000 gammas above background coincides with the EM-17 conductor. Cherts are mapped at the location.

Anomaly 9

The EM trace may be associated with a magnetic low. Andesite and variolitic andesite host the weak anomaly. A fault zone is suggested. Variolitic andesite overlies the mineralized basal chert.

Anomaly 10

Conductivity thicknesses are required. A magnetic high of +4000 gammas above background is coincident. Very high magnetic response obtained to the east and north was interpreted as iron formation.

Hole 27 may have tested the anomaly but appears to be too far west; the exact location of the collar, from the available information, is in doubt. Logs of hole 27 record copper-zinc mineralization. Trenches are shown on the geology map to the northwest of the anomaly. Chert is mapped around the conductor.

Anomaly 11

A discrete magnetic high of +4000 gammas above background is associated with the moderately strong EM conductor. Iron formation is interpreted from magnetic data to underlie the southern portion of the anomaly. Chert is mapped as the host rock. Trenching is shown on Map 170-17 approximately 400 feet south of the response.

Anomaly 12

Two faults with quartz-feldspar porphyry, and an andesite-chert fault contact are mapped near this anomaly. A pronounced magnetic low, which coincides with the EM trace, lies immediately west of an area interpreted from high, erratic magnetics to be underlain by iron formation.

A structural explanation is suggested, but field examination is required.

Anomaly 13

The moderately strong anomaly is subparallel with a magnetic low. A fault is mapped in chert to the west of Springer Lake and could be projected easterly beneath Springer Lake along the EM conductor.

Line 24W should have EM-17 and magnetic surveys completed to better define the position of the conductor with respect to the chert and to the fault.

Anomaly 14

Low magnetic contours parallel the conductor. An east-west fault is suggested.

Lines 12W, 16W, and 20W should be extended northerly with EM-17, magnetics, and geological mapping completed to enhance the single-line response.

Anomaly 15

Conductivity thickness is required. There is no magnetic anomaly association.

Geophysics and geological mapping should be completed on lines 12E and 20E as required to close off the strike of the conductor.

Anomaly 16

The trace is coincident with a pattern of magnetic high-low pairs on the northerly flank of a band of erratic magnetic data interpreted as iron formation. A chert-andesite contact as mapped corresponds well with the strike of the anomaly, although one dip in the chert is 70° northerly, whereas a dip on the conductor is southerly. One drill hole may have tested the zone at the eastern end between lines 12E and 16E. No trenches are shown on the geological map. If the contact between L4W and L12E has had "Considerable prospecting and drilling..." (Placer, July 1980, Part II, p. 7), the records should be reviewed.

Anomaly 17

Conductivity thicknesses are required. The broad conductor is located within an outline of erratic magnetics interpreted as iron formation, but mapped as chert with a southerly dip. One trench is shown on the geologic map. One drill hole may have intersected the anomaly ±100 feet east of line 16. Review of data and field checks are necessary.

Anomaly 18

The anomaly may be part of anomaly 17, separated or offset by an east-trending fault zone. In the case of 18, the geological map shows iron formation although magnetic highs are less pronounced than in the adjacent unit mapped as chert. Past work should be reviewed, with subsequent field checks.

Anomalies 19, 20, 21

The group of responses is broadly conformable with narrow, steep magnetic gradients of high-low pairs which trend into an area of confused patterns ascribed to iron formation. Mapping indicates chert and iron formation to be present.

Six holes have been drilled in the central and western portions of 21, one of which may have intersected the southern part of 20. These drill logs are not available at this time, but should be reviewed and results related to the geophysics prior to field checks.

Anomaly 22

The eastern end of the EM trace is within a band of subdued low magnetics along a contact mapped as andesite-chert (iron-formation). The western portion is in confused magnetics, possibly iron formation. Two drill holes have probed the eastern end of the anomaly; raw data should be re-evaluated.

SOUTH GRID

Anomaly 23

The EM-17 conductor occurs within a slight magnetic trough between long pronounced highs. Andesites are mapped nearby, although the magnetic pattern suggests that other rock types (iron formation?) are present.

Anomaly 24

Lines 28S and 32S should be extended westerly to complete the geophysics around the anomaly. A narrow magnetic low within flanking magnetic highs is associated with the EM-17 response. Andesites are mapped but the magnetic contours suggest that iron formation occurs near the anomaly.

Anomaly 25

The EM trace has an associated elongate magnetic high. Andesite is mapped nearby, adjacent to the swamp which masks part of the conductor. Heavy pyrite is noted in a trench 120 feet east of the anomaly. The occurrence should be examined.

This zone was considered for a drill test dependent upon the results of a drill hole in anomaly 27. A decision to drill should be made on the merits of each anomaly on an individual basis.

Anomaly 26

Drill hole MW 80-4 probed the anomaly. No clear cause of the EM response was noted in the drill log. Andesite was the only rock type which was intersected. It is worthwhile to note that the EM coincides with a magnetic low.

Anomaly 27

Drill hole MW 80-3 tested the EM response. Andesite is the predominant rock type. A section of siltstone between 178.5'-190' contains 30% pyrrhotite and presumably explains the conductor.

A magnetic high corresponds with the EM.

Anomaly 28

Drill holes SH 64-3 and -4 appear to have tested this anomaly. Hole SH 64-5 appears to be in the vicinity of line 32S and may have probed a fault zone. Drill results should be reviewed; logs are not available at the time of writing.

A series of magnetic highs and lows are strung out along the zone, except where noted by question marks. The north end of 28 appears to be a separate anomaly.

Anomaly 29

Hole SH 64-2 appears to have been drilled into anomaly 29 at approximately 49S, 4W. Drill results should be reviewed; the EM conductor appears to dip away from the drill hole. Logs are not available. The conductor as joined between lines transects the magnetic contours south of L49S. It is suggested

that anomalies 28 and 29 should be separated into another response, being the conductor at L52S, Base Line, and the portion of anomaly 28 on L56S, 1W. Each of these three anomalies would then have an associated magnetic high.

Anomaly 30

The conductor lies on the eastern flank of a magnetic high, more directly associated with a narrow magnetic low.

Hole MW 80-2 was drilled beneath a soil geochemical anomaly and intersected 1-2% pyrrhotite in siltstone at several horizons which may explain the magnetic high. The EM conductor was probably not intersected in the hole. A variety of rock types are mapped nearby.

Anomaly 31

An area of magnetic highs is associated with the conductor; iron formation was interpreted to be the cause. Geological mapping does not extend into the vicinity of anomaly 31. Peridotite is mapped to the northwest, west, and south.

Anomaly 32

The response has a magnetic high association although the conductor trends at a small angle across the magnetic contours. Peridotite is mapped surrounding the conductor.

1979 GRID

Em-17 anomalies are unnumbered and are discussed herein by grid coordinates. Designation on the EM-17 map of depth in feet/conductivity thickness in mhos is reversed in order from the 1980 maps.

4S 29E

Hole MW 80-1 was drilled on a short, moderately strong conductor with a coincident magnetic low. Graphitic schists, tuff, and chert, all with pyrite-pyrrhotite up to 20-30% (in tuff) were intersected. Chert and andesite are mapped.

2S 33E, extending to 12N 24E and 10S 35+50E

Within the grid of map 170-5, the anomaly may have been drilled in holes 113, 114, SE3, and C where minor mineralization was encountered. To the north of L12N the zone may have been intersected in holes SE2 68-20, and 68-18, with values of economic interest, particularly in zinc, occurring at least in the latter two holes. There is no magnetic signature with the conductor.

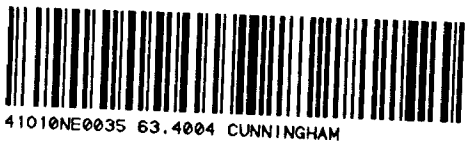
Because base metals occur in the zone farther north, the response at 2S 33E warrants further investigation. Basal chert is mapped near this location.

8N 33E

There is no magnetic pattern associated with the conductor. Country rock is mapped as diorite.

6N 20E

Holes A, 74-16, 70, 68, 74-14, and others to the north of map 170-5 have probably intersected the zone. Base metals were encountered farther north. Important zinc values with subordinate copper were obtained in holes 74-16, 70, 68, and 74-14, although assays are missing and some sections were not sampled in holes 74-16 and 74-14. Lead is present as an appreciable constituent in hole 74-16.



REPORT ON THE DIAMOND DRILLING EXPLORATION PROGRAM

1981 AND PRIOR TO 1981

M W RESOURCES LTD.

CUNNINGHAM TOWNSHIP, ONTARIO

PROPERTY

NORTH ZONE..

February, 1982

Prepared By

Dennis Fairbairn, P.Eng.,

Mount Hope, Ontario

LOR 1WO

TABLE OF

INTRODUCTION

This report covers the previous diamond drilling and the 1981 drilling in the North Zone of M W R's Cunningham Township, Ontario, copper-zinc property.

The object of the 1981 program was to prove a tonnage and grade of ore sufficient to support profitably an underground mining-custom-milling operation.

The program was directed in the field from before commencement to after completion, by the writer.

The report summarizes results to-date, and recommends a future course of action.

It contains much more than the normal quantity of back-up data in order to ensure distribution to Directors, under one cover, of all information required for future study and decision-making by those Directors. This, because, to date, the writer has been the sole custodian of such information.

The writer very much regrets the several periods of incapacitation which have delayed the submission of this report in its final form until this date. Due to these and other circumstances, the typing, as well as all writing, mapping, colouring, etc., was done personally by the writer, by hand. There are obvious deficiencies, particularly in the typing, for which apologies are tendered.

SUMMARY

The 1981 North Zone program was successful in proving about 50,000 tons of 5.2% equivilent copper mineralization, (3.2% Cu., 3.1% Zn.), in a length, width, and thickness of roughly 500-feet, 100-feet, and 7.2-feet, respectively. Gold and silver values are of the order of 0.02 OPT and 0.75 OPT.

To prove tonnage and grade in the remaining 500-feet of the 1,000-foot zone, approximately 2,000-feet of vertical, short-hole drilling remains to be done. Of this 2,000-feet, roughly one half will be required in the northern one-quarter of the zone, and one-half in the southern one-quarter. Successful, this drilling will prove additional reserves of up to another 40,000 tons of a grade equal to, or better than, that above.

High-grade zones of similar genesis may be expected to exist in several, or many, other locations in the Property. In order to locate these, which should be of considerably larger size, it is recommended that a program consisting of thorough geological mapping, geophysical surveying, and diamond drilling precede any attempts at production from the North Zone. It is further recommended that such a program procede under the terms of a satisfactory farm-out agreement with, and under the direction of, a major mining company.

CONCLUSIONS

The combined 1981 and pre-1981 diamond-drilling has confirmed the existence of the previously-suspected 1000-foot-long enriched horizon in the North Zone.

It is reasonably certain that within approximately one-half of its strike length, the zone contains more than 50,000 tons of recoverable material which grades 5.2% equivilent copper. This tonnage is contained in that portion of the zone which lies to the east of the dividing N-S-striking fault.

Further drilling is required to establish additional tonnage and grades both in the western portion of the zone which lies to the north in the 250-foot interval between DDH's 81-23 and 81-18, and in the untested southern portion of the zone which is located between DDH 81-8 and the Main Fault. This additional drilling can be expected to develop an additional 30,000 tons of at least equivilent grade material.

The enrichment in the North Zone basal chert remnant was probably the result of post-depositional sedimentary dewatering. There is therefor valid reason for expecting similar zones of enrichment in the basal cherts, (and, perhaps, in the middle cherts), in the east limb, the trough, and the west limb of the syncline. This, both north and south of the Main Fault. This has expanded very significantly the potential of the Property.

While the grade of material in the North Zone is considered to be commercial, the relatively small tonnage which can be considered to have been now established there with reasonable certainty, plus the significant drop in metal prices since the early-1981 preliminary estimates were made, combine to reduce to marginal the likely profitability of extraction and custom-milling at this time.

A production decision should properly await further developments, the keys being the results from further North Zone drilling, the results of further evaluation of cherts both north and south of the Main Fault, and, probbly, a significant improvement in, or satisfactory stabilization of, metal prices.

RECOMMENDATIONS

Alternative A

Phase 1

Place the North Zone "in the bank" until after finishing a reassessment of the balance of the Property.
Should the Board reach the contrary decision to proceed with further drilling in the North Zone in advance of a Property reassessment, be prepared to drill up to 2,000 feet of BQ hole under the field-direction of an engineer, competent, and with authority to adjust or curtail drilling as it prgresses. For this work, field time is estimated at one month and total cost at $60,000 .

Phase 11

Irrespective of the action taken in Phase 1, proceed, immediately after arranging the necessary financing, with a thorough Property reassessment, following, generally, the recommendations of Goldsmith, (November, 1981).

More specifically, after engaging a competent, available, geologist-geophysicist, proceed, under his/her field direction, and in chronological order, to:

1. complete Geological mapping of all potentially-favourable parts of the Property; simultaneously, acquire additional property in the area, contiguous or otherwise, base-metal or otherwise.
2. After running a check or a "calibrating" EM 17 survey over the known North Zone mineralization, field-check the conductors indicated in Placer's 1980 EM survey. Follow-up by extending the survey to previously-unsurveyed but favourable ground.
3. Complile and assess all data, and establish drill-targets.

For Phase ll, field time is forecast at one year, and cost is estimated at $175,000 .

Phase lll

Diamond-drill the Property through either to a production decision or to the reverse.

The time and cost for Phase lll work is indeterminate at this stage of development and planning. Time could be two years and costs certainly several hundred thousand dollars.

Phase lV

If the Phase lll decision is "no mill", consider carefully the economics of salvage custom-milling whatever tonnage of direct-shipping ore that had been developed, including, of course, that in the North Zone.

Alternative B

Attempt, now, to conclude a satisfactory farm-out agreement with a "major" who will provide capital, operating expertise, and the committment necessary to carry the Property through to a logical and final conclusion.

The Choice - A or B

The potential of the Property is good, but it is demonstrably still in an early stage of development as a profitable and significant producer.

The Property's continued development by MWR will require acceptance of the considerable financial risk to be taken, would require further early financing and dilution of present shareholders' equity at a time of scarce and expensive money, would require engagement, probably on a consulting

basis, of a force of professionals supported by an MWR part-time, if not full-time, administrative and technical staff, would involve still more significant moneys to complete Phase 111, and, if all were successful, major financing to bring in to production.

The choice of this alternative would not be unwise, for a successful conclusion would result both in an appreciable capital gain by the shareholders and in MWR becoming a sucessful and, perhaps, diversified mining company. It would be the proper choice were the Directors confident of MWR's ability to carry the project through to its conclusion without having to give up part way there, and of their willingness to accept the continuing risks and probable disappointments which will be encountered.

The alternative is to pass on to a major the total responsibility for the provision of capital and expertise, and, down the road, for MWR to accept, through a carried interest, a somewhat lesser but still significant return from the proposition..... after taking no risk other than that already taken, providing no additional staff and incurring no further technical and administrative headaches, and necessitating no continuing or material expenditures of Directors' time and effort.

This is a old and recurring situation in mining development, and the choice is often divisive and difficult due to varying points of view and objectives. In my view, this choice must be made -- and made now. It is a matter for discussion and decision by the Directors. On the basis of what knowledge I possess of pertinent present circumstances, and as Technical Director of MWR and as a Professional Mining Engineer, with respect, my recommendation is, definitely, proceed with Alternative B.

LOCATION

The North Zone mineralization is centred in Cunningham T'w'p., Porcupine Mining Division, Ontario. The Township is about 80 air miles southwest of Timmins, 40 west of Chapleau, and 120 northwest of Sudbury.

ACCESS

Road access is from Sultan, a flag-stop on the C.P.R. main line, 42 miles on paved highway 129 from Chapleau.

From Sultan, there is access via 27 miles of good gravel road to Garnet Lake, Garnet Township. This is followed by 7 miles of cat road to Hiram Lake and the property. The 7 miles is boulder-strewn, unmaintained since bulldozer construction in 1974, and now barely passable with 4-wheel-drive vehicles and then only from June to November. In 1981, the diamond-drillers used this route in, with skidder or 4x4 .

Otherwise, from Sultan, road access is about 12 miles via the old Sultan-Kentey wagon road, (the Swayze Road), which, until recently, served the Ministry and their forestry tower about one mile west of the North Zone. In spring and early summer, three swamps, one beaver dam and the Isiah Creek crossing near Peters Lake, preclude truck travel. In 1981, MWR used this route and an A.T.V., (Terra Jet), without problem and with about a 4-hour turnaround. The walk from the deposit to Sultan took the writer about four hours. A net expenditure of perhaps $50,000 could render this road suitable for year-round truck travel. The crossing at Isiah Creek is shown on p.3, O.D.M. Report, V.B. Meen, 1944, and by the 1981 photo by the writer, attached.

In winter, access from Sultan by snow vehicles would involve only a one-half hour's easy drive.

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Helicopter access is about one-half hour from Timmins base to Sultan staging, and less than ten minutes Sultan to the site. Placer, in 1980, serviced themselves totally in this manner.

An alternative route for personnel is via float plane, Chapleau to Peters Lake, followed by 3 miles' walking or A.T.V. riding to the site.

Chapleau is serviced daily by Norontair with service from Sault Ste. Marie connecting with Air Canada from Toronto. Toronto-to-Sultan via commercial airlines and car is less than five hours.

HISTORY

The chronology of work on the property and of the various "owners" is summarized for the record on Schedule 1 .

The mineral potential, particularly for lead and zinc having been recognized by 1927, and the favourable chert members having been identified and located by geological, geophysical and diamond-drilling work, the object of most, if not all, work, was to develop ore tonnages sufficient to support an on-site mill. The middle and basal cherts, both north and south of the main E-W fault and on the west limb of the regional syncline were explored by diamond-drilling which, by 1974, totalled almost 59,000 feet. Some holes tested to as much as 1,000 feet from surface. Umex, in 1969, calculated reserves on the basis of prior drilling at 2,614,000 tons assaying 0.47% Cu., and 1.84% Pb.-Zn., (and 0.25 OPT Ag.). Grandora Explorations, after their 1974 drilling program, reported, in both chert members north of the Main Fault, 766,000 tons assaying 1.00% Cu., and 1.33% Zn.; south of the Main Fault, they calculated 721,000 tons assaying 0.40% Cu., and 3.0% Zn.. Placer, in 1980, estimated a total drill-indicated 2,400,000 tonnage assaying about 0.4% Cu. and 2.4% Zn.. In 1981, the writer calculated, in the south zone, on the basis of narrower widths, but of mining widths, a drill-indicated tonnage of 970,000 grading 1.2% Cu. and 4.9% Zn..

Both Umex and Placer gave thought to open-pitting what we now refer to as the North Zone, and both concluded that, because of expected heavy handling of wall-rock, low grades, and relatively small tonnages, such an operation would be sub-economic.

The last diamond-drilling in this North Zone was in 1974,(Grandora). This, and previous drilling in this basal chert was rather haphazard. About a dozen holes intersected the high-grade, and some very good, ore-grade assays appear in the logs, but, in all cases, these appear to have attributed to isolated pods and to have become buried in clculations such as those of Umex, Grandora and Placer involving thicknesses of perhaps 30 feet in several-hundred feet of projected

down-dip mineralization. Additionally, mineralization was typically described disseminated and fracture-filling. The significance and possible importance of the quite different massive or ropey chalco in these pods as an indicator of possibly continuous ore-grade material seems to have been largely lost on all investigators save Joubin.

In 1980, after Placer had dropped their option after a small amount of superficial drilling, and after a futile attempt by the writer to refine the Umex work and to isolate a smaller tonnage of open-pit ore in the North Zone, a last-ditch attempt was made to locate some commercial mineralization before the property was placed in moth balls.

Following an earlier suggestion by Joubin, the available drill-hole data were tested to determine if the apparently random occurrences of massive chalco did fit a pattern ofdeposition in certain cross-structures, or, alternatively, were "drag" along those structures. In the course of this work, the writer noticed that four higher-grade intersections in old DDH's 17, 20, 21 and 22 were, at widely separated points, located at approximately the same elevation. Follow-up accurate mapping and analysis revealed the probability of the high-grade occupying a continuous N-striking horizon which dipped gently to the west, and plunged about 12 degrees to the south. It appeared to parallel the footwall diorite-chert contact only a few feet above that contact.

This mapping, the object of which was simply to determine continuity of the high-grade horizon, utilised only massive chalco-sphalerite intersections, irrespective of their widths being six inches or six feet, or of their mineable depth or grade being or not being of commercial value.

To obtain a rough handle on the commercial potential of the obviously small body which was indicated, simple arithmetical averages of

the assays and intersections were calculated. Assays worked out to 3.9% Cu., 6.2% Zn., and 0.03 OPT Au. and 1.25 OPT Ag.. Only an occasional assay was made for gold or silver. Vertical cross-sections were prepared and, haphazard though the intersections were, they strongly indicated a zone width of more than 100 feet, and a thickness sufficient for mining, (between 6 and 7 feet), a possible strike length of 1,000 feet, and, therefor, some 80,000 tons of material.

A quick study indicated that this volume of this grade, under these circumstances, and at early 1981 metal prices, could be extracted, shipped, and custom-milled at a significant profit and at a satisfactory return on investment. The object of the now-completed 1981 diamond-drilling program was to <u>prove</u> that there was or was not a tonnage of commercial ore in this North Zone.

CHRONOLOGY

Date	Company	Interest	Diamond Drilling Holes	Drilling Footage	Claims Worked	Work Performed
1904-07	Ridout Mining	Iron	-	-	-	-
1927-29	Ridout Cunningham	Zn., Pb.	some	?	34944 47	Trenching Drilling
1955-57	Shunsby G.M.	Zn,Cu,Pb	74	20,336	34947 etc	Geol.,Trench Map, Drilling
1960-61	Shunsby Mines	Zn,Cu,Pb	9 9	3,605 4,110	34947	Em,Mag.,Geol., Drilling
1965-66	FRJ Prosp. Synd.	Zn,Cu,Pb	41	14,279	34944 47	EM, Map, Geol. Drilling
1968-69	Con.Shunsby	Zn,Cu,Pb	23	9,091	34945 46,47 57539	Geol., Map Drilling
1969-70	Umex	Zn,Cu,Pb	nil	nil	-	Geol., Map, Examine
1974-75	Grandora Expl.	Zn,Cu,Pb	21	7,444	57539 34947	Trench, Drill. Geochem.
1978	MWR	Zn,Cu,Pb, Ag,Au	5	1,237	Tower Group	Geol., Map, Drill
1979-80	Placer Dev.	Zn,Cu,Pb, Ag,Au.	4	1,250	Southern Extension	EM 17, Chem., Mag., Drill
1981	MWR	Zn,Cu, Ag,Au	30	3,474	34947 57539	Map,Drill
			216	64,826		

Schedule 1

GEOLOGY LOCAL

The North Zone mineralization occupies the basal remnant of a 10-to-50-degree westerly dipping, northerly-striking cherty iron formation. The remnant is the near-surface expression of the easterly limb of a regional southerly-plunging syncline. The iron formation has a true maximum thickness of about 850 feet. Two 300-feet-thick chert beds and an interlayered 250-feet-thick band of greenstone, (generally variolitic and therefor an excellent marker), comprise the iron formation in this location. The assemblage is of submarine, volcanogenic origin.

The basal chert member is up to 300-feet thick and is in contact, possibly fault contact, with the intrusive footwall diorite. North-striking, dioritic, "digestive dykes", up to 100-feet thick, which possibly originate in and are concurrent with the diorite, cut across the basal chert member from both the east and the west. Characteristically, the digestive dykes are of either a light green or a distinctive yellow, pea-soup colour. They are well-named, for they display abundant evidence of having digested, or partly-digested, chert wall-rock and the contained sulphide mineralization.

The forgoing assemblage is unquestionably and frequently intruded by late felsitic porphyries, though none were observed by the writer in the core from the 1981 drilling.

The mineralized basal-chert remnant, (the North Zone), occupies a north-striking, south-plunging basin, which reaches the surface at its northern extremity. At a depth of approximately 200-feet, its southern extremity abuts the "Main Fault", (a flat-lying, E-W thrust, left-hand).

This chert basin is bounded on both its east flank and its base by the contact with the westerly-dipping footwall diorite, and,

on its west flank, by the relatively steeply and easterly-dipping digestive diorite.

The basal chert remnant is composed of, first, an argillaceous, banded and black-coloured fraction, second, by a less-argillaceous, grey-to-black and brecciated fraction, and, third, a fraction which is light-coloured, often a pale blue, and is generally massive, un-brecciated, and unmineralized with sulphides. That is, significant sulphide mineralization, when it occurs, is almost always in the brecciated and argillaceous chert fraction.

REGIONAL GEOLOGY

This has been adequately mapped and described by a succession of professionals, governmental and otherwise, between the early 1900's and the present day. A repetition would be superfluous other than to record that the area of interest lies in the southwest corner of the regional greenstone belt which stretches from Cunningham Township northeast and includes the gold and base metal deposits of the Timmins area.

FAULTING

The North Zone is cut by a fault complex composed, first, of N-S striking, east-dipping structures, and, second, by E-W-striking and south-dipping structures.

The only north-south-striking structure observed or which seems to be a factor, strikes N-10-W and lies along the westerly side of the mineralized zone, is normal, and produced the prominent escarpment which marks the west side of the Zone.

The set of E-W-striking faults are thrusts which dip flatly, (20-to-30-degrees), to the south. The North Zone mineralization terminates at its south end against the Main Fault, which strikes about N-70-E and is left-hand, with a displacement, lateral, of about 650 feet. Its vertical movement is not known, and it could be a factor in locating the southern offset of the North Zone. Belonging to this set of faults, and being a factor in th North Zone picture, are two parallel thrusts located a few hundred feet to the north of the Main Fault; both are probably of minor lateral displacement and have a vertical displacement of perhaps 40 feet. Thus, these two structures probably caused the stacking of the high-grade zone as is indicated in the longitudinal section and the southerly cross-sections.

MINERALIZATION

Prior to the current 1981 work, sulphide mineralization was generally considered by engineers to have been syngenetic with the chert, and, particularly by those involved in "reserve" calculations, as being comprised of widespread, stratabound, conformable, and relatively low-grade disseminations and fracture fillings. The noteable exception was Joubin, who often expressed the opinion that, were the higher-grade horizons not relatively continuous zones of enrichment, they represented either drag or continuous zones of mineralization in E-W, or cross-structures. Potapoff, (Umex, 1969), stated, "... the Cu-Zn-Pb prospects are disseminated and fracture-filling types of mineralization in a cherty formation...". Hough, (Umex, 1969), stated "... the chalcopyrite and sphalerite occur predominantly in the chert and mainly as very narrow, discontinuous fracture fillings, but also as disseminations and irregularly shaped "blebs"...".

The occasionally-encountered higher-grade chalcopyrite-sphalerite intersections were generally ignored as being isolated pods and were incorporated, and lost, in large-volume tonnage calculations. This, in spite of the chalco in the pods having been massive, ropey, and otherwise having exhibited remobilization characteristics. Our current observations and studies have revealed or confirmed that the high-grade horizon or horizons in the North Zone were indeed of exhalative and submarine origin, that the suphides and the cherts were simultaneously deposited by primary chemical sedimentation, and that the heavy sulphides do not occur in small, isolated pods -- they do occur as enrichments in a horizon which is clearly continuous.

Joubin, 1965, stated, ".. the sulphide mineralization is primarily syngenetic, but the diorite, and/or the digestive diorite, has been responsible for redistribution and concentration of the sulphides..". Goldsmith, 1965, stated, "... a distal facies of an exhalative volcanogenic suphide deposit .... intrusion of diorite may have

driven metals from chert proxymal to the contact outwards into fractures to create an upgraded concentration ...". Both views are on target.

An important observation is that neither the diorite nor the digestive diorite was the source of the massive sulphides. It was noted during the logging of certain core from the 1981 drilling, (particularly that from DDH 81-18), that earlier chalco veinlets or "ropes", as well as chert, had been digested by the intrusive, and that ghosts of both chalco and chert remained in the margin of the intrusive. The sudden gradation from fresh chalco to partially digested chalco was clearly visible in the core. Not only because of this observed digestion, but because of the frequently-observed occurence by myself and others[1] of sulphide veinlets lying at a high angle to the bedding, and also because of the occasionally-observed crenulation of pyrite, sphalerite, and chalcopyrite veinlets, (into tight folds or wrinkles - ampliture 1", wave length ¾"), I will, until there is strong evidence to the contrary, believe that enrichment was the result of upward, and, perhaps, lateral, remobilization of the sulphides during sedimentary dewatering. This, as at Norita, and as reported there by MacGeehan, MacLean and Bonenfant.

It is repeated that the digestive diorite intrusion is considered to have been, not a positive, but a negative factor in at least the quantity of sulphides in the present enriched, or high-grade, horizons.

[1]..... Grandora, log DDH 74-6 : @41 ft. to 46 ft., chert banding @ 45 degrees to core.
-- cpy. stringers parallel to core

[1]..... Meen, 1944, p.22 ..... :sphalerite and chalcopyrite were observed cutting across the strike of the chert at right angles.

Other possible modes of deposition should not be ignored. It is possible that the high-grade is either proxymal,(having been a primary deposit at or near the original vent zone), or that it is distal -- the concentration of sulphides having been carried down-stream from the vent zone and redeposited, unconformably, in a relatively narrow channel in previously exhaled and distal cherts. This latter mode of deposition was the basis of my working theory during most of the 1981 drilling program. The theory was supported, to a degree, by the apparent existence of a north-south striking, south-plunging, channel of higher grade and more auriferous copper-zinc mineralization. -- DDH 81-25 to 81-1 to 60-77 to 81-15 --. This "channel" thinned or disappeared up-dip to the east; it also immediately overlay the relatively barren westerly-dipping cherts. At the time, I believed the cherts to have been a chemical precipitate from an east-to-west flow. It was subsequently felt to be more likely that the primary flows from the vents were from south-to-north and that the original vents were located somewhere to the south of the Main Fault and, possibly, south of the higher-grade copper mineralization in an apparent north-south-striking channel which was indicated in DDH's 74-13, 74-18, 68-16 and 66-22 . This having been so, and the plunge continuing to the south, the possible favourable tonnage and grade implications in the South Zone were obvious.

Nevertheless, and irrespective of the genesis of the high-grade mineralization,(and irrespective of whether the two zones which are indicated in X-Sections A-B, C, D, E & F are, in fact two distinct zones or are a stacking due to the E-W-striking thrust-fault set), of practical importance is that the 1981 diamond-drilling has helped to establish, first, that the high-grade zones are in fact there, second, that they are continuous in both longitudinal and vertical sections, and, third, that they almost certainly are of commercial grade and quantity.

MINERALIZATION -- AN OVERVIEW

Given that the enrichment in the North Zone was the result of upward remobilization of the sulphides during sedimentary dewatering, and theorizing that the dewatering was related to intrusives, as both the very close paralleling of the enriched zone and the intrusives, and the existence of the narrow band of relatively barren cherts between the enrichment and the basal intrusives, would indicate, enrichment on the Property should not necessarily be restricted to the one basal chert remnant with which we are currently concerning ourselves.... in the top of the east limb of the regional syncline.

Similar enrichment could very well have occurred under similar circumstances anywhere in the more than five miles of strike length and one mile of dip length of cherts where primary zinc and copper mineralization is known to have occurred.

Similar enrichment could very well exist undetected by past scattered drilling proxymal to the intrusives and directly down-dip from the North Zone.

Pregnant exploration ground exists down dip on the syncline's east limb, in the trough of the syncline, and up the west limb. Significant zinc and copper mineralization has been reported and observed in the area of the west limb's outcropping both where trenches have exposed it or the one or two "Jim" drill-holes have penetrated it.

The possibility of enrichment in other zones on the Property has received little, if any attention. It definitely should receive attention in the form of, first, mapping and close study of the available existing information, and, second, whatever follow-up geophysics, geochemistry and drilling which is warranted by that work.

Similar thinking and similar attention should obviously be directed toward the cherts in the South Zone, (the cherts south of the Main Fault), where enrichment has already been noted, and where the potential for major discoveries is considered by the writer to be very good -- if not excellent.

DIAMOND DRILLING

Pre-1981

The logs of all holes which were pertinent to the 1980 identification or the limiting of a horizon of possible commercial value, (the North Zone), are contained in the Appendix. These include:

DDH (55) - 4,5,6,7,8,11
(56) - 17,20,21,22, 25,26,27,30,
31,33,35,36,39,48,51,66.
(65) - 93,99.
(74) - 1,6,7.

Pertinent details, including assays of all significant intersections, are summarized in the tables in Schedule II as well as on all vertical cross-sections, A-B to L . Where these old drill results enter into the picture, they are shown in the calculations of tonnages and grades in Schedule III.

While the log records may appear toopreciae with respect to collar locations and elevations, and hole dips, of the various holes, it is known that they are not. In some cases, they are only approximations. The plotting of the data by the writer is accurately in accordance with the records. It will therefor be understandable if some latitude seems to have been taken by the writer in locating some of the intersections on the plans, particularly in respect of some of the longer inclined holes. A ten-foot adjustment shows up as being quite significant or even unacceptable in 30-scale plotting, but, such adjustments are considered to be consistent with the actual situation.

Of significance is the large number of old drill-holes which missed the high-grade zone by passing over or under it and then into the up-dip low-grade cherts or down-dip into the hanging-

wall greenstones and digestive diorites. Several holes were previously considered to have been drilled down-dip the 45-degree-dipping sediments and the long intersections therefor to have represented only narrow true widths of conformable mineralization. The high-grade horizon having been now established as being flat or dipping gently to the west alters that interpretation of the true widths of the intersections.

Also of significance is the frequent inconsistency in the identification of the various rock types. The digestive diorite, for example, was not properly identified or described until after we / on in the early drilling; it appears in the logs under several different names. In the early going, the cherts are described as quartzites. Otherwise, there is fuzziness in differentiating between greenstones, andesites, tuffs, fine-grained diorites, dioritic dykes, etc., and, occasionally, fuziness in differentiating porphyry from variolitic greenstone. The forgoing is written, not to belittle previous engineering, but to advise future investigators that, structurally, they are dealing only with four basic rock types -- the cherts, the volcanics, and the intrusive diorites and porphyrys.

The pre-1981 drilling left a considerable gap, (300-feet), in the north end of the North Zone between DDH's 55-5 and 55-6 and DDH 55-8. This left some doubt regarding the continuity of good mineralization, and particularly about whether the good intersection in 55-8, (4.0-feet of 1.87% Cu., and 17.01% Zn.), was simply an example of a down-dip intersection -- which nearby 56-7 seemed to indicate that it was. The narrow intersection in '81-16, (1.2 ft. of 5.5% Cu., and 15.4% Zn. dispelled the continuity fears -- and established the proximity of troublesome west-dipping digestive diorite.

/25

Grandora drill-holes 74-1 and 74-6 were used for structural interpretation, but ignored in tonnage and grade calculations because assays of most samples are not available, and because, not only were apparently high-grade sections not sampled, but it is suspected that some unsampled chalco occurrences, (veinlets), were mistakenly identified as pyrite. The writer was not able to identify any veinlets which were composed of pyrite.

1981 DRILLING PROGRAM

General

The 1981 program was to have commenced with road access work in May, but, due to delayed provision of funds, record June rainfalls, and a Province-wide drill shortage, the first hole was not collared until July 25th.. The contractor was Markstay Drillers, Markstay, Ontario. Markstay experienced repeated serious mechanical and consequent labour problems. By August 16, only 3½ holes, totalling 479 feet had been drilled. Markstay was asked to leave, and Heath & Sherwood who, very fortunately, had a drill available, were engaged. Drilling recommenced on August 30th. and finished on October 9th.. 26½ holes, totalling 2995 feet, were drilled by H&S in 40 days. Average footage by H&S was about 85 feet per day worked.

The chert host rock is extremely hard; penetration by experts was as little as 12 feet per shift. In the very blocky Argillites, penetration was frequently only 20 feet per shift. Up to 100 feet per shift was obtained in Greenstone and Diorite. Bit consumption was extremely high; 5-to-10-foot runs were not uncommon.

The 1981 holes were, with one exception, either vertical or inclined at 75-degrees or more -- the latter inclination either to provide an intersection under a bad set-up or to provide tight geological information. The drill-pattern was established as drilling progressed.

All holes are plotted in plan and longitudinal section in Schedule II , and in vertical cross-section in Schedules III-to-XII, incl.. All significant assays are tabulated in Schedule XIII . Intersections used in tonnage-grade calculations are underscored. Similarly, similar data are shown on each vertical cross-section.

All holes were located in a closed Brunton-tape survey which was tied in to old drill-holes 55-4 and 56-33, which were located and positively identified. All holes were spotted, surveyed, logged and sampled by the writer except for DDH 81-25, which was logged and sampled jointly by Locke B. Goldsmith, P.Eng., Consulting Geologist.

Tagged and well-packaged samples were shipped by bus from Chapleau to Swastika Labs in Swastika, Ontario. Assay turn-around averaged about ten days.

Drilling costs, per foot, for 3474 feet, B-Q, H&S, were approximately $22.50 per foot, as follows:

1. Mob & demob ...	$ 2.75
2. Drill	17.95
3. Boxes	0.50
4. Radio, deliveries	1.20
Total	$ 22.37

The drillers occupied the old Shunsby cabin, (cook-house), and one four-man tent at Hiram Lake. The writer and Terra-Jet driver, cook, etc., -- Henry Burke -- occupied, by Ministry consent, the very adequate Forestry cabin at Tower Lake.

All 1981 core was properly boxed, nailed, labelled, and stored in substantial core racks built by ourselves at the Tower Lake cabin. Old core, all at the Hiram Lake camp, is there, but many racks have collapsed, many have been destroyed or dumped, many are identifiable with difficulty, but most, with care, could be re-examined. Placer's drill core was dumped, unlidded, by the Shunsby cabin, and almost all lost.

A base cabin was rented in Sultan to house Project Manager David Christianson when he was there. The main purpose was, initially,

to provide accomodation for two during initial road construction and repair and camp rehabilitation, but later proved essential in order to provide the contracted-for radio communication base-to-camp, to handle grocery orders, spare part orders, replacement personnel, possible emergencies, etc.. .. as well as to provide the essential telephone link between base and the Toronto Office, assay lab, equipment suppliers, etc..

It became quickly evident that the only reliable or feasible means of personnel or freight transportation between camp and Sultan was an ATV . MWR wisely purchased a Terra Jet which proved to be invaluable. It was sold to Henry Burke at the conclusion of the work.

During September and August we were bothered at the site by a black bear and two cubs. The cubs were killed, but mama was wounded and dangerous. Her presence precludedthe writer from walking alone on the property or without a gun. The importance is that this situation demands an extra body in camp.

Water for drilling came from the creek which flows east out of Hiram Lake. In future, it should be borne in mind that Hiram Lake makes very little water in the summer and, should the old beaver dam go out , Hiram Lake would become only a swamp and a very uncertain source of water.

1981 DRILLING PROGRAM

Specifics

The program commenced with holes 81-2, 81-1, and 81-3, in that order. The drill-section was located immediately south of DDH 60-77 which was the site of the previous highest grade intersection and the location where the most information would be supplied by the fewest additional holes.

The first hole, 81-2, revealed the probable existence of the N-S-striking fault which divides the North Zone into the East and West Blocks. Close plotting of the argillite beds, which were thought to be a marker horizon, suggested, in conjunction with the apparent absence of fault-breccia in DDH 81-2, a normal fault, west-dipping, the east side having moved upward. (this was a surprize in view of the present surface elevation of the east side being some 25-feet lower than the west). This split reduced almost to zero the likelihood of continuous, one-level mining from DDH 56-8 at the north extremity to the Main Fault at the south extremity, and, as a consequence, foreshadowed a reduction in mineable tonnage, an increase in unit mining costs, or both.

Continued drilling revealed the continuity of the high-grade zone from the surface north of DDH 81-15 to beyond 81-8 in the south. However, the southern thrust-fault-set picture then emerged, and, with it, the probability of the stacking of the high-grade zone. This development further complicated the mining picture, although it has the probable effect of increasing tonnage in a given length, but decreasing somewhat the grade of that increased tonnage.

The '81-drilling greatly and importantly clarified the digenitve diorite picture, including the location, thickness, strike, and

dip of both the main dyke and its several offshoots. There were some surprising dissappointments. After obtaining excellent intersections in DDH 81-25, DDH 81-26 was angled to the west from the same set-up, and encountered yellow digestive diorite throughout its length, indicating, for the first time, west-dipping off-shoots. Similarly, DDH 81-16, at the north extremity of the West Block, encountered narrow high-grade,(5.5% Cu., 15.4% Zn.), between walls of digestive diorite. Previous data had indicated east-dipping off-shoots at this location, (DDH 56-31). Therefor, the 81-16 check-hole, 81-18, was angled steeply to the west to pick up the high-grade to the west of the dyke. Instead, as in 81-25, we encountered only the west-dipping digestive diorite offshoot.

Results from the West Block drilling were therefor very unsatisfactory. DDH 81-14 was bottomed in apparently good chalco when the core-barrel and bit were lost at 81 feet. Follow-up 81-14A was a disappointment. Shortage of time and money held down the amount of drilling in the DDH 81-14 to 81-16 interval, and one of the few holes drilled here was stopped during the night at the pre-determined 75-foot level in chert and 0.5-feet of 0.9% Cu. and 6.4% Zn. However, the high-grade intersections which were obtained in the West Block drilling support the recommendation for further, conclusive drilling in this sector.

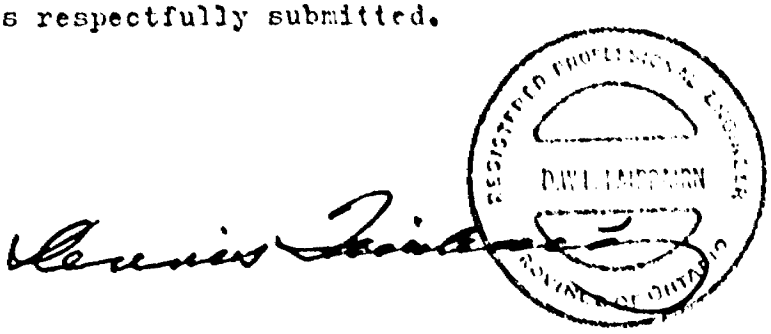
Otherwise, of reportable significance was only that several holes towards the north end of the East Block lost core, and, probably, good mineralization, due to grinding of core, the loss of water, or both, in the mineralized zones near or on the thrust-faults. Additionally, some moderately heavy leaching of chalco has obviously occurred in the near-suface portion of the flat-lying East Block.

The occasional loss of core and the leaching have caused the writer to make some assumptions regarding the continuity and quantity of mineralization across certain sections at the north

end of the East Block. With these assumptions, which have been noted in calculations, issue may apparently and properly be taken. Nevertheless, on the basis of his local knowledge, the writer believes they are valid and that eventual mining or further drilling will substantiate them.

With respect to future fill-in drilling, when it occurs, it should be located in obvious sections between Sections 1 and 4, and, from probably difficult set-ups, between SectionA-B and the Main Fault. The immediate north, east, and south of DDH 81-15 could also receive drilling attention.

All of which is respectfully submitted.



Dennis Fairbairn, P.Eng..

Mount Hope, Ontario.
February, 1981.

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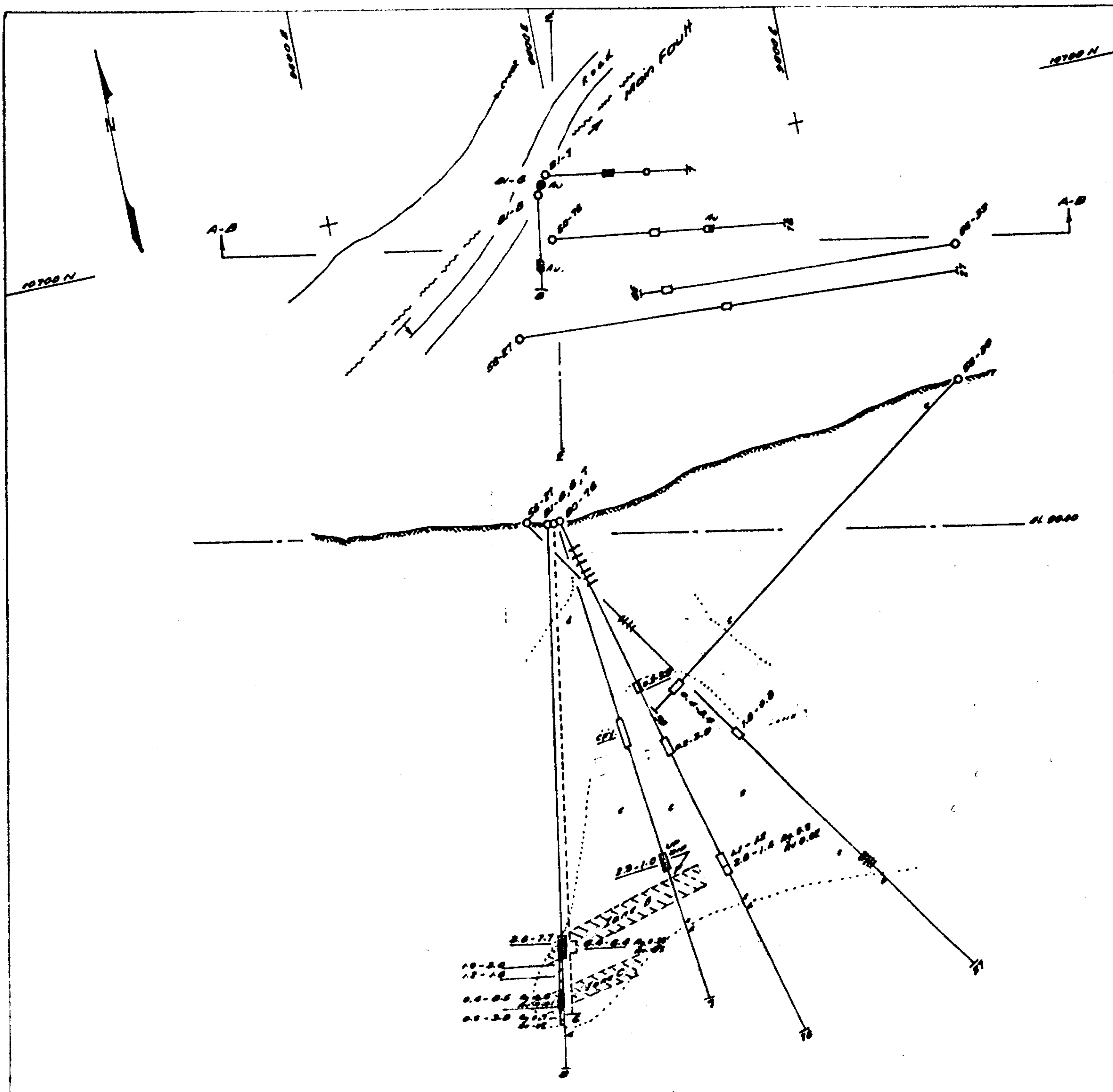
M.W. Resources. Ore Reserves B+C zones High-grade ropy chalco. Sept 24/82.

Section	Tons	Equiv Cu Grade
E-E	10,000	7.2
F-F	7,900	4.4
C-C	5,600	4.4
D-D	5,900	4.0
A-B	6,500	5.2
G-G	7,000	5.3 ?
H-H	4,000	3.5 ?
I-I	3,800	4.7
Total	50,700	5.03



Section	Zone	D.D.H.	From	To	Intersection	Cu.%	Zn.%	Equ.Cu.%	Ag.oz/t	Au.oz/t
A-B	B	81-8	170	180	10.0	3.6	7.7	8.4	0.27	0.02
			180	185	5.0	1.3	2.8	3.7	-	-
			185	190	4.0	1.2	1.6	2.2	-	-
			190	193	3.0	0.1	0.4	0.3	-	-
			193	201	8.0	0.4	6.5	4.5	0.06	.01
	C		201	206	5.0	0.9	8.8	3.5	-	-
		81-6	151	157	6.0	1.4	0.5	1.6	0.09	.005
			157	162	5.0	2.2	2.7	3.9	0.12	.01
			162	169	7.0	1.3	0.6	1.7	0.09	.006
	B		169	173.5	4.5	6.4	6.4	10.4	0.31	.02
	B	81-7	142	148	6.0	2.9	1.0	3.5	0.22	.006
			143	158	4.5	0.7	0.6	1.0	-	-
		60-78	72	76.1	4.1	0.3	2.8	2.4	?	?
			98.0	106	8.1	0.3	3.8	2.6	?	?
			141	145	4.0	0.3	2.9	1.8	?	?
			145	150.5	5.5	0.6	0.8	1.0	?	?
	B		150.6	155.6	5.0	1.1	1.3	1.8	?	?
	B		155.5	13[illegible]	4.0	2.8	1.4	2.7	0.20	.02

not incl. in Zone "B"

	D.D.H.	T.L.	S.L.	Factor
	81-8	225	221	0.98
	81-6	190	190	1.00
	81-7	205	203	0.98
	60-78	230	230	1.00

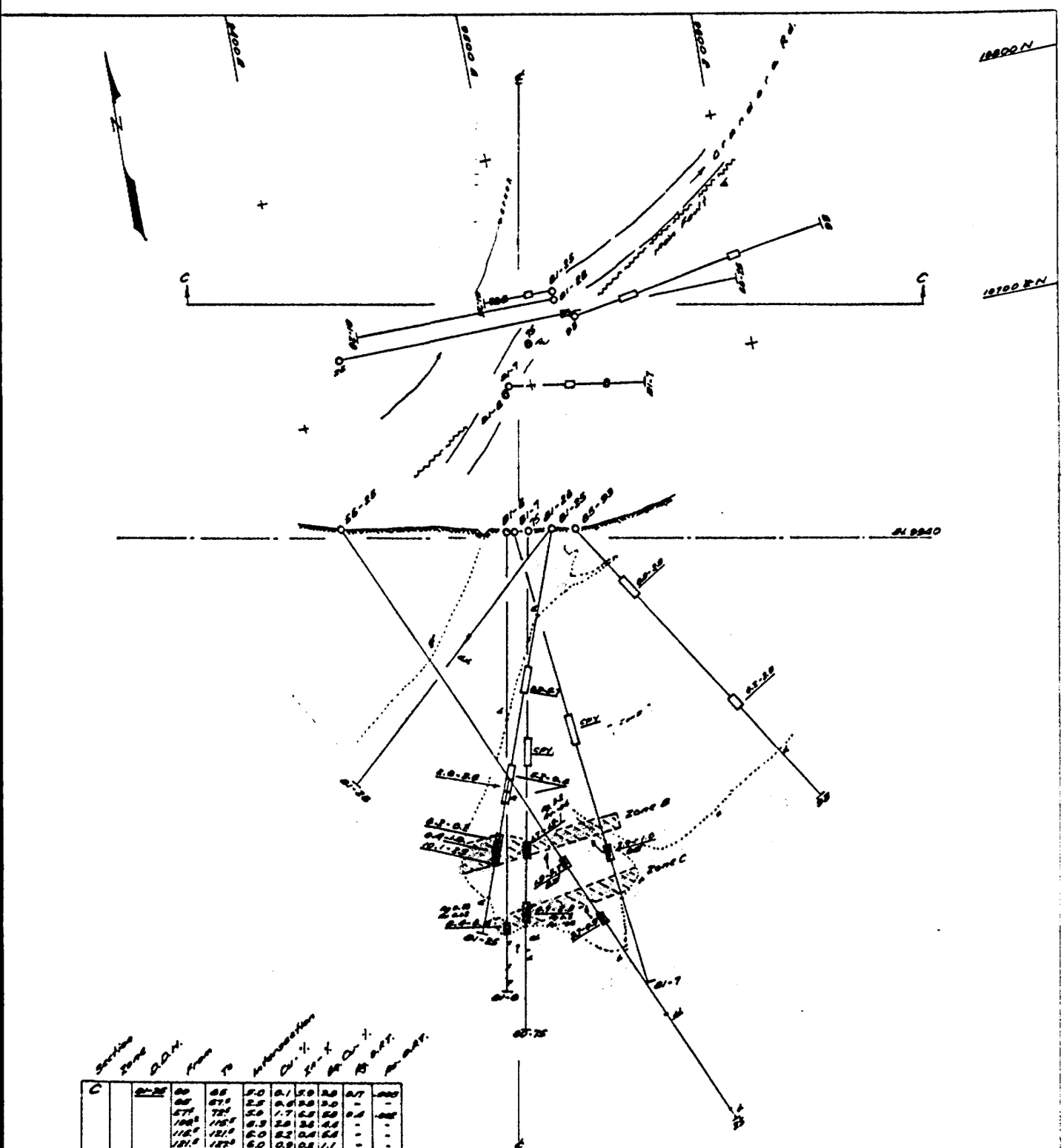
Cu/Zn = 20/35 = 1.6

Zone	Tons	Eq.Cu.%	Eq.Thick.ft	
B	4,000	6.7	7.1	70'
C	2,800	4.5	8.0	40'
Tot.	6,500	5.8	-	

M.W.R.- CUNN. T'W'P.
NORTH ZONE

VERT. SECTION –
A-B
DRAWN BY
DENNIS FAIRBAIRN P.Eng.

Scale: 1 in.=30 ft. Nov. '81



section	zone	D.D.H.	from	to	intersection	Cu %	Zn %	Cu % ft	Zn % ft	Cu+Zn % ft
C		81-25	00	65	5.0	0.1	5.0	5.0	0.17	0.085
			00	67'	2.5	0.6	2.5	3.0	-	-
			67'	72'	5.0	1.7	6.5	5.0	0.4	0.085
			108'	115'	6.3	2.8	3.6	4.4	-	-
			116'	121.0	6.0	5.2	0.8	5.8	-	-
			121.0	127'	6.0	0.9	0.5	1.1	-	-
			127'	134	6.5	2.1	0.5	2.5	-	-
	B		134	137	3.0	6.2	0.2	6.4	0.25	0.19
	B		137	144	7.0	0.6	1.0	1.0	-	-
	B		144	157'	5.5	10.1	2.3	11.5	0.87	0.995
			147'	152	6.5	1.5	0.4	1.7	-	-
			152	159	6.0	1.3	0.7	1.7	-	-
			159	165'	6.5	1.8	0.8	1.9	-	-
	B	80-25	136'	146'	9.5	1.7	8.1	9.0	0.8	0.04
			140'	148'	8.5	0.8	2.0	2.2	?	?
	B	80-26	172	177	5.0	1.9	0.7	4.2	-	-
			Tot	206'	5.5	2.7	0.9	3.8	-	-
		81-8	157	162	5.0	5.3	2.7	3.9	0.19	0.1
			162	169	7.0	1.3	0.5	1.7	0.09	0.05
	C		169	173'	4.5	6.4	6.6	10.8	0.35	0.8
	C	80-25	180	189	9.0	0.7	2.8	2.1	0.27	0.06

	DDH	T.L	S.L.	Factor
	81-25	178'	177'	1.00
	80-25	215'	215'	1.00
	80-26	210'	210'	0.99
	81-8	198'	198'	1.00

$\frac{Cu}{Zn} = \frac{50}{35} = 1.42$

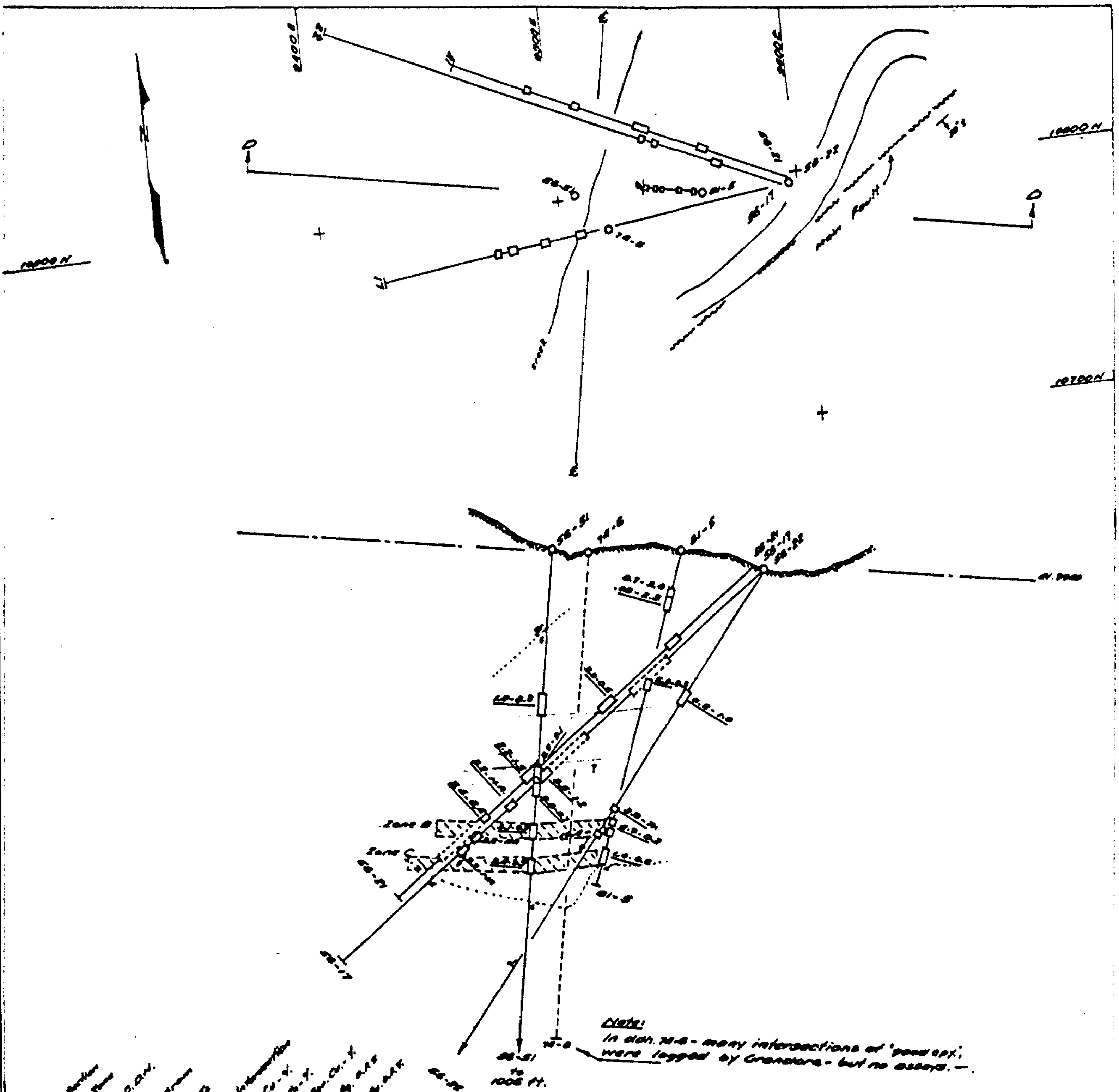
Zone	Tons	Cu %	Thickness ft.	
B	2,200	5.0	9.0	20'
C	2,400	3.5	8.2	20'
Tot.	5,600	4.4	-	

M.W.R. - CUNN. T'W'P.
NORTH ZONE

VERTICAL SECTION
C-C

DRAWN BY
DENNIS FAIRBAIRN, P.Eng.

Scale: 1 in. = 30 ft. Nov '81



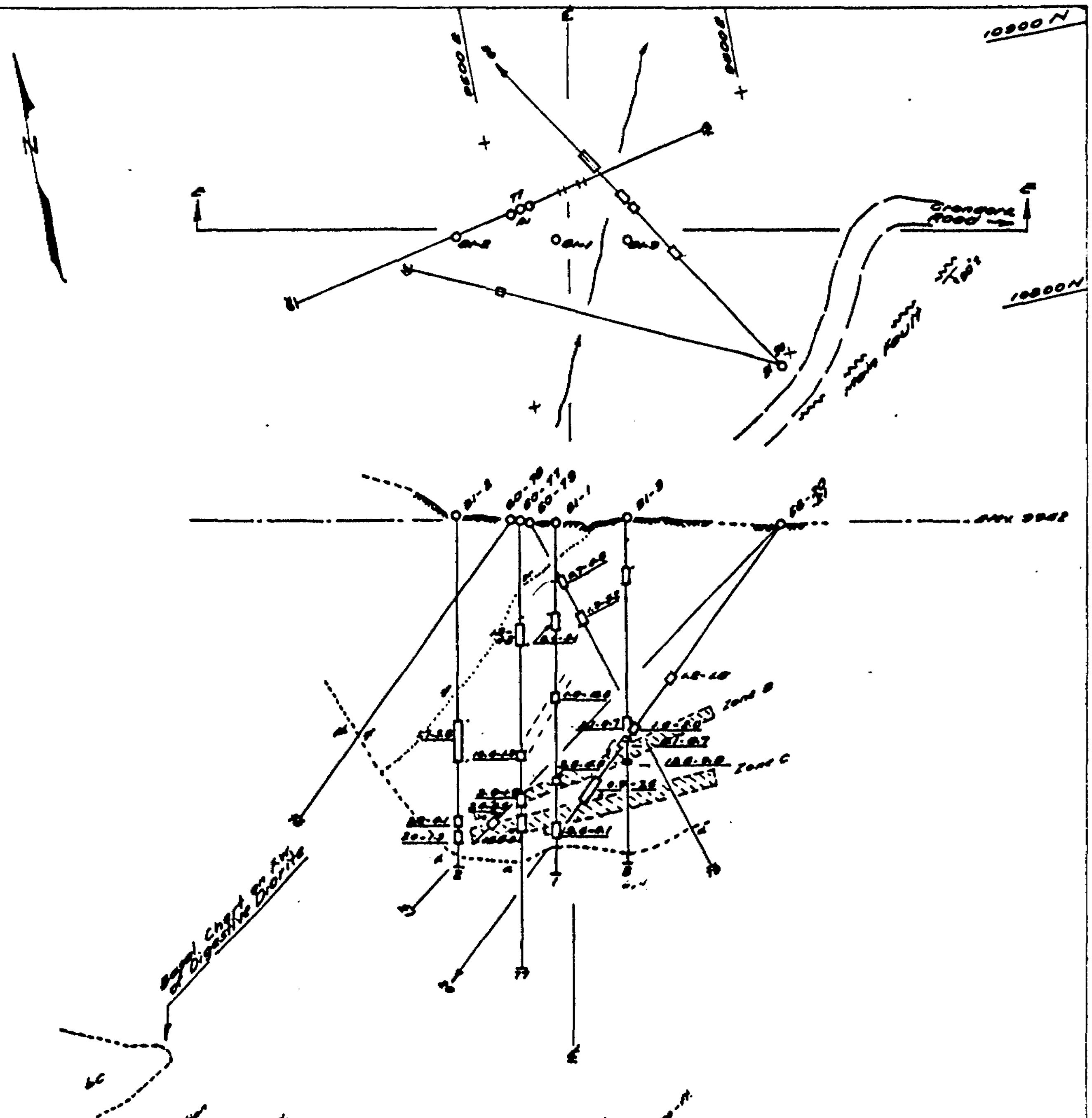
Section	Zone	D.D.H.	From	To	Intersection	Cu %	Ni %	Eq. Cu %	Pt.	Pd.
D		58-21	46.0	52.5	6.5	2.6	0.7	3.0	-	-
			44.5	52.0	7.5	2.0	0.6	3.0	-	-
			137	151	10.0	2.2	1.5	3.8	-	-
			137	142	5.5	1.6	1.7	3.5	-	-
			140	142	6.7	0.6	1.0	1.2	-	-
	B		155	157	3.6	1.3	3.5	3.6	-	-
	B		157	159	2.5	2.4	6.5	6.6	-	-
		58-51	61	69	8.0	1.4	6.9	5.6	-	-
			91	97	6.0	2.0	2.1	4.8	-	-
			97	103	6.0	3.6	0.7	4.0	-	-
			103	115	12.0	0.7	0.6	1.1	-	-
	B		115	121	6.0	3.1	0.8	3.8	-	-
			121	129	8.0	1.7	0.2	2.0	-	-
	C		129	135	6.0	3.4	0.9	4.9	-	-
		58-17	115	121	6.0	2.3	0.8	2.7	-	-
			121	127	6.0	1.1	0.5	1.5	-	-
			127	133	6.0	3.5	1.2	4.6	-	-
			157	161	3.5	3.3	[illegible]	3.9	-	-
	C		165	168	3.4	3.2	[illegible]	3.4	-	-
	C		@ 122.4		6.0			3.0	-	-
		58-22	119	122	3.0	2.0	Tr.	2.0	-	-
			122	125	4.2	0.1	Tr.	0.1	-	-
	C		126	130	3.0	1.8	Tr.	1.8	-	-
	C		130	135	2.5	10.5	Tr.	10.6		
		61-5	57	62	3.5	5.0	0.5	5.2	-	-
	B		115	118	1.5	4.9	0.5	5.0	-	-
			119	123	4.0	1.0	0.1	2.0	-	-
	B		120	124	6.5	1.4	0.4	1.8	-	-

Zone	Tons	Eq. Cu %	Av. Thick - ft.	
B	2,700	4.1	6.0	70'
C	3,200	2.9	6.0	80'
Tot.	5,900	4.0	-	

D.D.H.	T.L.	S.L.	Factor
58-21	207'	164'	0.78
58-51	1006	1006	1.00
58-17	265	259	0.97
58-22	[illegible]	-	0.98
61-5	166	160	0.99

$\frac{Cu}{Ni} = \frac{30}{35} = 1.0$

M.W.R. - CUNN. T'W'P.
NORTH ZONE
VERTICAL SECTION
D-D
DRAWN BY
DENNIS FAIRBAIRN P.Eng.
Scale: 1 in. = 30 ft. Nov. '81



Section	Zone	D.D.H.	From	To	Intersection	Cu-%	Zn-%	Comb. Cu-%	Ag-oz/T	Au-oz/T
		81-2	68	78	6.0	0.6	1.3	1.6	0.09	Tr
			78	78	5.0	1.2	2.3	2.6	0.12	.002
			78	80	5.0	2.0	2.0	2.9	0.16	nil
			83	88	5.0	1.7	3.0	2.6	0.12	nil
			88	93	5.0	1.5	4.9	4.4	0.10	.005
			114.5	118	3.5	3.0	0.1	2.8	0.09	.005
			118.5	128	4.5	2.0	1.3	3.0	0.07	.008
			124	128	4.0	0.4	2.0	1.4	0.03	.003
		60-77	30.5	38.5	8.2	0.4	2.7	3.1	?	?
			38.5	47.5	7.7	1.5	4.5	2.0	1.08	Tr
			48	48.7	2.7	1.2	0.4	1.4	?	?
			48.7	50	1.3	nil	nil	nil	?	?
	?		50	54.5	3.0	10.4	1.3	11.3	?	?
			54.5	57.5	5.7	0.2	0.3	0.4	?	?
			97.5	104	6.5	1.4	1.5	2.4	?	?
	B		104	108.5	4.5	3.8	1.2	4.2	?	?
			108.5	115	5.9	nil	nil	nil	?	?
	C		115	118	5.8	16.5	3.1	17.4	0.06	0.02
			118	130	12.0	0.2	0.3	0.4	?	?
		59-31	48	55.5	6.5	2.8	0.7	3.0	-	-
			88.5	95	7.5	2.0	0.8	2.4	-	-
			127	137	10.0	2.2	1.5	3.1	-	-
	B		137.5	139.5	2.5	2.4	8.8	8.5	-	-
			139.5	164	[illegible]	0.2	0.6	0.5	-	-
			164.5	170	5.5	1.6	1.3	2.4	-	-
			170	180	10.0	1.2	0.6	1.4	-	-
			180	185	5.0	1.2	0.8	1.6	-	-
		81-1	61	65	4.0	0.2	8.0	1.9	-	-
	?		65	69	4.0	1.0	12.6	9.7	0.18	.002
			86.5	91	4.5	1.1	0.4	1.3	-	-
			91	97.5	7.5	2.1	2.2	1.6	-	-
	B		97.5	100	2.5	3.4	4.8	6.4	0.2	nil
			103	109	6.0	1.0	0.1	1.9	-	-
			109	114	5.0	1.9	0.1	1.3	-	-
	C		114	117.5	3.8	2.7	0.1	2.7	0.20	.002
	C		117.5	118	2.0	12.6	0.1	13.3	1.22	.006
			118	125	3.3	0.6	0.1	0.6	0.03	nil
		59-30	104	108	4.0	1.3	1.0	2.3	-	-
			114	117	3.0	1.4	2.0	2.6	-	-
			117	120	3.7	0.1	0.1	0.1	-	-
	B	B	120	124	4.0	5.1	0.7	6.0	?	?
	C	C	145	156	11.0	0.9	7.5	5.6	?	?

Zone	Tons	Comb. Cu-%	Av. Thickness-ft.	
B	4,400	4.7	6.0	100'
C	5,600	2.1	8.0	100'
Total	10,000	7.2	-	

D.D.H.	T.L.	S.L.	Factor
81-2	136'	136'	1.00
60-77	170'	170'	1.00
59-31	207'	208'	0.98
81-1	136'	136'	1.00
59-30	148'	-	0.88

$\frac{Cu}{Zn} = \frac{90}{35} = 2.6$

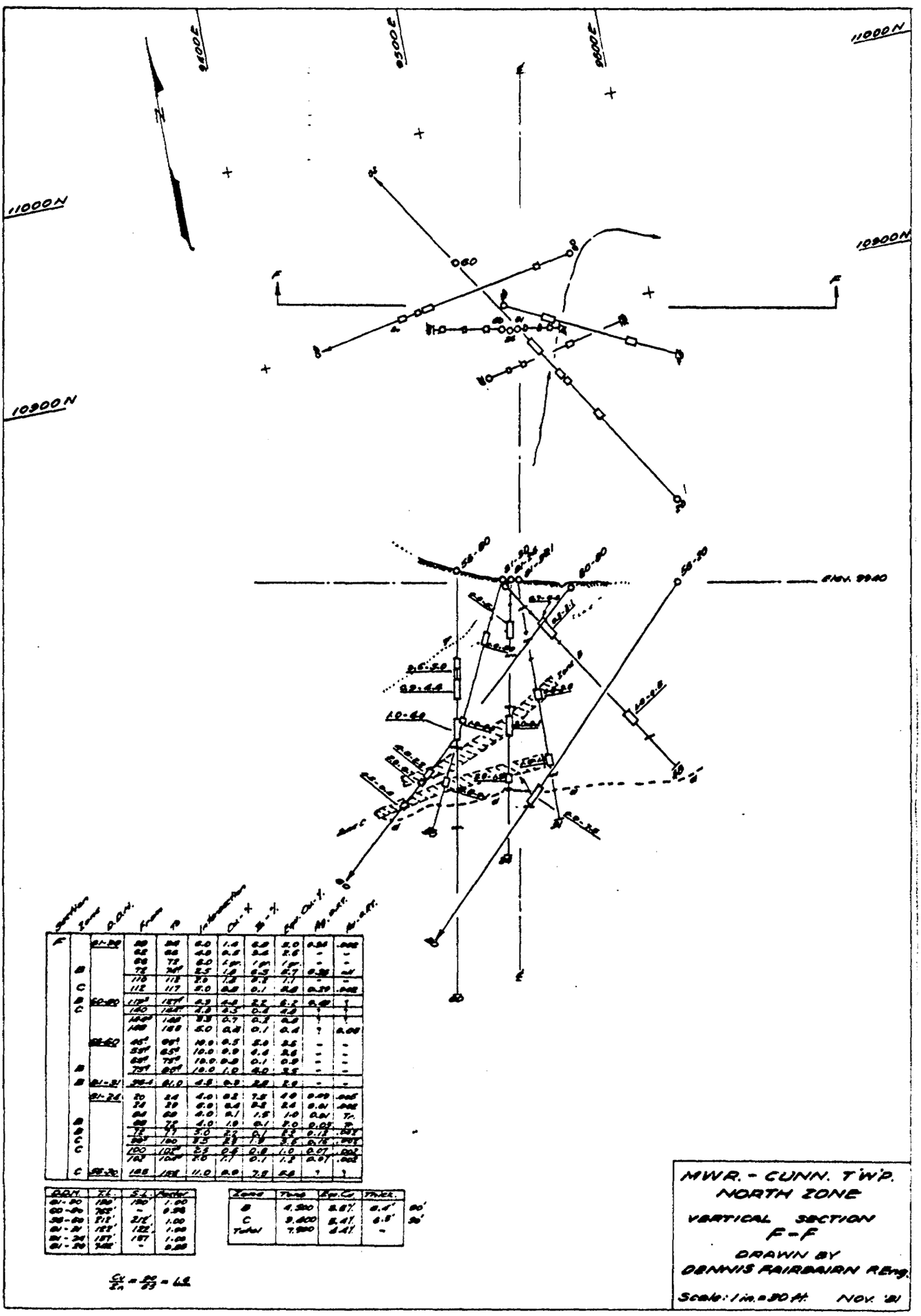
Note possible zone: 60-77: 10.4-1.0; 81-1: 1.0-12.6

M.W.R. – CUNN. TWP.
NORTH ZONE

VERTICAL SECT'N
E-E

DRAWN BY
DENNIS FAIRBAIRN, P.Eng.

Scale: 1 in. = 30 ft. Nov. '81



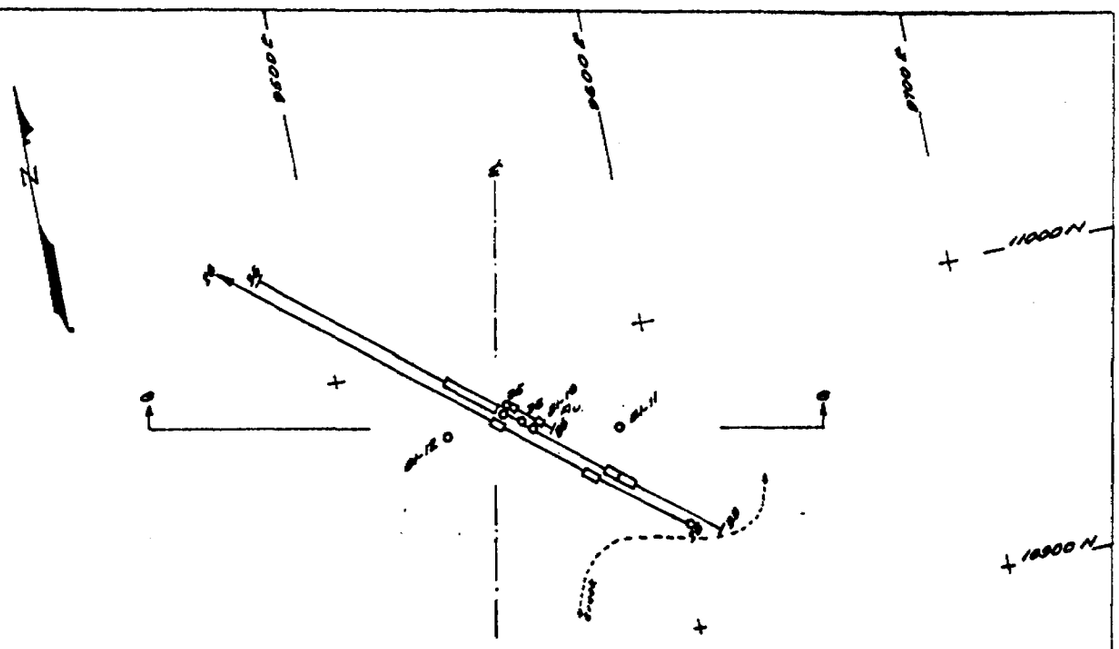
Section	Zone	D.D.H.	From	To	Intersection	Cu %	Au g/t	Cu% × m	Au g/t × m
F		81-20	80	84	4.0	1.4	2.8	5.6	0.011
			84	86	4.0	0.5	2.8	2.0	-
	B		86	93	8.0	1.0	1.0	1.0	-
			93	96	2.5	1.0	0.3	0.7	0.02
	C		110	113	3.0	1.0	0.3	1.1	-
			113	117	8.0	0.8	0.1	0.8	0.39
	B	60-80	139	143	4.0	4.6	2.2	6.2	0.02
	C		180	184	4.0	2.3	0.4	1.0	?
			184	188	4.0	1.2	0.2	0.8	?
			188	192	5.0	0.8	0.1	0.4	?
		80-60	491	501	10.0	0.5	5.0	2.6	-
			501	511	10.0	0.3	1.4	2.8	-
			511	521	10.0	0.2	0.1	0.2	-
	B		521	531	10.0	1.0	4.0	3.2	-
	B	81-21	398.4	41.0	4.8	0.3	2.8	2.8	-
		81-24	20	24	4.0	0.2	1.5	1.0	0.02
			24	28	4.0	0.4	0.2	2.4	0.01
			28	32	4.0	0.1	1.5	1.0	0.01
	B		68	72	4.0	1.0	0.1	2.0	0.02
	B		72	77	5.0	2.2	0.1	2.2	0.11
	C		149	160	11.5	2.8	1.8	3.6	0.18
	C		100	101	2.5	0.6	0.8	1.0	0.01
			101	102	2.0	1.7	0.1	1.3	0.01
	C	80-20	188	198	11.0	0.0	7.8	5.6	?

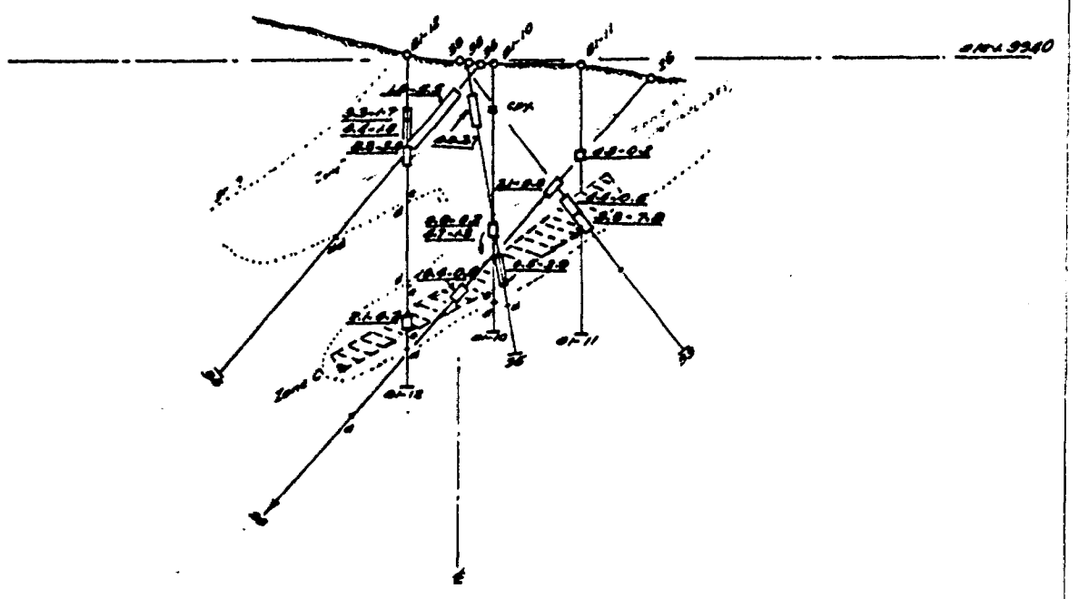
Drill	T.D.	E.O.H.	Azimuth
81-20	180'	180'	1.00
80-60	705'	-	0.98
80-80	215'	215'	1.00
81-21	125'	122'	1.00
81-24	157'	157'	1.00
81-20	198'	-	0.98

Zone	Tons	Ave. Cu	Thick.	
B	4,500	2.87%	0.4'	60'
C	3,400	2.41%	0.5'	30'
Total	7,900	2.67%	-	

$\frac{Cu}{Au} = \frac{2.67}{0.03} = 89$

MWR. - CUNN. TWP.
NORTH ZONE
VERTICAL SECTION
F - F
DRAWN BY
DENNIS FAIRBAIRN P.Eng.
Scale: 1 in. = 30 ft. NOV. '81





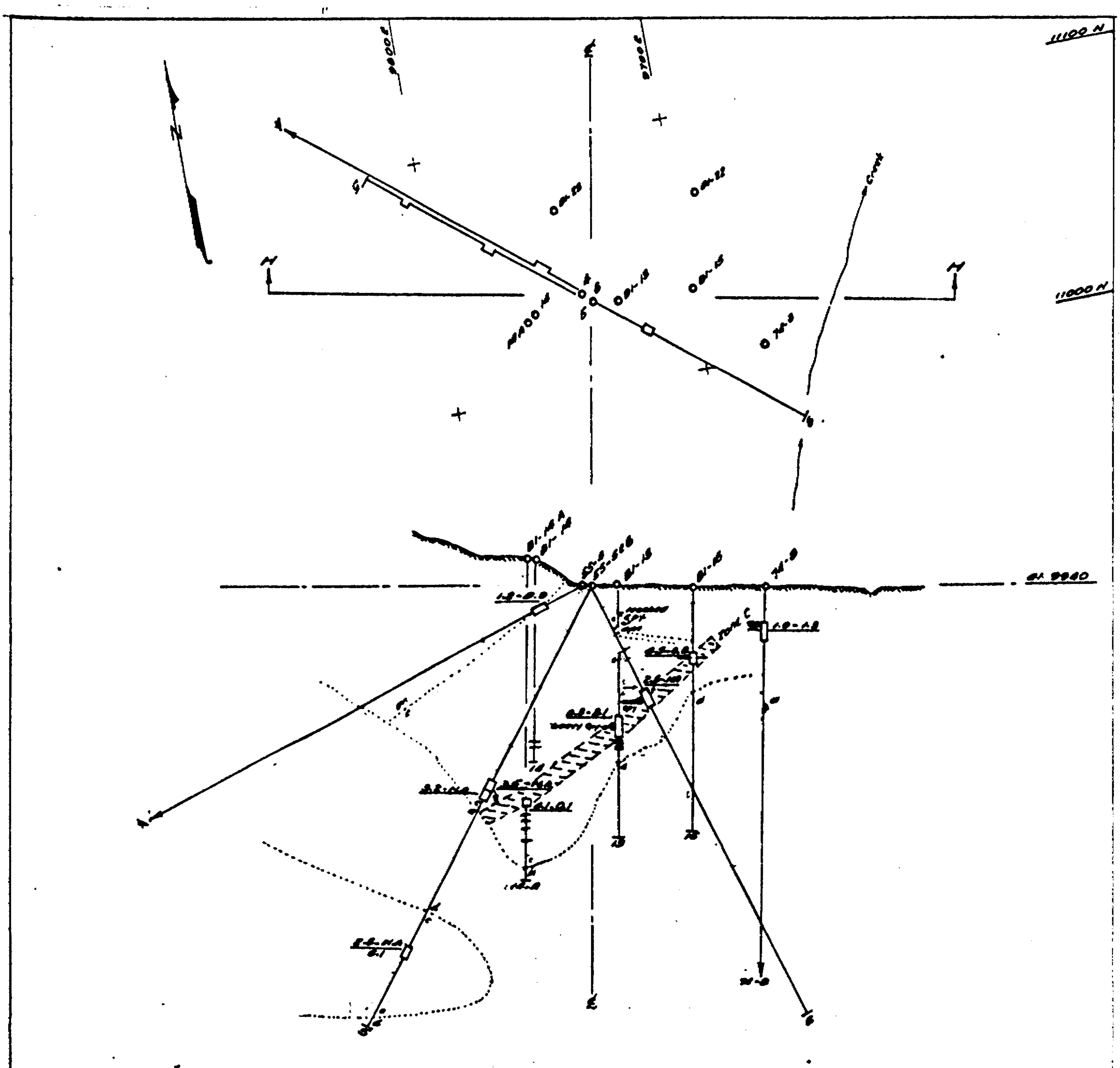
Section	Zone	D.D.H.	From	To	Intersection	Cu-%	Zn-%	Eqv. Cu-%	Au oz/t.	Au oz/t.	
G		81-10	9	14	5.0	1.0	0.1	1.1	–	–	Inclusion
			14	18	5.0	1.8	0.1	1.9	–	–	
			18	23	5.0	1.3	0.8	1.8	–	–	
	C		23'	23.5'	1.5	0.6	0.5	0.8	0.216	0.008	
	C		23.5'	24'	1.5	2.7	1.5	3.8	–	–	
		82-83	11	21	10.0	4.0	2.7	5.7	–	–	
			21	31	10.0	1.7	0.5	2.0	–	–	
	C		67	73	10.0	0.5	2.9	2.9	–	–	
			72	82	10.0	0.3	0.6	0.7	–	–	
		83-84	40	47	7.0	1.4	0.5	1.7	–	–	
			47	508	7.0	2.1	0.8	2.3	–	–	
			58	61	7.0	1.5	0.9	2.1	–	–	
			61	66	5.0	0.8	1.2	1.8	–	–	
			66	71	5.0	1.8	0.9	1.9	–	–	
	C		96	101	7.0	10.6	0.9	10.7	–	–	
			101	110	9.0	1.0	0.1	1.1	–	–	
		81-15	17	21'	4.5	3.8	1.7	4.3	–	–	
			21'	25	3.5	0.45	1.5	1.4			
	C		31	34	2.0	0.8	3.3	4.1	0.12	0.005	Inclusion
	C		34	36'	2.5	6.1	1.5	7.3	0.20	0.01	Inclusion
		78-79	20	30	10.0	1.0	0.5	1.5	–	–	
			30	40	10.0	1.0	0.5	1.4	–	–	
			40	50	10.0	0.9	0.5	1.3	–	–	Inclusion
			50	60	10.0	2.5	0.5	2.8	–	–	
	C		60	66	6.0	4.6	0.5	4.7	–	–	
	C		66	72	6.0	2.5	7.3	8.5	–	–	

D.D.H.	T.L.	B.L.	Factor
81-10	97'	97'	1.00
82-83	96'	96'	0.98
78-79	298'	–	0.98
81-15	107'	107'	1.00
76-80	125'	119	0.98

Zone	Tons	Eqv. Cu	Thick.	
B	2,000 ?	5.5 ?	?	
C	7,000	5.0	24	
Total	7,000	5.0	24	100'

$\frac{Cu}{Zn} = \frac{50}{35} = 1.5$

NWR. – CUNN. T'W'P.
NORTH ZONE
VERTICAL SECTION
G – G
DRAWN BY
DENNIS FAIRBAIRN, P.Eng.
Scale: 1 in. = 30 ft. Nov/81



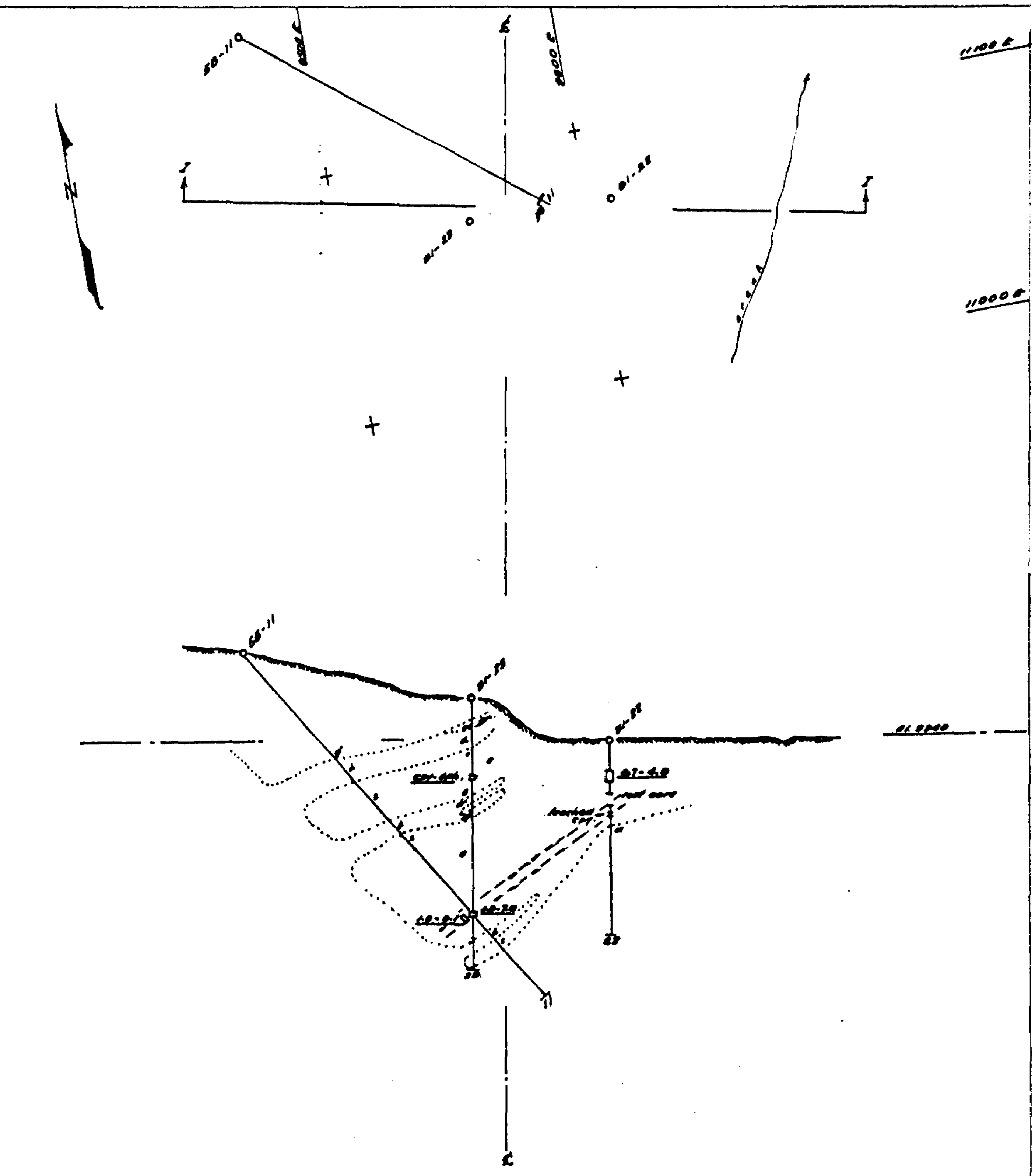
Section	Zone	D.D.H.	From	To	Intersection	Cu %	Zn %	Eqv. Cu %	Ag-O.P.T.	Au-O.P.T.	
H		55-5	82.8	88.7	2.9	0.9	2.05	3.1	-	-	
	C		88.7	91.0	4.3	2.6	2.05	4.7	-	-	
	C		91.0	[illegible]	4.6	3.2	2.05	4.4	-	-	
	C	81-14a	95.3	97.0	1.5	4.1	0.1	4.2	-	-	
	C		97.0	102.5	4.5	1.0	1.0	1.5	-	-	avg.
			141.0	148.5	7.5	1.8	0.1	1.9			
		81-13	82.5	84.0	0.5	0.8	2.1	1.6	0.80	.002	
	C		61	65	0.5	?	?	4.0	-	-	[illegible]
	C	81-15	26	30'	4.2	6.6	0.3	7.0	0.30	.005	
	C	55-6	48'	55'	7.3	2.6	2.05	3.6	-	-	
		55-4	17'	23'	6.0	1.2	0.9	6.0	-	-	

D.D.H	T.L.	S.L.	Factor
55-5	204	197	0.97
81-14a	120	120	1.00
81-15	97'	97	1.00
55-6	125'	101'	0.98
81-13	101	101	1.00

Zone	Tons	Eq. Cu.	Thick	
B	-	-	-	
C	4,000	3.0%	7.1'	[illegible]
Total	4,000	3.0%	7.1'	

[illegible] = [illegible] = 1.6

MW R. - CUNN. T'W'P.
NORTH ZONE
VERTICAL SECTION
H - H
DRAWN BY
DENNIS FAIRBAIRN, P.Eng.
Scale: 1 in = 30 ft. Nov. '81



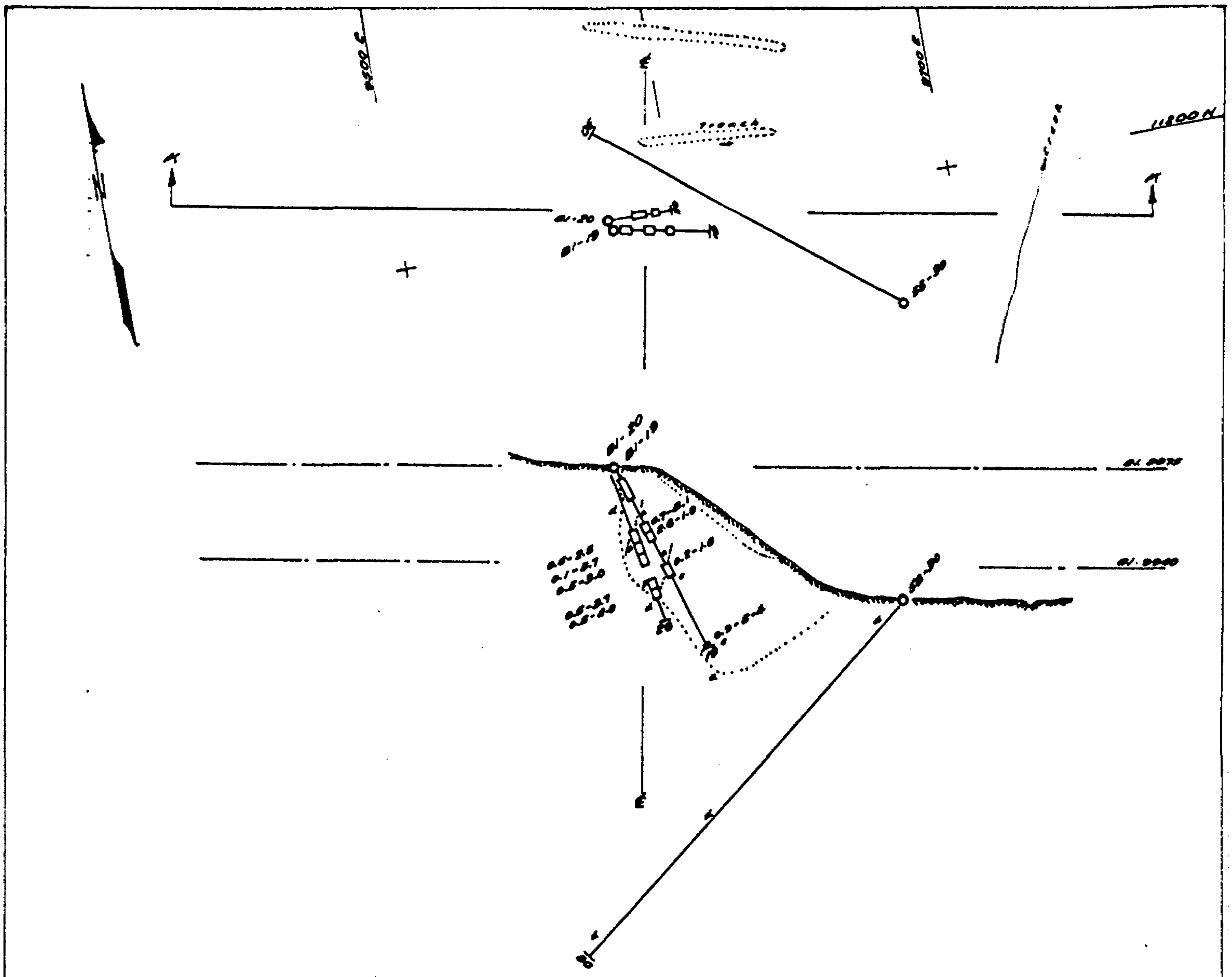
Section	Zone	D.D.H.	From	To	Intersection	Cu %	Zn %	Eq Cu %	Ag oz/T	Au oz/T	
I	C	81-28	[illegible] [illegible]	[illegible] 90'	1.6 [illegible]	1.0	5.9	5.9 3.7	0.15 -	0.02 -	assumed
		81-22	12.0 18.0	16.0 22.5	4.0	0.7	4.8	2.7	-	-	mesh, lost core
	C				6.0			4.8	-	-	assumed

D.D.H.	T.L.	S.L.	Factor
81-28	107'	107'	1.00
81-22	76'	76'	1.00
58-11	191'	180'	0.94

Zone	Tons	Eq. Cu.	Thick
C	3,800	4.7%	6.0'
Total	3,800	4.7%	6.0'

$\frac{Cu}{Zn} = \frac{30}{55} = \frac{1.6}{}$

MWR. - CUNN. T'WP.
NORTH ZONE
VERTICAL SECTION
I - I
DRAWN BY
DENNIS FAIRBAIRN, P.Eng.
Scale: 1 in. = 30 ft. Nov. '81



Section	Zone	D.D.H.	From	To	Intersection	Cu %	Zn %	Equiv. Cu %	Ag oz/t	Au oz/t
K		81-19*	5.5	14.0	8.5	0.5	2.0	2.4	0.07	.002
			22.5	27.0	3.5	0.7	6.1	5.7	0.10	nil
			27.0	31.0	4.0	2.2	1.0	3.2	0.38	.002
			74.5	75.0	0.5	0.0	6.6	4.9	0.14	.002
		81-30	21.0	25.5	4.5	0.5	1.5	1.5	–	–
			25.5	30.0	4.5	0.5	2.5	3.1	–	–
			30.0	34.5	4.5	0.1	3.7	2.4	–	–
			34.5	39.0	4.5	0.5	3.0	2.4	0.09	nil
			39.0	44.0	5.0	0.1	0.1	0.1	–	–
			44.0	48.0	4.0	0.5	2.7	2.8	–	–
			48.0	50.5	2.5	0.5	4.0	3.0	–	–

*NOTE: D.D.H. 81-19 stopped in "ore" @ 75.0 ft., in error.

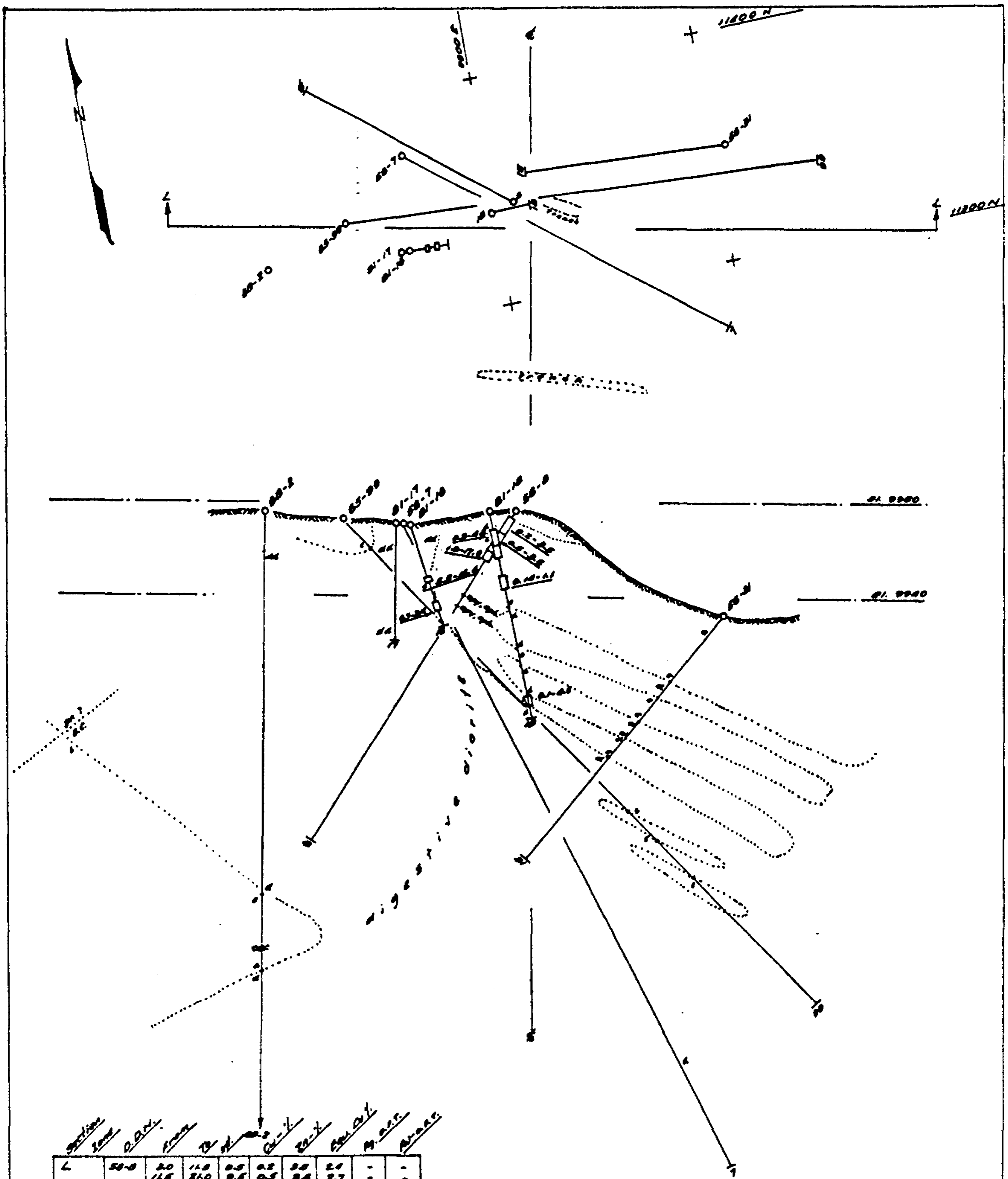
$\frac{Cu}{Zn} = \frac{30}{33} = 1.6$

MWR.-CUNN. TOWN'P.
NORTH ZONE

VERTICAL SECTION
K-K

DRAWN BY
DENNIS FAIRBAIRN P.Eng.

Scale: 1 in = 80 ft. NOV. '81



Section	Zone	D.D.H.	From	To	Ft.	Cu-%	Zn-%	Equ. Cu %	Ag. o.p.t.	Au o.p.t.
L		58-8	2.0	11.8	9.5	0.2	3.8	2.4	-	-
			12.6	21.0	9.6	0.5	3.6	2.7	-	-
			21.0	25.0	4.0	1.9	17.0	12.5	-	-
		81-18	25.0	26.2	1.2	5.5	15.4	15.5	0.61	.002
			38.5	40.0	3.5	0.7	2.4	2.2	0.09	nil
		81-19	8.0	15.0	7.0	0.1	4.5	2.9	0.05	.002
			15.0	20.0	5.0	0.1	1.6	1.1	-	-
			62.0	66.0	4.0	0.2	4.0	2.7	0.07	nil

M.W.R.-CUNN. TWP.
NORTH ZONE
VERTICAL SECTION
L-L
DRAWN BY
DENNIS FAIRBAIRN P.Eng.
Scale: 1in.=30M. Nov.'81

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
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ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52602 Date: Oct. 28, 1981

Received Oct. 19, 1981 38 Samples of split core

Submitted by M.W. Resources Limited, Mount Hope, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
5907	-	-	0.33	0.08
5908	-	-	1.83	0.01
5909	-	-	0.38	0.02
5910	-	-	0.38	0.01
5911	-	-	0.13	0.69
5912	-	-	0.38	3.39
5913	-	-	1.08	1.69
5914	-	-	0.28	0.31
5915	0.002	0.05	0.23	1.17
5916	NIL	0.03	0.05	1.12
5917	0.002	0.02	0.04	0.17
5918	-	-	0.03	0.06
5919	-	-	0.05	0.06
5920	-	-	0.06	1.10
5921	-	-	0.18	1.35
5922	NIL	0.05	0.52	1.64
5923	-	-	0.07	1.04
5924	-	-	0.02	2.80
5925	0.002	0.11	0.13	11.68

Per G. Leb
G. Leb L, Manager

SWASTIKA LABORATORIES LIMITED

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MP Parcbank

Certificate of Analysis

SCS (1975) L

Certificate No. 52546 Date: Oct.16, 1981

Received Oct.9, 1981 30 Samples of split core

Submitted by M.W. Resources Limited, Mount Hope, Ontario

Att: D.E. Christianson

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %	LEAD %
3356	0.005	0.09	1.37	0.27	
3357	0.01	0.13	2.17	2.69	
3358	0.005	0.09	1.30	0.64	
3359	0.02	0.33	6.37	6.45	
3362	-	-	0.18	-	
3363	-	-	0.68	0.44	
3364	0.002	0.22	2.93	1.00	
3365	0.002	0.06	0.75	0.54	
3366	0.002	0.27	3.52	7.68	
3367	-	-	1.89	2.99	
3368	-	-	1.23	1.63	
3369	-	-	0.08	0.37	
3370	0.01	0.06	0.38	6.51	
3371	0.02	0.07	0.89	3.85	
3372	-	-	0.19	1.24	
3373	-	-	0.11	1.79	
3374	-	-	0.13	1.12	
3375	-	-	0.08	0.79	
3376	0.005	0.17	0.14	5.91	2.23
3377	-	-	0.60	3.79	
3378	0.002	0.45	1.73	6.48	
3380	-	-	2.84	2.56	
3381	-	-	5.16	0.39	
3382	-	-	3.08	0.43	
3383	-	-	0.94	0.27	
3384	NIL	0.26	6.18	0.24	
3385	-	-	0.44	1.04	
3386	0.005	0.37	10.10	2.31	
3387	-	-	1.54	0.39	
3388	-	-	1.32	0.69	

Per G. Lebel

G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52451 Date: Oct.6, 1981

Received Sept.25, 1981 27 Samples of split core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3329	-	-	0.98	7.87
3330	-	-	0.88	0.06
3331	-	-	2.15	0.20
3332	-	-	5.53	15.39
3333	-	-	0.73	2.40
3334	-	-	0.02	0.13
3335	-	-	0.08	0.58
3336	-	-	0.49	1.47
3337	-	-	0.46	2.47
3338	-	-	0.12	3.69
3339	-	-	0.54	2.96
3340	-	-	0.06	0.31
3341	-	-	0.50	3.74
3342	0.002	0.08	0.55	4.02
3343	-	-	0.04	1.75
3344	-	-	0.07	3.37
3345	-	-	0.08	2.29
3346	-	-	4.99	0.29
3347	-	-	0.02	2.29
3348	-	-	0.85	1.28
3349	-	-	0.11	1.48
3350	-	-	0.84	2.57
3351	-	-	0.87	2.70
3352	-	-	4.91	0.16
3353	-	-	1.82	0.14
3354	-	-	0.07	0.03
3355	-	-	1.44	0.58

Per G. Lebel
G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52407 **Date:** Sept.25, 1981

Received Sept.18, 1981 8 **Samples of** core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3321	0.002	0.01	0.07	0.06
3322	-	-	0.70	4.77
3323	-	-	0.17	1.62
3324	-	-	0.05	0.68
3325	-	-	0.06	0.02
3326	-	-	0.18	0.35
3327	-	-	0.09	0.66
3328	-	-	0.24	0.42

Per G. Lebel
G. Lebel, Manager

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SWASTIKA LABORATORIES LIMITED

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Certificate of Analysis

Certificate No. 52358 Date: September 22 1981

Received Sept. 14/81 4 Samples of Split Core

Submitted by M W Resources Ltd., Sultan, Ontario Per: D. Christianson

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3317	---	---	0.41	0.36
3318	0.005	0.38	6.54	0.82
3319	---	---	0.14	0.18
3320	0.002	0.03	0.33	2.07

Per G. Lebel

G. Lebel - Manager

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Certificate of Analysis

Certificate No. 52356 **Date:** Sept. 24, 1981

Received Sept. 11, 1981 46 **Samples of** split core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3291	---	---	0.53	0.92
3292	---	---	0.55	1.70
3293	---	---	0.11	0.29
3294	---	---	0.54	0.78
3295	---	---	0.51	0.19
3296	---	---	4.69	1.25
3297	---	---	0.06	0.02
3298	NIL	0.01	0.07	0.40
3299	0.02	0.74	9.82	0.16
3303	---	---	3.28	1.71
3304	---	---	0.38	1.62
3305	---	---	0.84	5.26
3306	0.002	0.56	6.15	1.95
3307	---	---	0.60	0.30
3308	---	---	0.14	0.48
3309	0.002	0.14	2.11	0.19
3310	---	---	0.69	0.04
3311	---	---	4.31	0.20
3312	---	---	0.36	2.36
3313	NIL	0.06	0.83	3.84
3314	0.002	0.04	0.35	3.37
3315	---	---	0.11	1.36
3316	---	---	0.04	0.50

Per G. Lebel
G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52356 **Date:** Sept.24, 1981

Received Sept.11, 1981 46 **Samples of** split core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3267	0.002	0.06	1.14	0.54
3268	0.002	0.05	1.02	0.24
3269	0.002	0.29	8.76	0.11
3270	---	---	0.56	2.72
3271	---	---	0.31	2.66
3272	---	---	1.38	5.77
3273	---	---	0.26	0.89
3274	---	---	0.48	3.45
3275	NIL	0.26	1.84	6.33
3276	NIL	0.06	0.51	2.29
3277	---	---	0.75	0.53
3278	---	---	1.33	1.00
3279	---	---	0.86	2.23
3280	---	---	1.75	1.65
3281	---	---	0.66	0.71
3282	---	---	0.27	2.76
3283	---	---	0.26	0.85
3284	—	—	1.36	1.27
3285	NIL	0.15	1.76	1.64
3286	NIL	0.05	0.51	0.23
3287	---	---	0.97	0.12
3288	---	---	1.27	0.06
3289	---	---	1.32	0.76
3290	---	---	0.51	0.69

con't....

Per G. Lebel
G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52305 Date: Sept. 14, 1981

Received Sept. 4, 1981 7 Samples of split core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3260	NIL	0.04	0.37	0.81
3261	0.002	0.17	1.62	1.37
3262	---	---	0.07	0.39
3263	---	---	0.44	0.08
3264	0.002	0.16	2.26	1.93
3265	0.002	0.07	0.57	0.56
3266	0.002	0.07	1.14	0.13

Per G. Lebel
G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52292 Date: Sept. 14, 1981

Received Sept. 2, 1981 : 6 Samples of split core

Submitted by M.W. Resources Limited, Sultan, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3252	---	---	12.56	0.85
3254	---	---	0.38	0.84
3256	0.002	0.05	1.29	0.72
3257	0.002	0.09	2.80	0.12
3258	0.002	0.07	1.99	1.28
3259	0.002	0.02	0.45	2.00

Per G. Lebel

G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52245 Date: Sept. 2, 1981

Received Aug. 25, 1981 2 Samples of split core

Submitted by M.W. Resources Limited, Toronto, Ontario

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	LEAD %	ZINC %
3250	0.002	0.12	0.84	0.60	2.71
3251	NIL	0.03	0.25	0.03	0.50

Per G. Lebel
G. Lebel, Manager

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Certificate of Analysis

Certificate No. 52240 **Date:** Sept. 3, 1981

Received Aug. 25, 1981 16 **Samples of** split core

Submitted by M.W. Resources Limited, Toronto, Ontario

SAMPLE NO.	GOLD Oz /ton	SILVER Oz /ton	COPPER %	LEAD %	ZINC %
3234	NIL	0.01	0.02	0.12	0.41
3235	NIL	0.02	0.05	0.46	2.04
3236	0.002	0.03	0.16	0.20	0.80
3237	0.002	0.05	0.40	0.01	0.91
3238	0.005	0.09	0.16	1.82	7.50
3239	0.002	0.11	0.45	0.94	3.19
3240	NIL	0.02	0.19	0.16	0.48
3241	NIL	0.01	0.03	0.11	0.63
3242	NIL	0.01	0.05	0.25	1.38
3243	0.005	0.03	0.63	0.13	2.25
3244	0.002	0.03	0.11	0.37	2.00
3245	0.005	0.03	0.35	0.14	0.80
3246	0.002	0.01	0.10	0.03	0.47
3247	NIL	0.05	0.51	0.04	0.53
3248	NIL	0.01	0.05	0.05	1.46
3249	NIL	0.03	0.18	0.07	1.02

Per G. Tebel
G. Tebel, Manager

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Certificate of Analysis

Certificate No. 52199 Date: August 28, 1981

Received August 21, 1981 7 Samples of Split Core

Submitted by M. W. Resources Limited, Toronto, Ontario Per: D. Fairbairn

SAMPLE NO.	GOLD oz/ton	SILVER oz/ton	COPPER %	ZINC %
[illegible]	—	—	[illegible]	NA
3229	-	-	2.04	1.96
3230	0.002	0.21	2.98	0.54
3231	0.002	0.07	1.19	0.12
3232	0.002	0.02	-	-
3233	0.002	0.03	0.19	0.11
3301	0.002	0.48	6.16	4.18
3302	0.005	0.42	3.95	13.90
3223 —	NO ASSAY			
3224 —	" "			
3225 —	" "			
3226 —	" "			
3227 —	" "			

Per G. Lebel

G. Lebel, Manager

ESTABLISHED 1928

SWASTIKA LABORATORIES LIMITED

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Certificate of Analysis

Certificate No. 52091 Date: Aug. 18, 1981

Received Aug. 7, 1981 22 Samples of split core

Submitted by M.W. Resources Limited, Toronto, Ontario Att: D. Fairbairn

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	LEAD %	ZINC %
3201	NIL	0.08	0.83	0.27	1.29
3202	0.002	0.13	1.20	0.99	2.30
3203	NIL	0.16	2.00	0.71	2.96
3204	NIL	0.12	1.72	0.49	3.00
3205	0.005	0.10	1.34	0.92	4.86
3206	---	---	0.02	---	0.07
3207	0.002	0.02	0.08	0.27	1.00
3208	0.002	0.03	0.07	0.42	1.33
3209	---	---	0.39	---	3.08
3210	---	---	0.25	---	2.83
3211	0.002	0.16	1.84	---	12.59 —
3212	---	---	---	---	0.21
3213	---	---	0.17	---	0.88
3214	---	---	---	---	1.86
3215	---	---	1.11	---	0.44
3216	0.002	0.02	0.03	---	2.24
3217	NIL	0.39	3.65	---	4.78 —
3218	---	---	1.81	---	0.05 —
3219	---	---	1.32	---	0.03
3220	0.002	0.28	3.75	---	0.05
3221	0.005	1.32	19.38	---	0.07 ←
3222	NIL	0.04	0.55	---	0.02
	Au	Ag	Cu	Pb	Zn

Per G. Lebel
G. Lebel, Manager

ESTABLISHED 1928

SWASTIKA LABORATORIES LIMITED

P.O. BOX 10, SWASTIKA, ONTARIO P0K 1T0
TELEPHONE: (705) 642 3244
ANALYTICAL CHEMISTS • ASSAYERS • CONSULTANTS

Certificate of Analysis

Certificate No. 52850 Date: December 9 1981

Received 15 Samples of Pulp, and new pulp from stored reject

Submitted by M W Resources Ltd., Toronto, Ontario Att'n: Mr. D. W. Fairbairn

SAMPLE NO.	GOLD Oz./ton	SILVER Oz./ton	COPPER %	ZINC %
3320	0.002	0.03	0.33	2.12
3272	0.002	0.24		
3305	0.002	0.12		
3329	0.02	0.15		
3331	Nil	0.13		
3332	0.002	0.51		
3333	Nil	0.09		
3339	Nil	0.09		
3380	0.002	0.15		
3391	0.002	0.05		
3396	Nil	0.07		
3397	0.002	0.07		
3400	Nil	0.14		
5901	0.002	0.28		
5904	0.002	0.14		

Pulps - gold & silver checks - December, 1981

Per G. Lebel
G. Lebel - Manager

ESTABLISHED 1928

Member Canadian Testing Association

OMEP-81-5-C-55

N. W. R. - CUNNINGHAM T'W'P.
DRILL HOLE
INTERSECTIONS & ASSAYS.

Section / Zone	D.D.H.	Ft.	To	Ft.	Cu %	Zn %	Equ. Cu. %	Ag OPT.	Au. OPT.
A-B / B	81-8	170	180	10.0	3.6	7.7	8.4	0.27	0.002
		180	186	6.0	1.9	2.9	3.7	-	-
		186	190	4.0	1.2	1.6	2.2	-	-
		190	193	3.0	0.1	0.4	0.3	-	-
C		193	201	8.0	0.4	6.5	4.5	0.06	0.01
		201	206	5.0	0.9	3.8	3.3	-	-
	81-6	151	157	6.0	1.4	0.3	1.6	0.09	0.005
		157	162	5.0	2.2	2.7	3.9	0.13	0.01
		162	169	7.0	1.3	0.6	1.7	0.09	0.005
B		169	173.5	4.5	6.4	6.4	10.4	0.33	0.02
	81-7	142	148	6.0	2.9	1.0	3.5	0.22	0.002
		148	154.5	6.5	0.7	0.5	1.0	-	-
	60-76	72	76'	4.1	0.2	3.6	2.4	?	?
		98.9	105.0	6.1	0.2	3.8	2.6	?	?
		141	145	4.0	0.02	2.9	1.8	?	?
		145.0	150.5	5.5	0.8	0.8	1.3	?	?
		150.5	155.5	5.0	1.1	1.2	1.8	?	?
		155.5	159.5	4.0	2.8	1.4	3.7	0.80	0.02
		159.5	162.5	3.0	0.6	0.8	1.1	0.68	0.01

M.W.R.

DRILLING

Feb. '82

OM81-5-C-55

Section / Zone	D.D.H.	Fr.	To	Ft.	Cu %	Zn %	Eq. Cu %	Ag. o.pt.	Au. o.p.t.
C / B	81-25	60	65	5.0	0.1	5.9	3.8	0.17	.005
		65	67.5	2.5	0.6	3.8	3.0	–	–
		67.5	72.5	5.0	1.7	6.5	5.8	0.40	.002
		109.2	115.5	6.3	2.8	2.6	4.4	–	–
		115.5	121.5	6.0	5.2	0.4	5.4	–	–
		121.5	127.5	6.0	0.9	0.3	1.1	–	–
B		127.5	134.0	6.5	3.1	0.5	3.4	–	–
B		134	137	3.0	6.2	0.2	6.4	0.26	nil
B		137	144	7.0	0.4	1.0	1.0	–	–
B		144	147.5	3.5	10.1	2.3	11.5	0.37	.005
		147.5	152.0	4.5	1.5	0.4	1.7	–	–
		152	158	6.0	1.3	0.7	1.7	–	–
		158.0	162.5	4.5	1.5	0.6	1.9	–	–
B	60-75	135.5	140.7	5.2	1.7	13.1	9.9	3.2	0.04
		140.7	145.2	4.5	0.85	2.3	2.2	?	?
B	56-25	172	177	5.0	1.9	3.7	4.2	–	–
		201	206.5	5.5	2.7	0.9	3.3	–	–
	81-6	157	162	5.0	2.2	2.7	3.9	0.13	0.01
		162	169	7.0	1.3	0.6	1.7	0.09	.005
		169	173.5	4.5	6.4	6.4	10.4	0.33	0.02
	60-75	160	169	9.0	0.7	2.3	2.1	0.27	0.06
	60-25	201	206.5	5.5	2.7	0.9	3.3	–	–

Section / Zone	D.D.H.	Fr.	To	Ft.	Cu. %	Zn %	Eq. Cu %	Ag O.A.T.	Au O.A.T.	
C /	81-6	157	162	5.0	2.2	2.7	3.9	0.13	0.01	
		162	169	7.0	1.3	0.6	1.7	0.09	.005	
C		169[2]	173[5]	4.5	6.4	6.4	10.4	0.33	0.02	repeat, A-B.
C	60-75	160	169	9.0	0.7	2.3	2.1	0.27	0.06	
C	56-25	201	206[5]	5.5	2.7	0.9	3.3	-	-	
D /	56-21	46[0]	52[5]	6.5	2.6	0.7	3.0	-	-	
		84[5]	92[0]	7.5	3.0	0.6	3.4	-	-	
		127[4]	137[4]	10.0	2.2	1.5	3.2	-	-	
		137[4]	140[6]	3.2	1.4	1.7	2.5	-	-	
		140[6]	147[3]	6.7	0.6	1.0	1.2	-	-	
B		153[2]	157[2]	3.5	1.3	3.5	3.5	-	-	
B		157[2]	159[2]	2.5	2.4	6.5	6.4	-	-	
	56-51	61	69	8.0	1.4	6.3	5.4	-	-	
		91	97	6.0	2.9	2.1	4.3	-	-	
		97	103	6.0	3.6	0.7	4.0	-	-	
		103	115	12.0	0.7	0.6	1.1	-	-	
B		115	121	6.0	3.1	0.3	3.3	-	-	
		121	129	8.0	1.7	0.4	2.0	-	-	
C		129	135	6.0	3.4	0.9	4.0	-	-	

Section / Zone	D.D.H.	From	To	Ft.	Cu %	Zn %	Eq. Cu. %	Ag OPT	Au OPT	
D /	SL-17	115	121	6.0	2.2	0.8	2.7	-	-	
		121	127	6.0	1.1	0.6	1.5	-	-	
		127	133	6.0	3.5	1.2	4.4	-	-	
		147.5	151.0	3.5	3.3	NA	3.3+	-	-	
		166.4	169.8	3.4	3.2	NA	3.2+	-	-	
C		@ 166.4		6.0			3.0	-	-	Est.
	SL-22	119	122	3.0	2.8	Tr.	2.8	-	-	
		122	126.2	4.2	0.1	Tr.	0.1	-	-	
C		126.2	130.0	3.8	1.3	Tr.	1.3	-	-	
C		130	132.6	2.6	10.4	Tr.	10.4	-	-	
	81-5	57	60.5	3.5	5.0	0.3	5.2	-	-	81-5 NOT USED.
B		116.5	118.0	1.5	4.9	0.2	5.0	-	-	
		119.0	123.0	4.0	1.9	0.1	2.0	-	-	
C		128	134.5	6.5	1.4	0.6	1.8	-	-	
E	81-2	68	73	5.0	0.8	1.3	1.6	0.08	nil	81-2 NOT USED.
		73	78	5.0	1.2	2.3	2.6	0.13	0.002	
		78	83	5.0	2.0	3.0	3.9	0.16	nil	
		83	88	5.0	1.7	3.0	3.6	0.12	nil	
		88	93	5.0	1.3	4.9	4.4	0.10	.005	
		114.5	118	3.5	2.8	0.1	2.8	0.09	.002	
		119.5	124	4.5	2.0	1.3	3.0	0.07	.002	
		124	128	4.0	0.4	2.0	1.6	0.02	.002	

Section / Zone	D.D.H.	Fr.	To	Ft.	Cu %	Zn %	Eq. Cu %	Ag. O.P.T.	Au. O.P.T.	
E /	60-77	39.5	39.7	6.2	0.4	2.7	2.1	?	?	
		39.7	47.4	7.7	1.3	4.3	3.0	1.06	Tr.	
		84	86'	2.7	1.2	0.4	1.4	?	?	
		86'	88°	1.3	nil	nil	nil	?	?	
		88	91'	3.8	0.4	1.3	11.2	?	?	not used.
		91'	97'	5.7	0.2	0.3	0.4	?	?	
		97'	104	6.5	1.4	1.5	2.4	?	?	
B	B	104	108'	4.5	3.6	1.9	4.8	?	?	
		108'	112"	3.9	nil	nil	nil	?	?	
C	C	112"	118°	5.6	15.5	3.1	17.4	0.88	0.02	
		118	128	10.0	0.2	0.3	0.4	?	?	
	56-21	46	52'	6.5	2.6	0.7	3.0	-	-	
		84'	92°	7.5	3.0	0.6	3.4	-	-	
		127"	137"	10.0	2.2	1.5	3.1	-	-	
B		157'	159'	2.5	2.4	6.4	6.4	-	-	+ 1.3-3.5 / 35'
		159'	164'	4.8	0.2	0.5	0.5	-	-	
		164'	170°	5.5	1.6	1.3	2.4	-	-	
		170	180	10.0	1.2	0.6	1.6	-	-	
		180	185	5.0	1.2	0.6	1.6	-	-	
	56-20	81'	85'	4.0	1.2	1.8	2.3	?	?	
		114	117	3.0	1.4	2.0	2.6	?	?	
		117	120'	3.7	0.1	0.1	0.1	?	?	
B		120'	124'	4.0	5.1	0.7	5.6	?	?	
C		145	156	11.0	0.9	7.5	5.6	?	?	massive choice ?

Section / Zone	DDH.	Fr.	To.	Ft.	Cu %	Zn %	Eq Cu.	Ag OPT.	Au OPT.	
E /	81-1	61	65	4.0	0.2	2.8	1.9	-	-	
		65	69	4.0	1.8	12.6	9.7	0.16	.002	
		86.5	91	4.5	1.1	0.4	1.3	-	-	
		91	97.5	7.5	0.1	2.2	1.5	-	-	
B		97.5	100'	2.5	3.6	4.8	6.6	0.39	nil.	
		103	109	6.0	1.8	0.1	1.9	-	-	
		109	114	5.0	1.3	0.1	1.3	-	-	
		114	117.5	3.5	3.7	0.1	3.7	0.28	.002	
C		117.5	119.3	2.0	19.4	0.1	19.5	1.32	.005	
C		119.5	123	3.5	0.4	0.1	0.5	0.04	nil.	
F /	81-30	28	34	6.0	1.4	5.8	5.0	0.24	.002	
		62	66	4.0	0.5	3.4	2.6	-	-	
		66	72	6.0	1.9%	1.9%	1.9%	-	-	
B		72	74.5	2.5	1.8	6.3	5.7	0.26	nil	
		110	112.2	2.0	1.0	0.2	1.1	-	-	
C		112	117	5.0	8.8	0.1	8.8	0.29	.002	diorite @ 117'
B	60-80	119.2	127.5	8.3	4.8	2.2	6.2	0.48	?	
C		140	144.8	4.8	4.5	0.4	4.8	?	?	
		148'	153'	5.0	0.4	0.1	0.4	?	0.03	
		144.8	148'	3.3	0.7	0.2	0.8	?	?	
	56-60	45.5	55.5	10.0	0.5	5.0	3.6	-	-	
		55.5	65.5	10.0	0.9	4.4	3.6	-	-	
		65.5	75.5	10.0	0.8	0.1	0.9	-	-	
B		75.5	85.5	10.0	1.0	4.0	3.5	-	-	

section / zone	D.D.H.	Fr.	To	Ft.	Cu %	Zn %	Eq. Cu %	Ag. OPT.	Au OPT.	
F / B	81-31	56.5	61.0	4.5	0.3	2.8	2.0	-	-	
	81-24	20.	24	4.0	0.2	7.5	4.9	0.09	.005	
		24	29	5.0	0.4	3.2	2.4	0.01	.002	
		64	68	4.0	.05	1.5	1.0	0.01	Tr.	
B		68	72	4.0	1.9	0.1	2.0	0.03	Tr.	
B		72	77	5.0	2.2	0.1	2.2	0.12	.002	
C		96[5]	100°	3.5	2.3	1.9	3.5	0.16	.002	
C		100°	102[5]	2.5	0.6	0.6	1.0	0.07	.002	
		102[5]	104[3]	2.0	1.1	0.1	1.2	0.07	.002	
G	81-10	9.0	14.0	5.0	1.0	0.1	1.1	-	-	leached.
		14	19	5.0	13	0.1	1.3	-	-	"
		19	22	3.0	1.3	0.8	1.8	-	-	"
C		55	56[5]	1.5	4.7	1.2	4.5	-	-	"
C		52	63[2]	1.2	9.8	0.2	9.9	0.74	0.02	DDH 56-35
	56-35	11	21	10.0	4.0	2.7	5.7	-	-	
		21	31	10.0	1.7	0.5	2.0	-	-	
C		62	72	10.0	0.5	3.9	2.9	-	-	DDH 81-10
		72	82	10.0	0.3	0.6	0.7	-	-	
	81-12	17	21[3]	4.5	3.3	1.7	4.3	-	-	
		21[5]	31°	9.5	0.4	1.6	1.4	-	-	
		31	34	3.0	0.8	5.3	4.1	-	-	leached
		34	36[5]	2.5	6.1	1.9	7.3	0.56	0.002	"
		@ 85'			6.0		4.5			leached & assumed.

Section / zone	D.D.H.	Ft.	To	Ft.	Cu %	Zn %	Eq. Cu. %	Ag. O.P.T.	Au. O.P.T.	
G /	56-33	20	30	10.0	1.0	0.8	1.5	-	-	
		30	40	10.0	1.0	0.6	1.4	-	-	
		40	50	10.0	0.9	0.6	1.3	-	-	leached. lost core
		50	60	10.0	2.8	0.8	3.3	-	-	
C		60	66	6.0	4.4	0.5	4.7	-	-	
C		66	72	6.0	3.3	7.8	8.2	-	-	
"A"	81-12 56-35 56-36 81-10 56-13						5.5%			Prob. 2,000T near surface
H /	55-5	82[3]	86[7]	3.9	0.9	2.0 ±	2.1	-	-	
C		86[7]	91[0]	4.3	3.5	2.0 ±	4.7	-	-	
C		91[0]	95[4]	4.4	3.2	2.0 ±	4.4	-	-	
C	81-14A	95.5	97.0	1.5	4.1	0.1	4.2	-	-	
C		97.0	101[5]	4.5	1.0	1.0	1.5	-	-	oss.
		111.0	118.5	7.5	1.8	0.1	1.9	-	-	
	81-13	52[5]	61[0]	8.5	0.3	2.1	1.6	.03	.002	
		61	65	8.5	?	?	4.0	-	-	4 ft. lost core in "5"
	81-15	26[0]	30[2]	4.2	6.5	0.8	7.0	0.38	.005	
	55-6	48[0]	55[3]	7.3	2.6	2.0 ±	3.6	-	-	

SIGNIFICANT SILVER & GOLD ASSAYS

NORTH ZONE.

D.D.H.	@ footage	SILVER O.P.T.	GOLD O.P.T.	IN SECTION.
81-23	84'	0.15	0.02	I
81-10	52'	0.14	0.02	G
60-80	148'	<0.5	0.03	F
60-77	112'	0.85	0.02	E
60-77	40'	1.06	Tr.	E
60-75	141'	3.20	0.04	C
60-75	160'	0.27	0.06	C
81-6	157'	0.09	0.01	C
81-6	169'	0.33	0.02	C
81-8	201'	0.07	0.02	A-B
81-8	193'	0.06	0.01	A-B
60-76	155'	0.80	0.02	A-B
60-76	159'	0.68	0.01	A-B.

Shunsby Mines Ltd. Cunningham Twp. Ont. Page 1 Hole No. 4

Lat. 11037.0 Bearing N 52 W Started Dec.16/55
Dep. 9556.50 Dip -25 Completed Dec. 20/55
Elev. 9940.04 Depth 299.0'

0.0 - 12.0 Casing See DDH #1

12.0-31.0 Breccia, silicious, with sections good chalcopyrite and zinc in fractures and patches
17.4 - 23.4 Massive chalcopyrite and some zinc in patches and fractures

31.0-33.0 Agglomerate & tuff, fine disseminated pyrite.

33.0-46.0 Mostly breccia with narrow tuff bands at 35 to core, little zinc, pyrite.
At 41.7 3" Massive pyrrhotite

46.0-103 Fine grained andesite, tuff and agglomerate interbanded pyrite and considerable disseminated pyrrhotite and sphalerite, occasional narrow veinlet of chalcopyrite (Corresponds with long trenches 200 N East.

	Samples:	No	Width	%Cu	%Zn.
017.4-023.4	breccia massive chalco and zn.	808	6.0	1.25	2.88
065.0-070.0	Andes. py., pyrrh., chalco & zn.	809	5.0	0.49	0.52
070.0-076.0	ditto	810	6.0	0.20	0.24
076.0-086.0	"	811	10.0	0.11	0.05
086.0-091.0	"	812	5.0	0.57	0.42

Sample #809 assayed for nickel Tr., & lead. Nil.

103.0-161.5 Altered acid tuff and agglomerate highly silicious slight pyrite, fracturing at 35 to core. 128.0-130.0 Feldspar porphyry dike

161.5-299.0 Quartz diorite - quite massive.

299.0 END OF HOLE.

Shunsby Mines Ltd. Sultan, Ontario Page 1 Hole No. 5

Lat. 11033.89 Bearing N 52 W Started Jan.5/56
Dep. 9560.36 Dip 60 Completed Jan.7/56
Elev. 9940.04 Depth 204.0'

0 - 6.0 Casing.

6.0 -16.0 Breccia

16.0-21.8 Highly silicious breccia fairly well mineralized Zn fine specks chalcopyrite

21.8-25.3 Fine grained dark rock Lamprophyre dike?

25.3-45.0 Highly silicious breccia some pyrite in sections odd speck ZN

45.0-46.8 Breccia odd specks pyrite

46.8-51.1 Highly silicious breccia mineralized with Zn odd specks chalcopyrite

51.1-64.0 Breccia from 59.0 - 60.0 some Zn mineralization odd specks chalcopyrite

64.0-71.0 Agglomerate no mineralization

71.0-82.8 Very silicious mineralization 73.6 - 79.0 bleb chalcopyrite 72.6 - 77.9 fair Zn chalcopyrite

82.8-86.7 Highly silicious breccia slightly mineralized chalcopyrite fine specks Zn pyrite

86.7-91.0 Fractured silicious breccia fairly well mineralized chalcopyrite, pyrite fine disseminated Zn. not assayed.

91.0-95.4 Silicious breccia fair amount chalcopyrite, pyrite fine disseminated Zn.

95.4-103.0 Tuff slightly mineralized with pyrite and fine specks chalcopyrite

103.0-106.0 Tuff not mineralized

106.0-119.0 Coarse grained andesite fine pyrite

119.0-128.0 Tuff a little pyrite on fractures

128.0-148.0 Coarse grained andesite fine pyrite on fractures

148.0-156.5 Silicious fractured breccia mineralized chalcopyrite, pyrite, fine disseminated Zn.

156.5-165.0 Highly silicious breccia mineralized chalcopyrite, pyrite, fine specks Zn and graphite on fractures (11" ground core) at 158.9 and 9" at 164.0

165.0-166.4 Quartz and pinkish carbonate dig?

166.4-171.5 Silicious breccia fairly mineralized chalcopyrite, pyrite, graphite some fine specks possibly Zn? at 170.5 ground core 2 feet.

171.5-177.7 Silicious breccia poorly mineralized chalcopyrite, pyrite, graphite on fractures (agglomerate contact @ 176.5)

177.7-189.0 Agglomerate some fine pyrite

189.0-201.5 Tuff slight pyrite in spots

201.5-204 Quartz diorite

204 END OF HOLE.

	Samples:	No.	Width	%Cu	%Zn.
016.0-021.8	Breccia zn and chalco	813	5.8		0.20
046.8-051.1	Breccia zn and chalco	814	4.3		0.34
0828-086.7	Breccia py., chalco zn assume 2% Zn	815	3.9		0.88
086.7-091.0	ditto	816	4.3	3.53	) 3.31 % Cu
091.0-095.4	ditto	817	4.4	3.23	)
095.4-103.0	Tuff py., chalco	818	7.6		0.17
148.0-156.5	Breccia py., chalco, sphalerite	819	8.5		0.34
156.5-165.0	ditto 11" ground core	820	8.5		0.78
165.0-166.4	Quartz carb.	824	1.4		0.31
166.4-171.5	Breccia fair py and chalco zn	821	5.1		2.50
171.5-177.7	" poor mineralization	822	6.2		0.12
	Averages 82.8 - 95.4		12.6		2.61
	156.5 - 171.5		15.0		1.32

86.7 - 95.4 — 3.4 % / 8.7

Shunsby Mines Limited Sultan, Ontario Page 1 Hole No. 6

Lat. 11033.89 Bearing S 52 E Started Jan. 10/56
Dep. 9560.36 Dip -60 Completed Jan. 14/56
Elev. 9940.04 Depth 195.0

0 - 10 Casing - Extended to 25' on account of cave later at 24'

10 - 15.6 Agglomerate interbanded tuff, scattered chalcopyrite fine zinc in fractures disseminated pyrite

15.6-21.6 Breccia very silicious odd specks chalcopyrite, galena, zinc 21.0 - 23.0 ground core

21.6-31.0 Fine grained andesite tuff agglomerate interbanded fine pyrite in fractures 28.0 - 29.6 - ground core

31.0-33.6 Fine grained andesite tuff agglomerate interbanded sparse pyrite

33.6-44.0 Highly silicious breccia fine disseminated pyrite 37.0 - 38.0 fine streaks chalcopyrite

44.0-48.0 Agglomerate at 45 - 45.4 some zinc, chalcopyrite

48.0-55.3 Breccia & interbanded tuff narrow stringers graphite 1' foot section fairly massive chalcopyrite, pyrite pyrrhotite

55.3-69.0 Agglomerate interbanded tuff disseminated pyrite pyrrhotite

69.0-87.0 Agglomerate silicious fine threads calcite specks pyrite

87.0-106.7 Silicious agglomerate disseminated pyrite

106.7-125.6 Ditto as above

125.6-143.0 Fine grained andesite interbanded agglomerate

143.0-163.3 Fine grained andesite interbanded agglomerate

163.3-173.0 Ditto

173.0-195.0 Coarse grained quartz diorite

195.0 END OF HOLE

	Samples:	No.	Width	%Cu	%Zn.
048.0-055.3	Breccia and tuff some moss, chalco	823	7.3	2.59	7.0
055.3-061.0	Agglomerate py and pyrrh.	826	5.7	0.11	0.94
061.0-069.0	ditto	827	8.0	nil	nil
120.6-125.6	Sil. agglom. py. specks of zn.	828	5.0	nil	Tr.

18'-53'
.1'- mass cpy.

Shunsby Mines Limited Sultan, Ontario. Page 1 Hole No. 7

Lat. 11373.11 Bearing S 52 E Started Jan. 17/56
Dep. 9563.83 Dip 60 Completed Jan. 22/56
Elev. 9972.33 Depth 327.0'

0. - 14.0 Casing

14.0-31.0 Slightly siliceous agglomerate from 29 - 30' odd specks galena in fractures and pyrite.

31.0-52.6 Highly altered interbanded tuff agglomerate andesite fine galena on fractures slightly siliceous

52.6-57.0 Ditto as above

57.0-69.5 Badly shattered agglomerate.
61.6 - 61.9 fine disseminated chalcophrite
66.0 - 67.0 fine galena and phrrhotite.

69.5-88.0 Fine grained andesite tuff agglomerate no mineralization

88.0-108.0 Andesite agglomerate fine disseminated pyrite poorly Mineralized.

108.0-126.0 Fine grained andesite interbanded tuff agglomerate, poorly mineralized pyrite.

126.0-130.6 Agglomerate badly fractured

130.6-148.0 Interbanded tuff agglomerate poorly mineralized pyrite

148.0-164.5 Tuff and agglomerate no mineralization

164.5-172.9 Tuff silicious breccia pyrite graphite very fine disseminated chalcopyrite.

172.9-181.0 Highly silicious breccia fine pyrite, pyrrhotite.

181.0-186.9 Highly silicious tuff from 181.0 - 182.5 slightly mineralized pyrite, graphite.

186.9-206 Interbanded tuff agglomerate breccia fine disseminated pyrite, pyrrhotite in patches.

206.0-225.4 Agglomerate interbanded tuff very fine pyrite.

225.4-245.0 Andesite agglomerate fine threads calcite off specks pyrite.

245.0-265.0 Ditto as above.

265.0-284.6 Tuff from 280.0 - 284.0 graphite schist some pyrite.

284.6-305.0 Banded tuff little pyrite on fractures threads calcite.

305.0-310.6 Banded tuff badly fractured.

310.6-321.0 Andesite fine grained.

321.0-327.0 Fine grained quartz diorite.

327.0 END OF HOLE

Samples:

		No.	Width	%Cu	%Zn.
164.5-172.9	Tuff breccia, py. chalco.	825	8.4	0.01	

Shunsby Mines Limited, Sultan, Ontario — Page 1 Hole No. 8

Lat. 11343.02 — Bearing N 52 W — Started Jan. 24/56
Dep. 9609.42 — Dip 54 — Completed Jan. 26/56
Elev. 9977.23 — Depth 177.0

0 - 3.0 Casing

3.0-11.5 Highly silicious breccia well mineralized, zn patches, chalcopyrite

11.5-21.0 Ditto as above

21.0-25.0 Ditto as above

25.0-41.0 Banded tuff fine pyrite, zn poorly mineralized

41.0-60.0 Badly shattered tuff highly altered - 43.3 - 44.0 disseminated chalcopyrite zn, 50.0 - 50.6 fine chalcopyrite zn, 57.6 - 58.4 patches chalcopyrite fine zinc.

60.0-67.0 Fine grained andesite little pyrite on fractures

67.0-75.0 Prob fine grained quartz diorite

75.0-84.4 Coarse grained quartz diorite 76.4 ground core 6"

84.4-94.5 Highly silicious andesite odd specks pyrite on fractures

94.5-120.0 Coarse grained quartz diorite with some sections finer grained odd narrow quartz stringers.

120.0-138.0 Coarse grained quartz diorite some finer sections fine threads calcite and quartz stringers

138.0-168.0 Coarse grained quartz diorite

168.0-177.0 Finer grained quartz diorite

177.0 END OF HOLE.

Samples:	No.	Width	%Cu	%Zn
3.0-11.5	829	8.5	0.16	3.52
11.5-21.0	830	9.5	0.51	3.60
21.0-25.0	831	4.0	1.87	17.01
Average:				
3.0-250		22.0	0.62	5.95

Shumsby Mines Ltd. Sultan, Ontario Page 1 Hole No. 11

lat.	11162.10	Bearing S 52 E	Started	Feb. 3/56
Dep.	9473.71	Dip Collar -45	Completed	Feb. 5/56
Elev.	9974.91		Depth	191'

0 - 5 Casing

5 - 58 FLOW BRECCIA - interbedded and intergrading siliceous agglomerate and andesite. Generally green to gray-green no sulphides.

58 - 70 AGGLOMERATE - siliceous angular, to rounded fragments, grain size to 1" dia. Green to gray, very hard and compact, occasional banding at 30 to core, 67-70 scattered small blebs of pyr., chalcopyrite and sphalerite.

70 - 84 TUFF - green to dark green and chloritic, irregular banding at 30 to 45 to core, varies from hard and siliceous to fairly soft. Contact gradational over about 6".
74-78 fine pyrrhotite in bands up to 1" wide
78-84. Sulphides 10% mostly fine pyrite and pyrrhotite with odd specks of chalcopyrite.

84 - 89.5 TUFF - hard and siliceous, dark gray and green, thin banding at 45 to core. 84-85 mostly secondary blue quartz. 85-85.5 banded pyrite and sphalerite 30%.

89.5 - 98 BASIC DYKE - dark gray green, fine-grained, in contact becoming medium grained. Compact fresh looking feldspar and pyroxene. Down hole contact sharp at 60. Broken core in up hole contact with specks of pyrite.

98 - 128 TUFF - hard siliceous green, blue and black graphitic, banding at 45 to 60. 98-106 brecciated with secondary quartz, scattered blebs of brown sphalerite. 123-128 mostly secondary quartz.

128 - 133 TRAP DYKE - gray, fine-grained. Contact at 45 slightly finer grained.

133 - 135 GRAPHITIC TUFF - black, hard, siliceous, sheared and broken, graphite on slips, 10% sulphides Pyrite with a little chalcopyrite. Lost Core: 132.5-133.

135 - 156 QUARTZ BRECCIA - mainly glassey blue to gray quartz with dark inclusions. Scattered calcite stringers and graphite. Blebs and long parallel stringers of sulphide, mostly pyrite with minor chalco. Lost Core 142-43, 153-54.

156 - 158 GRAPHITIC TUFF - black, hard, siliceous, contacts at 45. Scattered bands of pyrite.

158 - 163 GRAY LAVA - gray, fine-grained, scattered pyrite, vague banding at 30 to core, possibly flow lines.

163 - 191 ANDESITE PORPHYRY + Irregular white to pink feldspar, fine light green matrix. No sulphides. 163-167 Crude banding, vague phenocrysts - Flow contact?

191 END OF HOLE.

	Samples:	No.	Width	%Cu	%Zn
66.0-71.0	Agglomerate py. chalco & Zn.	837	5.0	0.30	0.52
74.0-84.0	Tuff fine pyrrh. and pyrite	838	10.0	0.08	0.47
84.0-93.0	Ditto	839	9.0	0.08	0.28
98.0-106.0	Tuff graphitic some sphalerite	840	8.0	0.05	1.50
133.0-140.0	ditto plus some chalco	841	7.0	1.02	0.14
140.0-150.0	breccia well mineralized with py.	842	10.0	0.23	0.28
150.0-156.0	ditto	843	6.0	0.03	0.33

Shunsby Mines Ltd. Sultan, Ontario Page 1 Hole No. 17

Lat.	10795.03	Bearing	S 83 W	Started	Feb. 17/56
Dep.	9597.76	Dip	45	Completed	Feb. 21/56
Elev.	9940.04			Depth	245

0.0 - 5.8 Casing

5.8 -12.2 Graphitic andesite

12.2 -54.0 Highly siliceous breccia. Somewhat fragmental in narrow sections. Slight mineralization in scattered threads, mostly pyrite.

54.0 -67.0 Grayish tuff, less silicious, fracturing at 30 to core, sparse mineralization.

57.0 -98.0 Graphite shear with quartz and carbonate blebs and threads. Bands of breccia and silicious tuff at 30 to core. 72.0' - 76.0' - Fair Cpy. in massive patches and threads, slight Zns. Mineralization starts at 56.5' on to 80.0'. 62.5 - 72.0, erratic distrib. of sulphides including mass. pyrite, pyrr., chalco and Zns. 76.0 - 79.9, mostly pyrite in a breccia, slight cpy. and threads of Zns. 56.5 - 62.5, scattered patches of py., cpy., & Zns., also threads. 91.0 - 98.0, pyrite, chalco and Zns. mostly in fractures from 30 to 90 to core

98.0 -133.0 Graphitic breccia fracturing at 30 to core. Fair amount of pyrite in cubes (1/16") slight cpy. in fractures. From 109.0' good chalco, slight Zns. in blebs and threads.
Slight cpy, & Py. (sampled to complete section) 103.0 - 106.0', fair Zns & Cpy. in fractures in graphitic shearing. 106.0 - 109.0, very slight cpy. sampled to complete section. 109.0 - 115.0, good distribution of cpy. with slight zns. in fractures and blebs. 115.0 - 121.0, very good chalco, in massive narrow threads and blebs in graphitic breccia, slight Zns. 121.0 - 127.0', good cpy. & slight zns. in patches. 127.0 - 133.0, good cpy. & slight zns. in threads and blebs.
Graphitic breccia, fracturing at 30 to core, good chalcopyrite slight Zns in blebs and threads

133.0 -147.5 Dark green basic andesite. Patches of pyrite in cubes slight chalcopyrite

147.5 -167.4 Fine grained grey tuff. 147.5 - 151.0 massive patches chalcopyrite

167.4 -177.0 Silicious breccia, large angular quartz fragments, massive patches chalcopyrite, some bands of andesite. 166.4 - 169.8 - massive pyrite and patches massive chalcopyrite. 173.4 - 177.4 - Fair chalcopyrite in massive patches 169.8 - 173.4 - Slight pyrite - samples to complete section.

177.0 -185.0 Grey tuff, sparse mineralization slight pyrite

185.0 -200.3 Greyish green agglomerate, few splashes of pyrite

200.3 -245.0 Fine grained grading to coarse quartz diorite, coarse starts at 215.0'. No mineralization.

245.0 END OF HOLE

3.3' Cu 3.5'

3.16/3.4'

	Samples:	No.	Width	%Cu	%Zn
56.5-62.5	graphite shear py. chalco, zinc	867	6.0	0.35	1.50
62.5-72.0	ditto	865	9.5	0.31	2.73
72.0-76.0	"	864	4.0	0.76	2.73
76.0-79.9	"	866	3.9	0.05	0.38
98.0-103.0	graphitic breccia chalco and zn.	874	5.0	0.15	nil
103.0-106.0	ditto	870	3.0	0.51	1.60
106.0-109.0	"	871	3.0	1.63	nil
109.0-115.0	"	872	6.0	1.63	0.35
115.0-121.0	"	873	6.0	2.19	0.30
121.0-127.0	"	875	6.0	1.07	0.56
127.0-133.0	"	876	6.0	3.47	1.17
147.5-151.0	Tuff massive patches chalco	877	3.5	3.31	
166.4-169.8	breccia mass. patches of chalco	878	3.4	3.16	
169.8-173.4	ditto slight pyrite	880	3.6	0.20	NA
173.4-177.4	"	879	4.0	2.24	
	Averages:				
	56.5 - 79.9		23.4	0.35	2.02
	103.0 - 133.0		30.0	1.88	0.73
	166.4 - 177.4		11.0	1.86	

massive patches cpy →
127 - 133 - 6.0 - 3.47 - 1.17
147.5 - 151 - 3.5 - 3.31 - ?
166.4 - 169.8 - 3.4 - 3.16 - ?
169.8 - 173.4 - 3.6 - 0.20 - ?
173.4 - 177.4 - 4.0 - 2.24 - ?

11

Shunsby Mines Ltd. Sultan, Ontario Page 1 Hole No.20

Lat.	10795.03	Bearing	N 34 W	Started	Feb. 26/56
Dep.	9597.76	Dip	45	Completed	Mar. 15/56
Elev.	9940.04			Depth	742

0.0 - 7.0 Casing

7.0 - 8.2 Andesite - no min.

8.2 -107.0 Silicious breccia - mostly quartz fragments, slight pyrite. 9.2' - 10.0' massive pyrite. 37.5' - thread of chalcopyrite. 42.0' - 2" heavy fine chalco. 48.0 - Few threads of chalco. 50.2 - 51.4 - Few threads of chalco and little zinc. 52.6' - threads and patches cpy. 62.5' - patch of cpy. & zns. 64.8' - few threads of cpy. Threads are in fractures up to 1/8" in thickness. 48.0' - 51.4' widely scattered threads of cpy. 68.0' - few threads cpy. and little zn. 81.5 - 85.5 - scattered massive chalco pyrite in patches and threads in fractures, fair zinc in patches. 93.5 - thread of cpy. 101.0 - 107.0 - Hard glassy greyish white quartz with scattered patches and threads of cpy. and a few patches Zns.

107.0-109.0 Dark chloritic andesite, sparse min.

109.0-114.0 Light greenish grey tuff, few patches chalco. 107.0 - 114.0 few patches chalcopyrite in tuff.

114.0-125.0 Andesite tuff breccia, scattered patches massive chalco and zns. 114.0 - 117.0 scattered patches chalco and some zinc. 117.0 - 120.7 hard light green quartzite? Sparse min. 120.7 - 124.7 very massive patches chalco. 125.0 - 137.5 light greenish tuff, well pyritized . 137.5 - 145.0 graphitic andesite patches coarse pyrite, little chalcopyrite. 137.5 - 145.0 mostly pyrite little cpy. in threads.

145.0-156.0 Greyish white silicious breccia 145.0 - 156.0 Very massive sections of chalco and pyrite, little zinc.

156.0-161.0 Fault zone (graphitic breccia) Lost core - 2.0'

161.0-198.0 Dark green andesite, slight pyrite with agglomerate bands. 174.0 - 176.5 - Agglomerate.

198.0-263.0 Medium grained quartz, diorite, sparse mineralization. 215.5 - darker green and much more disseminated pyrite. 227.0 - Thin thread of chalcopyrite at flat angle to core. 227.0 - 231.8 Fine disseminated pyrite. 231.8 to 237.0 considerable coarse pyrite.

263.0-276.5 Light greyish green altered tuff and agglomerate, slight pyrite.

276.5-290.00 Dark green medium grained andesite? coarse pyrite

290.0 Medium to fine grained diorite sparse mineralization numerous quartz stringers. 309.0 - 325.0 light green fine grained diorite, prob. alteration. 325.0 - 416.0 medium grained diorite sparse mineralization. 416.0 - 584 medium grained diorite a little pyrite dark green, more hornblende.

290.0-638.0 Diorite - gradational. 584.0 - slightly schistose, fine disseminated pyrite, fine grained. Tuff or agglomerate? or

638.0-679.6 Altered diorite or outer phase from dark green to greenish grey and finer grained more schistose mineralization finer pyrite, and increasing.

679.6-687.0 Graphitic schist, may be altered greywacke, good pyrite in fractures. Contact at 30 to core down dip. Looks like steep westerly dip quartz threads and patches.

687.0-693.5 Sheared agglomerate or tuff, fine disseminated pyrite.

693.5-705.0	Coarse grained "spotted" rock may be agglomerate. No mineralization. looks porphyritic.	
705.0-709.0	Grey tuff fine grained, fair pyrite.	GT
709.0-713.5	Graphitic shear, good pyrite in fractures, contact sharp at 30 to core.	~~~
713.5-718.5	Grey tuff, fine grained, fair pyrite.	GT
718.5-722.5	Graphitic shear, scattered quartz blebs, good pyrite in threads.	~~~
722.5-739.5	Dark grey tuff, fine grained, fair pyrite in threads	GT
739.5-742.0	Dark green andesite, some pyrite. A? d?	Gt
742.0	END OF HOLE.	

Samples:

		No.	Width	%Cu.	%Zn
48.0-51.4	breccia py. slight chalco	886	3.4	0.30	
1.5-85.5	breccia patches of mass. chalco	887	4.0	1.17	1.82
101.0-107.0	quartz, specks of chalco & zinc	888	6.0	0.51	0.65
107.0-114.0	Tuff " " " "	889	7.0	0.30	-
114.0-117.0	" " " " "	890	3.0	1.37	1.96
117.0-120.7	Quartzite sparse mineral	7 891	3.7	0.10	-
120.7-124.7	breccia mass. patches of chalco	892	4.0	5.10	0.70
137.5-145.0	tuff breccia little chalco and py.	893	7.5	0.46	-
145.0-156.0	breccia py. mass chalco and zn. (0.86?)	894	11.0	0.86	7.53
Average:	114.0 - 124.7		10.7	2.32	0.81

Box 16,17,18 Regular diorite, foliage unknown... varying to flow and porphyry.

Box 19 – Coarse grained andesite with tiny feldspar phenos.
Box 20 – Fine grained andesite with tiny feldspar phenos.
Probably all a phase of dyke diorite.

WH Jan 29/64

patches cpy → 120.7 - 124.7 - 4.0 - 5.10 - 0.70
145.0 - 156 - 11.0 - 0.86 - 7.53

Shunsby Mines Ltd. Sultan, Ontario Page 1 Hole No. 21.

Lat.	10795.03	Bearing	N 67 W	Started	Mar. 2/56
Dep.	9597.76	Dip	45	Completed	Mar. 4/56
Elev.	9940.04			Depth	207

0.0 - 5.0 Casing

5.0 - 6.0 Andesite - sparce mineralization

6.0 -20.0 Brecciated iron formation. Few blebs and threads of chalcopyrite and pyrite. At 17.5 some minor faulting with slight displacement.

20.0 -25.0 Grey fine grained tuff, may be altered version of iron formation, sparse mineralization. 21.3 - 25.4 - 10" Ground.

25.0 -42.0 Brecciated iron formation. Could be fault 32.0 - 35.0 Sludge sample. 35.0 - 42.0 Numerous fractures filled with chalcopyrite some zinc, also blebs chalcopyrite in fragments. 25.4 - 30.0 - 3.0' Ground. 30.0 - 31.0 - 6" Ground. 31.0 - 32.5 - 6" Ground. 32.5 - 35.0 - 2.0 Ground

42.0 - 46.0 Slatey greywacke, slightly graphitic thread chalcopyrite at contact with I.F. 42.0 - 46.0 slight chalcopyrite in threads.

46.0 -59.3 Brecciated iron formation, chalcopyrite well distributed in fractures and irregular blebs, slightly graphitic. 46.0 - 52.5 considerable chalcopyrite in threads and blebs, 52.5 - 59.3 scattered blebs and threads chalcopyrite some zinc.

59.3 -69.5 Slaty greywacke, bedding at 40 to core. slight pyrite

69.5 -111.0 Brecciated iron formation with tuff and graphitic bands. Scattered blebs and threads chalcopyrite and zincs. 68.5 - 79.5 scattered threads chalcopyrite slight zinc. 79.5 - 84.5 Ditto #900. 81.6 - 86.0 - 1.0' ground. 84.5 - 92.0 Some very good sections chalcopyrite in threads and irregular blebs. 92.0 - 97.0 Scattered threads chalcopyrite some zinc. 97.0 - 102.0 Ditto #903. 102.0 - 107.4 Ditto #904. 107.4 - 111.4 Scattered threads chalcopyrite.

111.0-119.0 Slaty graphitic greywacke patches chalcopyrite some zinc.

119.0-140.0 Silicious breccia, numerous chalcopyrite filled fractures. 119.0 - 127.4 Fair chalcopyrite in numerous threads also fair zinc. 127.4 - 137.4 Good threads and patches chalcopyrite. 137.4 - 140.6 patch chalcopyrite and threads

140.6-147.3 Grey tuff, chalcopyrite and pyrite disseminated

153.7 - 157.2 - ass 3.5' @ 1.3% Cu + 3.5% Zn (Ko.)

147.3 Hard silicious breccia - scattered threads and patches chalcopyrite zinc and slight Phs. 157.2 - 159.7 Fairly massive zincs and good chalcopyrite. 159.7 - 164.5 Few threads Chalcopyrite. 164.5 - 170.0 First 10" very massive chalcopyrite. 170.0 - 180.0 Consistent patches massive chalcopyrite. 180.0 - 185.0 Scattered patches chalcopyrite and zinc.

147.3-192.0 Hard silicious breccia.

192.0-207.0 Diorite, fine to medium grained. Few threads pyrite chalcopyrite. 194.0 - 196.3 Grey tuff.

207.0 END OF HOLE.

Samples:	No.	Width	%Cu	%Zn.
35.0-42.0	896	7.0	.92	1.63
42.0-46.0	897	4.0	.15	.18
46.0-52.5	898	6.5	2.60	.70
52.5-59.3	899	6.8	.87	.51
79.5-79.5	900	11.0	.36	.65
79.5-84.5	901	5.0	.15	.70
84.5-92.0	902	7.5	2.96	.60
92.0-97.0	903	5.0	.46	.47
97.0-102.0	904	5.0	.87	.75
102.0-107.4	905	5.4	.46	.23
107.4-111.4	906	4.0	1.12	.23
111.4-119.0	907	7.6	.51	2.29
119.0-127.4	908	8.4	.66	2.71
127.4-137.4	909	10.0	2.24	1.49
137.4-140.6	910	3.2	1.43	1.73
140.6-147.3	911	6.7	.56	.98
157.2-159.7	912	2.5	2.40	6.45
159.7-164.5	913	4.8	.20	.47
164.5-170.0	914	5.5	1.58	1.26
170.0-180.0	915	10.0	1.17	.65
180.0-185.0	916	5.0	1.22	.56
Averages:				
84.5-185.0		100.5	1.09	1.14
35.0-59.3		24.3	1.23	0.83

Shunsby Mines Limited, Sultan, Ontario — Page 1 Hole No. 22

Lat.	10795.03	Bearing	N 67 W	Started	Mar. 5/56
Dep.	9597.76	Dip	60	Completed	Mar.10/56
Elev.	9940.04			Depth	408.0'

00 - 6.0 Casing

6.0 - 13.0 BC Hard silic. breccia, fair diss. py. & slight cpy.

13.0- 29.5 ST Tuff - greyish green, almost parallel to core. Sparse min.

29.5-40.0 FAULT ZONE - Frag. breccia. 30.0' - 34.0 - 3.5 ground. 34.0' - 40.0 - 4.0' ground. Fault probably.

40.0-74.0 BC Silicious breccia, large angular fragments good cpy. in sections. 44.0 - 47.5 Few large patches chalcopyrite, some zinc. 61.5 - 69.5 - few threads cpy. and diss. zns. 56.0 - 56.7 - fair cpy. & zn. in patches.

74.0-98.7 IF BC Brecciated iron formation, diss. sphalerite with few threads cpy. 83.0 - 85.0 - fine diss. zns Some minor displacement up to 1/4", almost down dip. 88.0 - 88.6 - fine diss, zns. 91.0 - 98.7 - Two sections good chalco in threads plus diss. zns.

98.7-111.0 BC Silic. Breccia scattered threads of cpy. & patches Zns. 111.0 - 111.5 - Band of andesite, slight py.

110.0-;26.2 Interbanded slaty greywacke (slightly graphitic) and iron formation. Most of min. confined to brecciated I.F. Some good patches cpy. & Zns. 111.5 - 117.0 Includes 1 foot slaty gwke., slight py. plus well distrib. cpy. in patches, slight zns. 117.0 - 119.0 - andesite, slight py. 119.0 - 122.0 - Massive patches chalco, pyrite slight zns in silic breccia. 122.0 - 126.2 - Grey tuff well min. pyrite in mass. patches.

126.2-149.5 Slaty graphitic greywacke, patches massive pyrite, slight cpy. 130.0 - 132.6 includes 1 foot massive chalco. slight zns.

149.5-197.0 Sheared agglomerate, diss. pyrite

197.0-408.0 Diorite - gradational from coarse to fine to medium. Sparse min. 197.0 - 202.0 - looks porphyritic with large felds par (pink) fragments. Slight pyrite. 206.0 - 210.0 - Few specks chalco & pyrite. 221.0 - 224.0 - Few specks chalco & pyrite, slight zns. 238.0 - 238.5 - Few coarse cubes pyrite, little cpy. 256.0 - 265.0 - Grey tuff greenish grey, a little fine pyrite. May be fine grained phase of diorite? 265.0 - 335.0 - Sparse min. in med. grained diorite. 335.0 - 408.0 - Coarser grained and very sparse min. Few threads quartz & carbonate. 377.0 - 379.0 - Fine grained diorite.

408.0 END OF HOLE

Samples:

	No.	Width	%Cu	%Zn
26.0-36.0	918	10.0	0.10	0.89
36.0-40.0	919	4.0	0.25	1.32
44.0-47.5	920	3.5	0.41	1.30
54.5-61.5	930	7.0	0.05	nil
61.5-69.5	921	8.0	0.02	1.93
91.0-98.7	922	7.7	0.20	0.91
98.7-104.0	931	5.3	0.02	tr.
104.0-111.5	932	7.5	0.07	tr.
111.5-117.0	923	5.5	0.46	0.71
117.0-119.0	924	2.0	0.46	Nil
119.0-122.0	925	3.0	2.85	Tr.
122.0-126.2	934	4.2	0.07	Tr.
126.2-130.0	933	3.8	1.28	Tr.
130.0-132.6	926	2.6	10.40	Tr.

	Samples: (cont'd)	No.	Width	%Cu	%Zn
170.5-172.5		935	2.0	0.05	Nil
182.5-184.5		936	2.0	0.15	Nil
206.0-210.0	Spectro	927	4.0	0.30	1.17
210.0-214.0		937	4.0	0.02	0.25
214.0-221.0		938	7.0	0.03	0.25
221.0-224.0		928	3.0	0.35	2.04
224.0-230.0		939	6.0	0.05	0.28
237.0-241.0		940	4.0	0.02	0.15
	Averages: 119.0 - 132.6		13.6	3.00	Tr.

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 25

Lat.	10723.57	Bearing	N 88 E	Started	Mar. 25/56
Dep.	9420.69	Dip	55	Completed	Mar. 28/56
Elev.	9944.81			Depth	310

0.0 - 5.5 Casing

5.5 -122.3 Agglomerate/p tuff - greyish fine grained, some fine disseminated pyrite with odd speck chalcopyrite, more silicious in sections. Large (1/2") rounded spherical inclusions. 68.2 few specks chalcopyrite in quartz and calcite stringer. 70.5 Few specks and patches chalcopyrite at and near fracture at 45 to core. Fine pyrite.

122.3-141.5 Greywacke to graphitic slaty greywacke, fractured at 60 to core. 126.0 1" narrow quartz stringers, some galena and chalcopyrite little Zns. 126.5 - 141.5 Numerous patches of coarse pyrite and fine pyrite in threads.

141.5 Brecciated slaty & I.F. greywacke, numerous bands at 45 to core of quartz and carbonate with patchy chalcopyrite and ZnS along with pyrite. 141.5 - 146.5 Fair chalcopyrite and sligh ZnS in patches and threads. 146.5 - 152.3 Slight chalcopyrite and zinc. 141.5 - 149.0 - 1.0' Ground. 152.3 - 161.0 Slight chalcopyrite and Zinc. 161.0 - 166.0 Slight chalcopyrite and Zinc. 166.0 - 172.0 Fair chalcopyrite in patches. 173.0 - 178.7 - 0.8' ground. 172.0 - 177.0 - Good Mass. Patches cpy. & Zns. 177.0 - 183.0 - Slight cpy. & Zns. 183.0 - 188.0 - Good threads cpy. slight zns. 188.0 - 190.0 - Band of andesite slight py. 190.0 - 194.0 - Brecciated I.F., slight chalco. 194.0 - 201.0' - Good chalco, mass. patches. 192.0' - 201.0' . Sludge (2.8' ground)

206.0-253.0 Fine grey tuff with irreg. threads & patches cpy. & zns. 201.0 - 206.5' includes mass. patch cpy. at 203.5 (3"). 206.5 - 212.0' - Threads cpy. 194.0 - 201.0 - badly shattered brecciated I.F. prob. on account of contact with tuff. Ground 2.8' of good chalco but have sludge. Quite massive pyrite. At 219.0' - 4" slight cpy. py. & zns. From 237.0' - more schistose with fractures at 30 to core.

253.0-303.0 Med. grained dark green chloritic andesite, num. qtz. threads & strgs. slight py. 303.0 - 310.6 Diorite dark green

310 END OF HOLE

Samples:

	No.	Width	%Cu	%Zn.
141.6-146.5	941	5.0	0.77	0.66
146.5-152.3	942	5.8	0.41	1.58
152.3-161.0	943	8.7	0.51	0.77
161.0-166.0	944	5.0	0.92	0.51
166.0-172.0	945	6.0	0.20	0.05
172.0-177.0	946	5.0	1.89	3.67
177.0-183.0	947	6.0	0.46	0.05
183.0-188.0	948	5.0	0.77	1.02
188.0-190.0	950	2.0	0.20	0.07
190.0-194.0	951	4.0	0.26	1.27
194.0-201.0	954	7.0	0.46	1.53
201.0-206.5	952	5.5	2.75	0.89
206.5-212.0	953	5.5	0.41	1.48

Average:

141.5-212.0	70.5	0.77	1.06

5-15 d
15-28 -C + Gr alt.
28-37 -C

Shumsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 26

Lat.	10943.53	Bearing	N 52 W	Started	Mar. 29/56
Dep.	9603.88	Dip	45	Completed	Apr. 6/56
Elev.	9933.75			Depth	258

0 - 5	Casing
5 - 37	Shattered broken, weathered core, probable fault zone, odd specks of chalcopyrite and sphalerite, much lost core. 5 - 11 Fine to coarse diorite. 11 - 13 - 75% fine granular pyrite banded at 30 to core. 13 - 15 Coarse green rather fresh diorite. 15 - 28 Alternating blue quartzite and greenstone bands. 28 - 37 Blue brecciated quartzite. Lost core - 17 - 19, 21 - 24, 25 - 26, 27.5 - 28, 30 - 32.
37 - 71	Graphitic quartzite - gray, blue to dark graphitic all considerably brecciated. 37 - 40.5 Almost void of sulphides. 40.5 - 71 Chalcopyrite and a little sphalerite as blebs and irregular stringers often near parallel to the core. Grading into blue quartzite.
71 - 91	Blue quartzite - Hard, glassey, slightly brecciated, sparse scattered grains of chalcopyrite and sphalerite.
91 - 94	Argillite - Dark gray, graphitic, fine grain, sharp contacts at 45. Almost void of sulphides except for small blebs in the contacts. 71 - 82, 82 - 94.
94 - 101	Chalcopyrite vein - brecciated blue quartzite with long coarse stringers of chalcopyrite at 20 to 30 to core. About 25% chalcopyrite.
101 - 130	Graphitic quartzite - Generally dark graphitic brecciated quartzite interbedded with gray fine grained argillite bands up to 1' wide. Scattered small belbs of chalcopyrite mostly in the quartzite. 106 - 107 stringer of chalcopyrite parallel to core. 101 - 110, 110 - 120, 120 - 130, 128 - 130 Sulphides 20% but mostly pyrite.
130 - 138	Andesite - Green, fine grain, scattered pyrite and odd specks of chalcopyrite.
138 - 161	Breccia - Irregular bands of andesite, brecciated quartzite and graphitic material. Sheared and broken. Scattered pyrite and odd specks of chalcopyrite.
161 - 178	Andesite - Green, fine grain, leucoxene alteration, scattered pyrite.
178 - 180	Quartz diorite - medium grain, sharp contacts at 30 to core.
180 - 192	Andesite - as above.
192 - 201	Quartz breccia - white quartz with large inclusions of greenstone. Scattered pyrite and specks of chalcopyrite.
201 - 222	Graphitic shear - graphitic, quartz, heavily sheared and broken. About 50% of core ground. Scattered pyrite and a few specks of chalcopyrite. Lost core 204 - 08, 209 - 10, 211 - 12, 215 - 16, 220 - 21. Sludge 198 - 221.
222 - 258	Andesite - pale green, fine grain, scattered quartz stringers and specks of pyrite.
258	END OF HOLE.

Samples:		No.	Width	%Cu	%Zn
40 - 47		964	7.0	1.43	0.51
47 - 54		965	7.0	2.09	0.30
54 - 61		966	7.0	1.53	0.91
61 - 66		967	5.0	0.46	1.22
66 - 71		968	5.0	1.32	0.86
71 - 82		969	11.0	0.05	0.15
82 - 94		970	12.0	0.25	0.46
94 - 101		971	7.0	10.45	0.51
101 - 110		972	9.0	1.02	0.10
110 - 120		973	10.0	0.45	0.40
120 - 130		974	10.0	0.81	1.47
192.0-201.0		980	9.0	0.09	nil
198 - 221.0	sludge	981	23.0	0.20	0.05
Averages:					
40 - 71			31.	1.42	0.72
71 - 94			23.	0.15	0.31
94 - 130			36	2.63	0.64
40 - 130			90	1.58	0.58

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 27

Lat.	10637.10	Bearing S 87 E	Started Mar. 29/56
Dep.	9469.37	Dip - minus 45	Completed Apr. 2/56
Elev.	9945.57		Depth 260

0 - 9 Casing

9 - 41 Quartz Breccia - Light gray, hard and siliceous, angular to rounded fragments. Scattered fine pyrite. 14 - 15 sphalerite and pyrite, one bleb of chalcopyrite. Lost core 28 - 30.

41 - 56 Quartz Breccia - As above with sphalerite, scattered chalco-pyrite and pyrite

56 - 62 Fault - Sheared and broken, graphitic gouge, 3' lost core.

62 - 122 Andesite agglomerate - Gray to light gray, soft, minor schisting. Rounded fragments (lapilli) up to 1" diameter. 89 - 122 Sheared and broken. Lost core - 89-91, 96-97, 120-122. Scattered irregular graphitic bands after 92'. 103 - 1" graphite with grains of chalcopyrite.

122 - 143 Graphitic tuff - Thin banding at 70 degrees to core, black to dark gray. Sulphides as bands and fine irregular stringers also fine disseminated grains. Mostly pyrite with scattered chalcopyrite and sphalerite. Gray silicious bands increasing down hole. Lost core 33-35. 122-127 - sparse chalcopyrite. 127-137 - chalco, almost nil, 2' lost core. 137-143 - Sparse chalcopyrite, Sludge.

143 - 192 Quartzite Breccia - Blue to pale gray quartzites generally brecciated. Occassional argillaceous band up to 1' wide. 143-160 - Scattered grains of pyrite. 160-171 - Blebs and fine stringers of chalcopyrite possibly 1% cu. 171-183 - Scattered large blebs of pyrite with minor chalcopyrite. 183-192 - Scattered pyrite

192 - 205 Graphitic Quartzite - Blue to black graphitic, scattered pyrite with odd bleb of sphalerite, very little chalco. 195-200 - Sheared and broken, calcite stringers. 1.5' lost core.

205 - 260 Andesite - Uniform gray green, fine grain, widely scattered grains of pyrite.

260 END OF HOLE.

	Samples:	No	Width	%Cu	%Zn
041.0-046.0	breccia pyrite, chalco, sphalerite	955	5.0	0.61	3.11
046.0-051.0	" " " "	956	5.0	0.82	1.02
051.0-056.0	" " " "	957	5.0	0.41	1.27
122.0-127.0	graphitic tuff py. chalco, sphalerite	958	5.0	0.77	3.26
127.0-137.0	" " " " "	959	10.0	0.15	0.41
137.0-143.0	" " " " "	960	6.0	0.92	0.66
129.0-135.0	sludge sample	963	6.0	0.25	0.20
160.0-171.0	breccia some chalco	961	11.0	1.63	0.81
171.0-183.0	" pyrite& "	962	12.0	0.51	0.55
	Averages: 41.0 - 56.0		15.0	0.61	1.80
	122.0 - 143.0		21.0	0.51	1.16
	160.0 - 183.0		23.0	1.04	0.63

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 30

Lat. 11155.12 Bearing N 52 W Started Apr. 8/56
Dep. 9675.74 Dip - minus 45 Completed Apr.11/56
Elev. 9927.58 Depth 180

0 - 11 Casing

11 - 180 Andesite - uniform gray green, fine grain, scattered pyrite as sparse grains. 16 - 24 - Badly broken core. 83 - 110 - Badly broken core, no sulphides.

180 END OF HOLE.

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 31

Lat.	11350.05	Bearing	N 87 W	Started	Apr. 12/56
Dep.	9705.19	Dip - Minus	45	Completed	Apr. 14/56
Elev.	9932.42			Depth	149

0 - 8	Casing
8 - 38	Quartzite Breccia - Blue to gray brecciated quartzite scattered grains & irregular stringers of pyrite with odd blebs of sphalerite. 8 - 24 - Core generally badly broken with rusty fractures. 26 - 29 - Irregular 1/2" sulphide stringer running down core - pyrite, sphalerite and chalcopyrite. 29 - 38 - Almost void of sulphides.
38 - 46.5	Trap dyke - Fine grained, dark gray green. Sharp contact at 45. Similar to andesite but appears to be a dyke.
46.5- 57	Quartzite Breccia - Blue to gray. Sulphides almost nil.
57 - 63	Fault - Broken and crumbled quartzite. Lost core 61-62, 62.5-63.
63 - 75	Andesite? Gray green, generally fine grained with scattered vague phenocrysts, also faint banding, possibly tuff or sediments - no sulphides.
75 - 85	Blue Quartzite - Generally brecciated with blebs and stringers of pyrite. 4" banded graphite in up hole contact. Also scattered small blebs of sphalerite.
85 - 149	Andesite - Green, fine grain generally with vague phenocrysts. Possibly altered diorite? Sulphides almost nil. Generally badly broken with rusty weathered fractures. Leucoxene alteration. 145 - 46 - Broken quartz stringers, no sulphides 2' lost core at end of hole.
149	END OF HOLE.

Samples:

		No.	Width	%Cu.	%Zn
75.0-85.0	Quartzite py. blebs of sphalerite	986	10.0	Tr	0.46

8 - 38 - C
38 - 46 - Trap (Gr?)
46 - 57 - C
57 - 63 - C + ~~~ 61-63
63 - 75 - ? Gr?
75 - 85 - C
85 - 149 - C. not diss

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 33

Lat.	10979.00	Bearing	S 52 E	Started	Apr. 17/56
Dep.	9552.00	Dip	- 50	Completed	Apr. 18/56
Elev.	9938.58			Depth	123

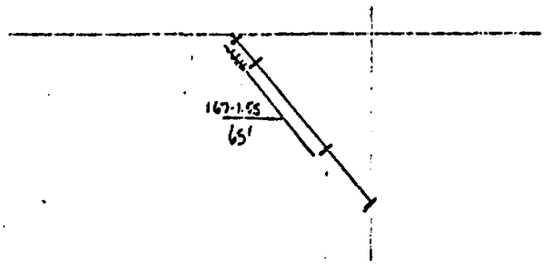
0 - 17 Casing

17 - 85 Graphitic quartzite - Blue to gray brecciated quartzite with dark graphitic banding usually at 45 approximately. Chalcopyrite scattered fairly uniformly throughout as coarse stringers and blebs also a little sphalerite. 17 - 20 core badly shattered and broken, only a few specks of chalcopyrite. 77 - 79 - core missing.

85 - 123 Andesite- Gray at contact, becoming gray green, fine grain massive. Scattered pyrite and a few widely scattered fine stringers of sphalerite.

123 END OF HOLE.

	Samples:	No	Width	%Cu	%Zn
20 - 30		990	10	1.02	.76
30 - 40		991	10	.97	.56
40 - 50	8" lost core	992	10	.86	.56
50 - 60		993	10	2.80	.76
60 - 66		994	6	4.38	.51
66 - 72	Increasing sphalerite	995	6	3.26	7.80
72 - 85	Mostly pyrite	996	13	.25	1.94
	Averages:				
50 - 72			22.0	3.36	2.61
20 - 85			65.0	1.67	1.55



Good Cu !

✓

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 36

Lat.	10975.00	Bearing	N 52 W	Started	Apr. 20/56
Dep.	9558.00	Dip	- Minus 45	Completed	Apr. 21/56
Elev.	9938.58			Depth.	140

0 - 13 Casing

13 - 33 Graphitic Quartzite - Dark gray, fine grain, badly broken. Scattered chalco and sphalerite as fine stringers and grains. 29.5 - irregular 1/2" stringer of sphalerite, galena cubes and chalcopyrite. Lost core 30.5 - 31.5.

33 - 78 Quartzite Breccia - Fine grained glassey, white to gray. 33 - 44 Graphitic patches, sphalerite, pyrite and sparse chalcopyrite. 44 - 76.5 - massive very little sulphide. 76.5 - 78 - Blebs of pyrite with a few specks of sphalerite and chalcopyrite.

78 - 94 Green sediment? Compact fine grain green chloritic, sprinkled with fine pyrite crystals. Could be intrusive dyke.

94 - 104 Andesite - Quartzite fragments - probably contact material. Green fine grained andesite with irregular quartzite patches, scattered pyrite.

104 - 111 Diorite - Gray green medium grain, fine white feldspar. Sharp contacts.

111 - 116 Quartzite - Blue, fine, glassey.

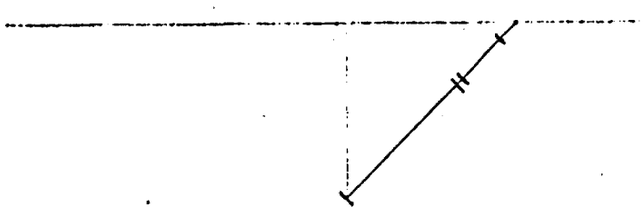
116 - 119 Andesite - Quartzite - Contact material as above 118 - 1/2" stringer with fine chalcopyrite.

119 - 140 Andesite - Generally dark green, sheared and broken. Sometimes resembles diorite over short lengths. No sulphides. 122 - 128 - Intense shearing, probably fault.

140 END OF HOLE.

Samples:

		No	Width	%Cu	%Zn
13 - 20	very sparse chalco & sphalerite	401	7	1.02	5.46
20 - 30	increasing " " "	402	10	2.35	6.48
30 - 40	decreasing " " "	403	10	1.63	4.44
40 - 44	chalco almost nil	404	4	0.97	0.92
44 - 49	chalco nil	408	5	Tr	0.50
	Average: 13.0 - 44.0		31.0	1.65	4.87



Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 35

Lat.	10981.55	Bearing	S 52 E	Started	Apr. 18/56
Dep.	9549.91	Dip	-80	Completed	Apr. 19/56
Elev.	9938.58			Depth	96

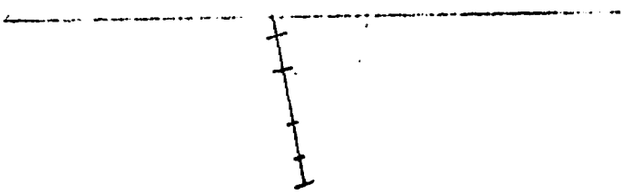
0 - 11 Casing

11 - 82 Quartzite and chert - banded chert and quartzite light gray to dark graphitic. Banding usually about 60 to core. 11 - 31 Scattered chalcopyrite mostly as irregular bands up to 1/2" wide. No sphalerite. 31 - 62 Very sparse chalcopyrite and sphalerite as widely scattered fine irregular stringers. 62 - 72 Increasing pyrite, patches of sphalerite and sparse small blebs of chalcopyrite. 72 - 82 Probably 5% pyrite, very sparse sphalerite, no chalcopyrite seen. 74.5 - 77 Sheared graphite and pink calcite.

82 - 96 Andesite - gray green, massive, no sulphides. Sharp contact at steep angle.

96 END OF HOLE.

	Samples:	No	Width	%Cu	%Zn
11.0-21.0	Chert some chalco	997	10.0	3.98	2.70
21.0-31.0	" " "	998	10.0	1.73	0.46
62.0-72.0	" py. chalco and sphalerite	999	10.0	0.46	3.87
72.0-82.0	" pyrite and sphalerite	1000	10.0	0.30	0.56
	Average: 11.0 - 31.0		20.0	2.85	1.58



Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 39

Lat.	10639.01	Bearing	N 87 W	Started	Apr. 25/56
Dep.	9655.74	Dip	-45	Completed	Apr. 28/56
Elev.	10000.94			Depth	186

0 - 8 Casing

8 - 144 Chert Breccia - Gray, glassey, thoroughly brecciated. Sparse grains of pyrite, pyrrhotite. 78 - 1" Stringer with sphalerite. 119 - Large bleb of pyrrhotite and pyrite. 131 - 144 Graphitic patches or inclusions.

144 - 166 Andesite agglomerate and tuff - gray to buff, relatively soft often brecciated with graphitic stringers. Very badly sheared and broken. Lost core - 146 - 47, 149 - 50, 153 - 54, 156 - 57, 160 - 61, 162 - 64.

166 - 178 Chert Graphitic - Blue brecciated chert with black graphite. 170 - 176 A little chalcopyrite and sphalerite.

178 - 186 Andesite agglomerate - Gray to buff, fragmental no sulphides.

186 END OF HOLE.

Samples:	No	Width	%Cu	%Zn
170.0-176.0	417	6.0	0.41	3.41

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 51

Lat. 882 N Bearing vertical Started May 29/56
Dep. 330 W Dip 90 Completed June 9/56
Elev. -19 Depth 1006

10000
330
9670

0 - 3 Casing

3 - 34 Gray agglomerate, relatively soft. Scattered round fragments or variolites up to ½" diameter. Also irregular banding. Scattered pyrite. VS.

34 - 97 BC Graphitic chert, dark gray to black, hard siliceous banding at 30 & 45 degrees to core. Sharp contact at 45. ? G

97 - 135 BC Chert generally blue to gray with graphitic sections up to 6" wide. Banding varies from 60 to 30 degrees to core. Brecciated sections up to 2 or 3 ft. wide. Scattered pyrite and chalco mainly in brecciated sections. 97 - 103 Brecciated, Scattered large blebs of chalco. 103 - 115 sparse sphalerite and chalco. 115 - 129.5 scattered small blebs of chalco and sphalerite. 119 - 119.5 - 50% chalco. 129.5 - 135 Large blebs of chalco & a little sphalerite. Qt

135 - 146 GL Gray lava - Uniform gray, fine grain in contact, becoming vaguely porphyritic down hole. 138 - 39 Sheared with graphite on slips a few specks of chalcopyrite. 138.2 - 1" stringer of quartz and pink calcite. GL

146 - 225 Feldspar porphyry - (sometimes logged as quartz diorite) vague irregular pale feldspar phenocrysts in darker groundmass. Scattered pyrite. 177 - 76 Banding at 45. Phenocrysts gradually disappear down hole. Grading into andesite. Dr?

225 - 255 Andesite - Gray green, fine grain, scattered, leucoxene alteration. 227 - 227.5 - Blue quartz stringer near parallel to core. A few specks of chalcopyrite and sphalerite. Gradually becoming coarser grained grading into diorite without definite contact. And

255 - 314 Diorite - Uniform dark green, massive, varies from medium to fairly coarse grain. Scattered fine grained bands 1" to 6" wide. D

314 - 317 Trap dyke - Reddish gray, fine grain, hard, sharp contacts.

317 - 387 Diorite - as above, sometimes becoming fine grained over 3 or 4 feet finally grading into andesite.

387 - 401 Andesite - Green, fine grain as above. A

401 - 417 Gray lava - Gradational contact, uniform pale gray, fine grain, scattered quartz stringers with pyrite. GL

417 - 418.5 Graphitic shearing - sheared graphite at 30. Calcite stringers, cherty blue quartz. Scattered pyrite. A few fine specks of galena and chalcopyrite. Q

418.5 - 485 Gray lava - Uniform pale gray, fine grain, scattered fine quartz stringers. 428 - 29 porphyritic band. Gradually taking on a greenish tinge after 475. GL

485 - 536 And Andesite - Generally pale gray green, fine grain. Occasional bands with pale feldspar phenocrysts. 502 - 511 Mostly feldspar porphyry. And

536 - 540 Gray dyke - Light gray, fine grain, hard, silicious, sharp contacts at 45. D

540 - 567 Andesite - Gray green, fine grain, scattered quartz stringers up to 1/2" wide. And

567 - 583 Diorite - sharp irregular contact. Fairly fine grain in contact becoming medium in centre. Dark green to 581. 581 - 83 - Fine grain, gray green, fine quartz carbonate stringers. Dr

583 - 594 Quartz Feldspar Porphyry - dark gray matrix with abundant white phenocrysts of quartz and feldspar about ¼" diam. Sharp contacts almost at 90. No quenching at contacts. D

594 - 604 Diorite - as above to 600, then becomes finer grained & gray green gradationly.

604 - 778 Diorite - Dark green, uniform medium grain. Contact gradational with diorite above. 635 -53 - Becoming gray green & rather fine grain, no definite contact. 671-673 - Fine grained trap dyke contacts at 70. 675 -675.5 Fine grained trap dyke contacts at 45. 703.5-705 - White quartz, contacts at 30. 703-708.5 - Blue quartz, fine grain, altered appearance for 3' on either side. 750 - Gradually becoming finer grained and grading into andesite about 778.

778 - 823 Andesite - Uniform dark green, fine grain, scattered quartz stringers up to 1/4" wide.

823 - 840 Diorite - dark green, compact, fairly coarse grain. Scattered quartz stringers . Sharp contact at 60 to axis of core approx.

840 - 897 Diorite - dark green, somewhat finer grained granular texture, gradational with diorite above. 892 - 94 - Becoming dark gray.

897 - 935 Diorite - Generally dark green, grading from medium to fairly fine over widths of 3 or 4 feet. Scattered quartz stringers.

935 - 987 Diorite - Uniform dark green, rather fine granular texture. Widely scattered quartz stringers less than 1/4" wide. Sharp contact at 30 to core. 979 - 987 Becoming coarser grained.

987 - 1006 Diorite - Dark green, fine grained sharp contact at 85 to core becoming medium grained by 997.

1006 END OF HOLE.

	Samples:	No	Width	%Cu	%Zn
61.0 - 69.0	Graphitic chert py., some chalco & zn.	435	8.0	1.37	6.27
69.0 - 83.0	ditto	436	14.0	0.30	0.56
83.0 - 91.0	ditto	437	8.0	0.51	0.14
91.0 - 97.0	ditto strs. of chalco & sphalerite	438	6.0	2.90	2.14
97.0 - 103.0	Chert py. chalco slight sphalerite	439	6.0	3.62	0.72
103.0-115.0	ditto	440	12.0	0.66	0.56
115.0- 121.0	ditto	441	6.0	3.11	0.33
121.0- 129.0	ditto	442	8.0	1.73	0.45
129.0- 135.0	ditto	443	6.0	3.41	0.91
135.0- 140.0	Grey lava slight py & chalco	444	5.0	0.25	0.10
	Averages: 91.0 - 135.0		44.0	2.27	0.79
	61.0 - 135.0		74.0	1.60	1.27

Andesite & Diorite
778 897
823 935
different

good values!

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 60

Lat. 10933.24 Bearing Started Nov. 8/56
Dep. 9507.46 Dip -90 Completed Nov. 10/56
Elev. 9945.75 Depth 212.0

0.0 - 13.0	Casing	
13.0 - 19.0	Tuff, scattered chalco and sphalerite in seams and specks.	T
19.0 - 36.0	Interbedded tuff and variolitic greenstone, Scattered seams and specks of chalco and sphalerite.	T, GV
36.0 - 111.0	Chert and argillite, brecciated, scattered pyrite, chalco and sphalerite. 45.5 - 65.5' - Mineralized sphalerite and slight chalco. 65.5 - 75.5 - Slight sphalerite, in graphitic chert breccia. 75.5 - 85.5 - Mineralized sphalerite & chalco. 85.5 - 111.0 - Slight sphalerite and Chalco. 90° Min.	C+
111.0-117.0	Tuff, fine grained, sparse pyrite.	T
117.0-129.0	Chert breccia, slight pyrite with scattered chalco and sphalerite.	C
129.0-130.5	Possible fault zone. Graphitic schist with pink carbonate. Fine pyrite.	~~
130.5-135.0	Grey tuff, some pyrite.	GT
135.0-137.5	Chert breccia, mineralized with pyrite with some sphalerite.	C
137.5-139.5	Fine grained tuff with graphitic streaks.	GT
139.5-200.0	Andesite, gradational contact with above.	GV
200.0-212.0	Tuff with a few specks of sphalerite.	T
212.0	END OF HOLE	

Samples:

	No	Width	%Cu	%Zn
45.5 - 55.5	6713	10.0	.50	4.95
55.5 - 65.5	6714	10.0	.94	4.43
65.5 - 75.5	6715	10.0	.80	0.10
75.5 - 85.5	6716	10.0	.98	4.04
85.5 - 95.5	6717	10.0	.83	1.92
95.5 -105.5	6718	10.0	1.00	0.78
105.5-111.0	6719	5.5	1.32	0.75
Average: 45.5 - 111.0		65.5	0.95	2.55

Shumsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 75

Lat.	10718.22	Bearing		Started	Dec. 12/60
Dep.	9505.15	Dip	90	Completed	Dec. 14/60
Elev.	9943.07			Depth	215

0 - 10 Casing

10 - 105 Gray tuff and agglomerate with minor breccia bands. Tuff is banded and shows variation in fragment - size. The banding makes angles of 25 - 45 with core - axis. Pyrite is disseminated and in stringers. Carbonates occur in bands up to ¼" wide. 28 - 33' - agglomerate band. 66.8' - possible speck of chalcopyrite. 69 - 76 - agglomerate band. 90.5 - 92.3 - siliceous breccia with patches of disseminated chalcopyrite up to 1" in diameter. 93.0 - specks of C.P. and possibly sphalerite in 1/16" carbonate - filled - fracture. 96 - 98.6 - siliceous breccia with sparsely disseminated C.P. 95' - specks of C.P. in a 1/16" wide carbonate band. 102.6' - narrow stringer of C.P.

105 - 136 Graphitic tuff and argillite - Graphitic occurs along cleavage planes or in patches. Pyrite present as fracture - fillings and as cubes up to ¼" across. A 1/8" wide carbonate band is present. The bedding makes angles of 25 - 35 with the core - axis. 119.6' - specks of C.P. in a 1/16" wide fracture filled with pyrite. 126.1' and 127.5' - specks of C.P. 130.0' 130.3' - siliceous breccia.

136 - 169 Siliceous breccia - contains disseminated C.P., sphalerite and pyrite. These sulphides occur as patches and fracture fillings. 140.5 - 142.3' - graphitic tuff. 136' - 4" band of massive sulphides containing patches and fracture - fillings of C.P. and sphalerite. 140' - 9" wide band of sulphides containing massive C.P. and sphalerite.

169 - 180.5 Greenstone and greenstone breccia - 169 - 176' - Chloritic with cleavage planes and disseminated pyrite. 176 - 180.5' - greenstone breccia with carbonate bands up to ½" wide.

180.5 - 215 Diorite - 180.5 - 201.7 - coarse grained diorite with quartz and carbonate bands up to 1/8" wide. 201.7 - 203.5' - chloritic and siliceous shear zone with sparsely disseminated pyrite. 203.5 - 215' fine grained diorite with disseminated pyrite, and chloritic zones, and with siliceous and carbonate bands. 205.5 - disseminated C.P.

215 END OF HOLE.

	Samples	No	Width	%Cu	%Zn
127.5 - 135.5	Dark sheared, chert, py, graph,	024	8.0	0.06	0.70
135.5 - 140.7	Chert, well min, py, C.P.	025	5.2	1.75	12.11
140.7 - 145.2	Chert, py, some C.P.	026	4.5	0.85	2.22
145.2 - 149.5	Andes, chert, slight min.	027	4.3	0.30	1.27
149.5 - 160.0	Chert, breccia, some min.	028	10.5	0.18	1.45
160.0 - 169.0	Chert breccia, py, some C.P.	029	9.0	0.74	2.35
169.0 - 175.0	Andes. carb, graph, slight py.	030	6.0	0.02	1.40
	Average: 135.5 - 169.0		33.5	0.68	3.60

All samples were assayed for silver and gold best assays

	Silver	Gold
025	2.20	0.05
029	0.27	0.05

.05 Au
3.2 Ag

Shumsby Mines Ltd. Sulton, Ont. Page 1 Hole No. 76

Lat.	10674.43	Bearing	S 32 E	Started	Dec. 15/60
Dep.	9491.37	Dip	-65	Completed	Dec. 17/60
Elev.	9943.98			Depth	230.

0 - 11 Casing.

11 - 72 Greenstone breccia with tuff and disseminated pyrite / 11 - 11.8 - silicious breccia with massive and disseminated pyrite. 11.8 - 39.7 - graphitic sections, about 1' wide of broken core totalling about 8'. 39.7 - 41.5 - coarse tuff with sparse specks of C.P. 44.5 - 59' - graphitic tuff and breccia with ½" wide carbonate bands and disseminated C.P. and C.P. as threads and sparse irregular masses up to 3/8" in diameter.

72 - 79.8 Graphitic silicious breccia - Contains disseminated pyrite and C.P. and irregular masses of C.P.

79.8 - 99 Greenstone breccia and tuff with few stringers of pyrite. 79.8 - 91.7' tuff with coarse fragments and with ¼" wide fractures, filled with dark coloured fine grained material.

99 - 172 Silicious breccia with graphitic argillite and chloritic sections - widely disseminated pyrite in sections, and in bands up to ¼" wide. C.P. in masses up to 1/8" in diameter. 99 - 105' - sparsely disseminated C.P. and C.P. and sphalerite in stringers of pyrite. 110 - 117 - massive C.P. and sphalerite inbands up to ¼" wide. 120': 2 - 3 feet of tuff. 146' - a 3/4" fracture filled with massive C.P. 146 - 162' - spots and stringers of C.P. 157' - a 3/4" fracture filled with massive C.P. 169' - 1 foot zone of broken breccia.

172 - 224 Chloritic greenstone - shows cleavage planes and disseminated pyrtie. 1/8" wide band of pyrite and carbonate bands about 1/4" wide are also present.

224 - 230 Diorite with carbonate bands up to 1/4" wide.

230 END OF HOLE.

Samples:

		No	Width	%Cu	%Zn
72.0 - 76.1	Silic, breccia, py, C.P. sph.	038	4.1	0.18	3.57
90.9 - 105.0	Chert breccia, graphite, C.P. sph.	031	6.1	0.24	3.82
105.0 - 109.7	barren, not sampled.		4.7		
109.7 - 117.3	silic. breccia, C.P.	032	7.6	0.71	1.12
141.0 - 145.0	silic, breccia, C.P. Sph.	033	4.0	0.02	2.04
145.0 - 150.5	silic, breccia, graph, C.P.	034	5.5	0.77	0.83
150.5 - 155.5	silic, breccia, graph, C.P.	035	5.0	1.10	1.24
155.5 - 159.5	Chert, graphite, C.P.	036	4.0	2.64	1.40
159.5 - 162.5	Chert, graph, py, C.P.	037	3.0	0.64	0.76
	Average: 145.0 - 162.5		17.5	1.31	1.0

All samples were assayed for silver and gold
Best results as follows

	Silver	Gold
036	0.79	0.02
037	0.68	0.01

Shunsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 77.

Lat.	10872.21	Bearing		Started	Dec. 16/60
Dep.	9509.40	Dip	-90	Completed	Dec. 19/60
Elev.	9942.46			Depth	170

0 - 7 Casing

7 - 24.3 Coarse gray tuff with some rounded fragments and disseminated pyrite: The rock is chloritic and contains a 1/8" wide, band of quartz. The pyrite is more concentrated near fractures filled with fine grained dark coloured material.

24.3 - 47.5 Siliceous breccia with graphitic chert and disseminated pyrite: Contains stringers and patches of pyrite. 27.2': a patch, ½" in diameter, of massive galena and sphalerite. 29': 5" zone of disseminated cp. and threads of the same mineral. 29.5 - 30.5': chloritic greenstone. 33.6 - 40.5': disseminated cp. and sphalerite. Also patches of cp. and sphalerite less than ¼" in diameter. 40.5 - 47.5': similar to 33.6 - 40.5' but with more cp. and sphalerite.

47.5 - 83 Gray tuff with fine grained chloritic sections: The bedding makes angles of 25 - 40 with the core-axis. Carbonate bands, less than ½" wide are present as well as disseminated pyrite, and stringers of pyrite. 62.9 - 83 scattered patches up to ¼" in diameter and stringers of cp. The concentration of cp. is greater in 62.9 - 64', 69.5 - 70.0, and in 76.2 - 77.6: 68' disseminated sphalerite in a band 1/16" wide.

83 - 131.5 Siliceous breccia and graphitic chert with minor greenstone sections: Contains sections of massive cp. and disseminated pyrite - 88.2 - 89.2 massive cp. and some sphalerite in brecciated graphitic chert. 89.7': few stringers of cp. in graphitic chert. 90.6 - 91.5: stringers and massive cp. in brecciated graphitic chert. 97.6 - 108': disseminated and massive cp. and sphalerite in siliceous breccia. Stringers of cp. in siliceous breccia. Cp. is more concentrated in 104.5 - 106.5': 108 - 112': greenstone. 112 - 118.5: over 50% of this section is massive cp. and lesser amounts of sphalerite. The rest contains stringers of cp. in siliceous breccia. 118.5 - 131.5': disseminated cp. stringers of pyrite and few patches of cp. less than ¼" in diameter, in siliceous breccia and graphitic chert.

131.5 - 170 Chloritic tuff. Contains disseminated pyrite stringers and patches of pyrite, up to 1/8" in diameter. Also, carbonate bands up to ¼" wide. 136' - 137' broken core.

170 END OF HOLE.

Samples:

		No	Width	%Cu	%Zn
33.5 - 39.7	Silic. breccia, sph., cp.	039	6.2	0.40	2.74
39.7 - 47.4	Silic. breccia, sph. cp.	040	7.7	1.30	4.38
84.0 - 86.7	1" band of massive cp. in graphitic chert	041	2.7	1.18	0.33
86.7 - 88.0	Barren greenstone not sampled dyke				
88.0 - 91.3	Silic. breccia with 1" section of massive cp.	042	3.8	10.44	1.22
91.3 - 97.5	Dark banded at 30, some py. and little cp.	046	5.7	0.23	0.20
97.5 - 104.0	Silic. breccia, cp.	043	6.5	1.45	1.53
104.0-108.5	Silic. breccia with cp. rich matrix.	044	4.5	3.58	1.94
108.5-112.4	Barren greenstone not sampled dyke.			barren	
112.4-118	Silic. breccia with very much cp.	045	5.6	15.55	3.06
118.0-128.0	Chert, fine py. some cp.	047	10.0	0.21	0.34
Averages:	33.5 - 47.4		13.9	0.90	3.60
	84.0 - 118.0		34.0	4.60	1.27
	33.5 - 128.0		64.5	1.82	

All samples were assayed for silver and gold. Best assay.

	Silver	Gold
040	1.06	0.04
045	0.28	0.02

1.6

good min

Shumsby Mines Ltd. Sultan, Ont. Page 1 Hole No. 80

Lat. 10927.33 Bearing S 79 W Started Dec. 26/60
Dep. 9564.51 Dip Collar - 50-600' - 50 Completed Jan. 1/61
Dip 300' - 48-762' - 50
Elev. 9936.70 Depth 762

0 - 13 Casing

13 - 19.0 ST. Gray tuff with some rounded fragments and sparsely disseminated pyrtie. 18.0 - 19.0': massive pyrite and pyrrhotite.

19.0 - 61.8 Interzoned graphitic chert, siliceous breccia, argillite, and gray tuff: Contains disseminated pyrtie and pyrrhotite and stringers of pyrite and pyrrhotite. Bedding planes are approximately parallel to core-axis. 27.0 - 32.5': siliceous breccia zone with stringers and patches of C.P. and pyrrhotite. 39.0 - 57.5': threads, stringers and specks of C.P. and sphalerite.

61.8 - 153.5 Chert, siliceous breccia, interbedded argillite and minor greenstone sections: Contains mineralized sections. Bedding planes make angles ranging from 0 - 15 with core-axis. 61.8 - 114.0: specks, stringers and patches, up to ¼" in diameter, of C.P. and sphalerite. Also few specks of graphite, stringers and patches, up to 1" in diameter, of pyrite and pyrrhotite. 79.7': 1/8" wide band of pyrite, pyrrhotite, CP, and lesser sphalerite. 100 - 103' shows more mineralization than any other part of section 61.8 - 114.0, 119.2 - 127.5: Chert with siliceous breccia with stringers and patches of CP and sphalerite and locally massive CP as breccia matrix. 127.5 - 128.6': greenstone, 128.6 - 132.5: siliceous breccia and greenstone with disseminated CP and sphalerite and with stringers and patches of CP and sphalerite. 132.5 - 140.0': widely scattered stringers and patches of cp. and lesser amounts of sphalerite. The patches are up to ½" in diameter. 140.0 - 152.4': chert, siliceous breccia, and minor greenstone sections with disseminated cp, sphalerite and pyrite as well as stringers and patches of cp, and some massive cp. The cp. of more concentrated from 140 - 145' and near 152.4. 152.4 - 153.5': greenstone.

153.5 - 155.3 Tuff and breccia with carbonate stringers.

155.3 - 228.7 Diorite of varying grain size with disseminated pyrite, quartz stringers, and carbonate stringers. 189.5': 2" wide shear zone with quartz and carbonates. 220.6': 2" wide quartz band.

228.7 - 239.0 Siliceous breccia with disseminated pyrite and pyrrhotite and with stringers and bands up to ½" wide, of pyrite and pyrrhotite.

239.0 - 266.0 Greenstone varying grain size with disseminated pyrite and pyrrhotite and with stringers of quartz and carbonates. 245.3 - 246.2': greenstone and carbonate breccia zone.

266.0 - 762.0 Diorite of varying grain size with disseminated pyrite and pyrrhotite, and with quartz and carbonate stringers. 273.0 - 273.8': carbonate band containing diorite fragments.

762.0 END OF HOLE.

Samples:		No	Width	%Cu	%Zn
26.4 - 31.3	Chert, graphite, cp, stingers, py and pyrr.	053	4.9	0.72	4.76
100.0-102.9	Chert, cp, some sph. graphite and py.	054	2.9	1.17	0.39
119.2-127.5	Silic. breccia, cp., rich matrix, lesser sph., py.	055	8.3	4.79	2.13
127.5-128.6	Barren, not sampled				
128.6-132.5	Silic breccia, greenstone, cp, in part of matrix and lesser sph.	056	3.9	1.99	3.70
132.5-140.0	Chert, stringers & few patches cp, sph, py.	059	7.5	0.16	0.14

197

DOWN DIP.

Samples: (cont'd)

		No	Width	%Cu	%Zn
140.0-144.8	Chert breccia, greenstone, cp, rich matrix, lesser sph. and py.	057	4.8	4.48	0.44
144.8 - 148.1	Chert, greenstone, cp., little sph. py.	058	3.3	0.74	0.22
148.1 - 153.1	Chert, some cp., py., minor greenstone	060	5.0	0.42	0.08
	Averages: 119.2 - 144.8		25.6	2.74	1.02
			8.3		
			33.9		

All samples were assayed for silver and gold with negative results.

Best assays: No. 055 - 0.48 oz. Silver.
No. 060 - 0.03 oz. Gold

4.96.

26.4 - 31.3 4.9' 1.72 Cu 4.76 Zn

100 - 153.1 53.1' 1.47 Cu .52 Zn

53' 1.47 Cu.

4.8

DIAMOND DRILL RECORD

Property: Consolidated Shunsby Mines Limited
Claim No. S. 34947

HOLE NO. 93

Sheet No. 1

Section from 0.0' to 162.4'

Started: September 16, 1965

Latitude: 8+00 N) North
Departure: 3+20 W) Grid

Bearing N 80 E

Completed September 17, 1965

Ultimate Depth: 162 ft.

Elevation: -

Dip: - 45°

Proposed Depth: 150 Ft.

Depth Feet	Description	No. of Sample	Width of Sample	Cu	Zn
0.0 - 17.0	Casing				
17.0 - 19.9	Chert, py, a little sphal.& cpy.locally B'ccd.	MS 1	3.0'	0.10	0.6
19.9 - 21.1	Diorite, a little cubic pyrite	MS 2	8.5'	0.06	0.27
21.1 - 27.3	Greenstone, variable, some sections w/sphal-gal. but possibly misplaced core ?				
27.3 - 28.5	Lost core (1.2') ?				
28.5 - 29.1	Argillite fractured, carb.veinlets. A little cpy. sphal. & py. in fractures	MS 3	10.5'	0.08	2.89
29.1 - 34.0	Chert, dark, B'ccd.,locally with much sphal.& some cpy.				
34.0 - 35.00	Lost core ?				
35.0 - 35.8	Diorite,dark, badly broken (some misplaced core?) 35.7 - 35.8 fair sphal. - gal.assoc.w/fracts.				
35.8 - 52.0	Argillite (?Tuffs) f/gr, some pyrr. dissem., py. in bands, traces of other sulphides.	MS 4	13.0'	0.10	0.65
52.0 - 97.8	Chert, argillite phases, locally banded sections sphal.-gal. min. along fracts. locally dissem. sphal.-gal. esp. in dark mottled zones (?B'ccd, altered) a little cpy. 72.7-97.8 massive, l/col.chert, little min. but some veinlets of sulphides	MS 5 MS 6 MS 7 MS 8 MS 9	10.0' 10.0' 10.0' 10.0' 8.7'	0.02 0.06 0.19 0.01 0.02	0.3 0.71 0.16 0.08 0.44
97.8 - 100.7	Greenstone (?f/gr diorite) a little py.	MS 10	6.5'	0.23	2.84
100.7 - 101.6	Chert,massive, well-min'd along 4 separate veins with sphal.-gal.				
101.6 - 103.5	Argillite banded py., some sphal.-gal. in cross-cutting veinlets				
103.5 - 106.9	Chert, mainly dark, local sphal.-gal. 104.3 - 105.8 good sphal.-gal., some cpy. @ 104.1' cpy. vein of 1".				

DIAMOND DRILL RECORD

SHEET No. 2 HOLE NO. 93 Cont'd.

	Depth Feet	Description	No. of Sample	Width of Sample	Cu	Zn
A	106.9 - 115.8	Argillite normal py. min. A little sphal.-gal. & cpy. assoc. with fracts.	MS 11	8.6	0.06	0.71
C	115.8 - 123.4	Chert with diorite phases, chert locally mind'd. with sphal.	MS 12	8.0'	0.08	0.38
A	123.4 - 132.8	Argillite normal py., a little assoc. cpy.	MS 13	11.0'	0.05	0.44
C	132.8 - 133.9	Chert, sphal. min. in centre section	107.2-134.8	27.6	0.06	0.50
A	133.9 - 134.6	Argillite, py. min.				
	134.6 - 162.0	Diorite, f/gr with a little pyrite, changing very little throughout section. A few qtz. veinlets with py. and pyrr. 145.4 - 145.7 silic. zone, dissem. sphal.-gal.				
	@ 162.0	END OF HOLE				

Dip Test -43° (corrected) (at 162.0')

Casing pulled

Drilled by: Continental Diamond Drilling Co. Ltd.

E. Menard, foreman

sgd. Geo. Checklin, geologist

P.S.

110.0 - 125.0	Sludge (sample) covering part of chert, mineralized with sphal./gal.in which section there was a lot of lost core	MS 18	15.0'	0.08	0.44

Property: Consolidated Shunsby Mines Ltd.
Claim No. S.34944

HOLE No. 99 (14A)

Sheet No. 1

Section From 0.0 to 298.0

Started: October 8, 1965

Latitude: 14+ 11N.) North Grid

Bearing > Plan >

Completed: October 12, 1965

Departure 2 + 03W)

Dip -45°

Ultimate Depth: 298!

Depth Feet	Description	Sample No.	Width of Sample	Cu	Pb
0.0 - 21.0	Casing Coring started at 16.5'				
16.5 - 17.7	Chert Breccia, No. min.				
17.7 - 18.3	Diorite (?)Intr.,Broken core, a little cpy. near 2nd contact				
18.3 - 62.6	Greenstone(volcs) Much broken core yellowish alt.with black alt. along fractures in Lt.(?), very little cpy.& sphal.minor diorite/intr.				
62.6 - 180.9	Diorite,variable, locally intr.into sheared greenstone to form alternating planes of each.A little cpy.,sphal.& gal.locally, also py.				
180.9 - 197.8	Chert,variable, light-col.to black, w/a little py.locally				
197.8 - 220.1	Diorite (?) Intr.				
220.1 - 239.2	Chert,black with graphite slips,py min,(but not major), in streaks, bands, blebs, Traces only of sphal. & cpy.				
239.2 - 240.5	Lost Core (1.3')				
240.5 - 252.7	Diorite(?)Intr., F/Gr.grey, no vis.mafics, towards end becomes more altered & veined.				
252.7 - 256.6	Diorite (?)Intr., badly altered to greenish-grey, soft material with much lost core, some py.				
256.6 - 259.0	Lost Core (2.4')				
259.0 - 263.9	Chert,badly broken, variable, with py. min.				
263.9 - 270.0	Lost Core (6.1')				
270.0 - 270.3	Chert, several fragments only.				
270.3 - 271.9	Diorite, veined & altered				
271.9 - 277.5	Lost Core				
277.5 - 298.0	Diorite,grey, sheared at 80° locally, streaky unidentified crystals.				
@ 298.0	END OF HOLE				
	Dip Test at 280' - 52° (uncorrected) -45° (corrected				

Drilled by: Continental Diamond Drilling Co. Ltd.
E. Maynard, Foreman

sgd. Geo. Checklin, geologi

Diamond Drill Record

CONSOLIDATED GRANBY MINES LIMITED

HOLE No. 68-2

this is revised Log of Hole # 68-2

Latitude: L 14 N

Departure: 240 W

Started: Oct. 26, 1968
Completed: Oct. 29, 1968

Ultimate Depth: 331

Depth Feet	Description	Sample No.	Width	Cu	Zn	Pb
0.0 - 18.0	Casing					
18.0 - 47.0	Feldspar Andesite Porphyry - excessively porphyritic, fine to coarse phenocrysts, probably phase of dig diorite					
47.0 - 74.0	Digestive Diorite - grades to porphyry as diorite in short sects. crystalline sects. contacts - purplish phenos of dig diorite					
74.0 - 83.0	Diorite - Well defined green and black crystals, med. gr. massive compact, uniform, finer grained at bottom					
83.0 - 168.0	Feldspar Andesite Porphyry - Light grey to dk. grey greenish. Compaction varies. At 94.0 sudden gradation to coarse feldspar-andesite porphyry. At 11.5 to fine phenocryst prophyry. 130.0 - 135.0 a definite dig. diorite zone. All variation possibly dig. diorite series.					
168.0 - 191.0	Chert - Compact bluish almost black; no visible breccia, core shattered and broken. Little py. as pyrr. in fractures and isolated blebs. Little dissem., sphal. Includes intermittent bands of altered andesite or sct. at 170.0 - 174.0. Altered at 178.0 - 179.0 Grades in Arg. below 179.0 SAMPLE: 182.0 - 189.0 Chert, bluish; contains abt. 2% sulphides per str. sphal.	516	7.0'	0.05	0.57	
191.0 - 201.0	Argillite - Contact a fault zone; shattered graphitic, mineralized by py. in fractures, qtz. stringers, chert at 192.0 and 195.0 - 196.3. Considerable py. and pyrr.					
201.0 - 331.0	Andesite - Dk. grey, almost black, sheared and graphitic and silicified to 210. ft. Unaltered thereafter but varies in colour + amount of schistosity. At 240.0 could be F.w. diorite phase. Inclusions of bluish quartz 307.0 - 308.0, Altered rock w/soapstone appearance at 305.0 - 308.0 Short sect. contains pyrr. END OF HOLE.					

Drilled by: Continental Diamond Drilling Co.

Signed: "William Heshka"

DIAMOND DRILL RECORD

CONSOLIDATED CHUNSBY MINES LTD. HOLE No. 68-2

Latitude: L 14 N Started: Oct. 26, 1968
Completed: Oct. 29, 1968

Departure: 240 W Dip: 90° Ultimate Depth: 331

Depth Feet			Sample No.	Cu	Zn	Pb
0.0 -	18.0	Casing				
18.0 -	25.0	Greenstone - lt.green grey, uniform few narrow 1/8" quartz stringers contains purplish crystal of abt. ¼" size			dy ?	
25.0 -	73.0	Andesite - dk.greenish grey, contains phenocryst of feldspar of varying intensity at irregul.intervals; phenocryst elongated along possible flow planes. Grades onto good medium crystaline rock of diorite composite. Crystalline section contains well developed purplish crystals. Contact of some of these crystalline sections undistinguishable in other sections well defined. The well defined appear intrusive with FW and HW sheared and altered. Possible digestive diorite sections of diorite in lust of 48.0 feet.			dy ? Gr. ?	
73.0 -	83.0	Diorite - well defined green + black crystals, a few greenish feldspar crystals abt. ¼" in diam. Medium-grained massive, compact uniform. Finer grained at topcontact which is not distinguishable. Change gradual but rock types not of same composition. Finer grained at bottom, contact indicates movement or intrusion.			d.	
83.0 -	93.0	Diorite - similar in structure to above but includes purplish crystals and a few lighter coloured (Plagioclase) crystals.			dy	
93.0 -	130.0	Greenstone - dark green top 5.0 ft.nr. contact with diorite balance lt.green uniform grained; contains tiny feldspar crystals throughout, quartz stringers ¼" wide intersect at random intervals + various angles. Bottom contact grades into diorite in 3 inches length.			Gr. ?	
130.0 -	139.0	Diorite - medium grained but crystals not well formed. Numerous purplish crystals. Crystallinity decreases to nil at bottom.			dy ? d ?	
139.0 -	168.0	Greenstone - Light grey to dk.grey greenish. Composition varies from basic to more acidic. Visible phenocrysts in some sections. Bottom contact abt. 70° to core.			Gr.	

-contd.-

Depth Feet		Sample No.	Width	Cu	Zn	Pb
168.0 - 191.0	Chert - Compact, dk. bluish to almost black; no visible breccia-tion. Contains minor pyrite and pyrrhotite especially in factures and in isolated plebs. Little dis-seminated sphalerite. Includes sect. of greenstone at 170.0-174.0. Altered and epilotized at 178.0 to 179.0. Grades into argillite below epidote.					C
	SAMPLES - 516 - 182.0 -189.0 chert, bluish top and dark, bedded nr. bottom, contains abt. 2% sulphides, few stringers of sphalerite.					
	SAMPLE 182.0 - 189.0	516	7.0	0.05	0.57	
191.0 - 201.0	Argillite - Contact or fault zone-shattered, graphite, mineralized by pyrite in fractures + planes, quartz stringers. Contains sections of chert at 192.0 + from 195.0 - 196.3. One section of andesite at 199.0. Much pyrite and pyrrhotite.					C+A
201.0 - 243.0	Andesite - Dark grey almost black, sheared + graphitic on top. Schistosed diorite at 202.0 - 204.0 schistosity abt. 45° to core. Sheared and graphite+pyritized at 210.0 - 214.0. Grades into quartz-andesite composition of abt. 12.0 long. Hydro-thermal alteration from 233.0 to 243.0.					? shear alt schist
243.0 - 254.0	Altered Diorite - top andesite grades into well defined schistosed rock at 30° to core. schistosity decreasing to 254.0					dig
254.0 - 331.0	Andesite - composition and appear-ance as above; variable acidity of short sections. Altered hydro-thermal appears at 284.0 - 395.0 but less intense. Altered products resemble soapstone. Section 305.0 - 308.0 pyritized. Inclusion of bluish quartz 307.0 - 308.0.					dig?
	END OF HOLE AT 331 '					

Drilled by: Continental Diamond Drilling Company

Signed: William Hesh

DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 1 SECTION FROM 0 TO 30' STARTED

LATITUDE 10785 N DATUM COMPLETED

DEPARTURE 9520 E BEARING ULTIMATE DEPTH 202 FT.

ELEVATION DIP 90° PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	FROM TO	Cu.	ZN
0-4'	OVERBURDEN					
4-36'	TUFF, GREY, 4 TO 11, 2.5 FT CORE LOST.	26860A	7'	4-11'		
		26861A	9'	11-20'		
	4-17.5' MASSIVE TO OCCASIONAL BANDING AT 45° TO CORE AXIS. PYRITE & PYRRHOTITE ALONG MINOR SLIPS & DISSEMINATED.	26862A	5'	20-25'		
	17.5-21' ABUNDANT PYRITE AND PYRRHOTITE VEINLETS AND DISS-EMINATED. BANDING AT 40° TO CORE. GRAPHITIC SLIP AT 20° TO CORE AXIS.	26863A	6'	25-31'		
		26864A	5'	31-36'		
		26865A	5'	36-51'		
		26866A	5'	41-46'		
	21-22.5' BANDED 20° TO CORE					
	22.5-26.5' MULTITUDES OF PYRITE FILLED FRACTURES. PYRITE CUBES TO 1/4 INCH DIAMETER.					
	26.5-29' TUFF BECOMES COARSER GREENISH IN COLOR - WELL HEALED AT 45° TO CORE AXIS PYRITE.					
	29-36 TUFF. MASSIVE, GREYISH TO BLACK, ABUNDANT PYRITE AS CUBES.					

N.M.P., TORONTO - STOCK FORM NO. 501 REV. 12/51

AT 30 FEET 1 FOOT CORE LOST.

DRILLED BY C.L.F. SIGNED

DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 2 SECTION FROM 30' TO 50 STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	FROM ~~GOLD~~ TO	Cu, ~~SILVER GOLD~~	ZN.
4-36' (CONTINUED)	AT 30' ONE FOOT OF LOST CORE					probable
	AT 31' PYRITIC BANDS PARALLEL					
	TO CORE AXIS, GALENA? SPHALERITE?				it was	
	DISSEMINATED.			was it pyrite? of cpy. 3/1981	cpy -	
	AT 33' BECOMES AGGLOMERATIC					
	FRAGMENTS ARE OUTLINED BY PYRITE.					
36-56'	TUFF - CHERT STRONGLY PYRITIC.					
	TRANSITIONAL. AT 36-37'	26865A	5'	36-41	— MOSS	stringers cpy
	AT 36.2' SHEARING AT 10° TO CORE.	26866A	5'	41-46		
	GRAPHITIC ALONG PLANES					
	CHERT. BLUE, MASSIVE WITH					
	STRINGERS AND BLEBS OF					
	CHALCOPYRITE & SPHALERITE					
	AT 39' 3/4 INCH CHALCOPYRITE					
	STRINGER.					
	41-46' TUFF CHERT. BANDING AT 45° TO CORE.					
	LESS CHALCOPYRITE, STRINGERS	26867A	5'	46-51'		
	SPHALERITE					
	41.2' SHEARING 10° TO CORE AXIS					
	40-51 LESS SPHALERITE OR VEINLETS.					
	AND DISSEMINATIONS, SOME					

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OCCASIONAL GALENA.

DRILLED BY SIGNED

DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 3 SECTION FROM 50 TO 66' STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	FROM TO	Cu. SLUDGE GOLD $	ZN.
36-56' (CONTINUED)	51-56' CHERT GREY-NEARLY BLACK SPHALERITE & CHALCOPYRITE AS STRINGERS MINOR PARALLEL OR NEAR PARALLEL TO CORE, ASSAY SHOULD BE LOW.	86868A	5'	51-56		
56-66'	CHERT - BLUE, PARTLY BRECCIATED NUMBERS OF SMALL FRACTURES AT 63 & 65 FT. SPHALERITE & CHALCOPYRITE - DISSEMINATED AND AS STRINGERS, BANDING AT 70° TO CORE CHALCOPYRITE AND SPHALERITE STRINGERS AT 0 TO 10° TO CORE BUT NEARLY RIGHT ANGLE TO BANDING.	86869A	5'	56-61	?	
		86870A	5'	61-66	?	NO ASSAY
		86871A	5'	66-71	?	
	56.9 - 57.5' GOOD CHALCOPYRITE & SPHALERITE					
	61-66 GOOD SPHALERITE PLUS 3 STRINGERS OF CHALCOPYRITE 1/2 INCH WIDE. DISSEMINATED CHALCOPYRITE STRINGERS AT 50° TO CORE AND NEARLY PARALLEL TO CORE.					

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY. HOLE NO. 74-6

SHEET NUMBER 4 SECTION FROM 66' TO 98 STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	FROM GOLD $ TO	SLUDGE GOLD $
D 66-76'	CHERT BLUE, VERY HARD GOOD CHALCOPYRITE, & SPHALERITE AT 69 & 70'				
	71-76' CHERT MASSIVE VERY MINOR DISSEMINATED OR OCCASIONAL SPECKS OR BLOBS OF CHALCOPYRITE & SPHALERITE VEINLETS PARALLEL TO CORE VERY LOW GRADE.	86872A	5	71-76'	
76-102'	CHERT- BLUE- MASSIVE NO BANDING				?
D	AT 76-78 GOOD CHALCOPYRITE & SPHALERITE, STRINGERS AT 5° TO CORE, GOOD SPHALERITE & CHALCOPYRITE HINCHESWIDE	86873A	5	76-81'	.
	SOME DISSEMINATED	86874A	10	81-91'	
	81-91' ONE STRINGER ½ INCH CHALCOPYRITE, VERY MINOR DISSEMINATED SPHALERITE	86875A	7	91-98'	
	98-100.7' GREENSTONE DYKE SHEARED AT 45° TO CORE. GRAPHITIC.				

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 5 SECTION FROM 98 TO 123' STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	FROM GOLD $ TO	GOLD $	ZN.
76-102' (CONTINUED)	91-98 CHERT BLUEISH TO WHITE VERY HARD VERY OCCASIONAL SPECKS OF CHALCOPYRITE AND SPHALERITE. 101' SHEAR GRAPHITIC 20° TO CORE PYRITE & PYRRHOTITE	NOT	98-106 SAMPLED			
102-106'	CHERT HARD, MASSIVE. BARREN NO SULPHIDES					
106-112.5	CHERT GOOD SULPHIDES AS STRINGERS & DISSEMINATED FROM 106-108.	28676A	6.5'	106-112.5'		
112.5-119'	TUFF - SILICEOUS, MINOR CHAL-COPYRITE BANDS UP TO 2 INCH WIDE. GRAPHITIC SLIP WITH PYRITE & MINOR CHALCOPYRITE AT 20° TO CORE. RHODOCHROSITE ? (PINK CARBONATE) AS BLOBS & VEINLETS AT 119'.	28677A	6.5	112.5-119'		
119-124'	SHEAR AT 122.5' GRAPHITIC WITH RHODOCHROSITE. SOME CORE LOST. 123' 8 INCH WIDE TALC SLIP.	28678A	5'	119-124'		

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 6 SECTION FROM 123 TO 146' STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	FROM GOLD $ TO	Cu. SLUDGE GOLD $	ZN
119-124' (CONTINUED)	CHALCOPYRITE ASSOCIATED WITH PYRITE STRINGERS AT 0-10° 20° & 70° TO CORE. MINOR SPHALERITE AS STRINGERS.					
124'-134'	CHERT - BLACKISH, SLIGHTLY BRECCIATED WELL MINERALIZED PYRITE & SOME CHALCOPYRITE AND GOOD SPHALERITE.	26879A	10'	124-134'		
134-140'	CHERT BRECCIATED WELL MINERA--LIZED AS FILLING BETWEEN FRAGMENTS & AS BANDS 50° TO 60° TO CORE. PYRITE AND PYRRHOTITE, MINOR CHALCOPYRITE AND GOOD SPHALERITE & STRINGERS OF GALENA.	26880A	6'	134-140'		
140-146'	TUFF - WELL MINERALIZED TO 141.5'. GOOD SPHALERITE PLUS CHALCOPYRITE AT 30° TO CORE. 146' CUBIC PYRITE - ONE INCH STRINGER.	26881A	6'	140-146'		

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-6

SHEET NUMBER 7. SECTION FROM 146' TO 202 STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH 202 FT

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	FROM GOLD $ TO	Cu + SLUDGE GOLD $	ZN. EQUIV
146-149'	CHERT - WELL MINERALIZED CHALCO	26882	A 3	146-149		
	-PYRITE, SPHALERITE DISSEMINATED					
	TO MASSIVE, MULTITUDE OF		SAMPLING	SUMMARY		
	STRINGERS AT 30° TO 90° TO CORE					
	149-150 1/2 FOOT OF CORE LOST.				Cu	Zn. EQUIV
149-202	GREENSTONE CONTACT AT	4'-149' (145')		0.30	0.77	0.68
	80° TO CORE - SHEARING AT	106'-149' (43')		0.67	1.07	1.20
	149.5'. FINE GRAINED DARK	134'-149' (15')		0.80	2.07	1.83
	? BRECCIATED & BROKEN					
	FOR 3 FEET?					
	162 1/2 INCH CHALCOPYRITE IN					
	FRACTURE 45° TO CORE. ROCK					
	APPEARS TO BE LAVA?					
	163-165 BROKEN ROCK ?					
	BY ? MOVEMENT.					
	168-169 ANDESITE ALMOST					
	DIORITE? IN TEXTURE. 2 INCH					
	WIDE ? ZONE WITH 20° PYRITE					
	AND [illegible] CHALCOPYRITE					
	168-202 ANDESITE HAS A COARSE					
	GRAINED ANDESITIC TO DIORITIC.					

N.M.P., TORONTO—STOCK FORM NO. 501 REV. 12/51

END OF HOLE 202 FEET

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-8

SHEET NUMBER 1. SECTION FROM 0 TO 32 FT. STARTED

LATITUDE 11005 N. DATUM COMPLETED

DEPARTURE 9625 E. BEARING ULTIMATE DEPTH 195 FT

ELEVATION DIP 90° PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	FROM TO	GOLD	ZN.
0-10'	CASING	26886	5'	10-15'	.46	.28
10-36'	CHERT BRECCIATED PYRITE	26887	7'	15-22	1.01	1.35
	AS STRINGERS AND BANDS	26888	4.8'	22-26.8	.08	.08
	AT 30° TO CORE, SHEARING					
	SOME ? STRONGEST AT 14-					
	15' GRAPHITIC.					
15-18 missing	16-18' GRAPHITIC.					
	22-26' TUFF WITH DISSEMINATED					
	PYRITE. - BRECCIATED					
	24-27' CORE STRONGLY BROKEN					
	BLOCKY DRILLING					
	24-30' STRONG GRAPHITIC					
36-43'	AT 36' CONTACT WITH TUFF	26889	5.2	26.8-32'	.28	1.35
T	SHARP ANGLE TO CORE					
	OLIVE GREEN - SOFT, VERY			Good core?		
	DIFFICULT TO SPLIT - PYRITE					
	& OCCASIONAL CHALCOPYRITE					
43-60?	GREENSTONE MASSIVE	1.24				
d/	(TUFF OR GRAPHITIC TUFF					
	HIGHLY SILICEOUS IN PLACES)					
	GOOD CHALCOPYRITE 26.8-28'					

N.M.P. TORONTO-STOCK FORM NO. 501 REV. 12/51

PYRITE - MINOR CHALCOPYRITE

DRILLED BY TO 32.' SIGNED

DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-8

SHEET NUMBER 2 SECTION FROM 32 TO 81 FT. STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	FROM TO	Cu. SLUDGE GOLD $	ZN.
43-60' (CONTINUED)	ANDESITE- FINE GRAINED ? CE FLOWS PARTLY FRACTURED	26890	5'	32-37'	.02	.24
	OCCASIONAL STRINGERS 1/8 INCH CALCITE CONTAINING PYRITE CUTTING CORE AT 30°					
	AT 55' 1/8 INCH STRINGER PYRITE / 15° TO CORE.					
	53-60' 2 INCH DISSEMINATED PYRITE.					
	60' 1/4 INCH CALCITE STRINGER 45° TO CORE.					
60' 106	ANDESITIC TUFFS. LARGELY FINE GRAINED CHLORITIZED					
	AT 67.5' 1/2 INCH CARBONATED ZONE WITH 20% PYRITE. WITH SOME DISSEMINATED ON EITHER SIDE.					
	AT 77-80' BRECCIATED TUFF BY CARBONATE VEINS SOME UP TO 1 INCH WIDE.					
	AT 81' 1/2 INCH CARBONATE VEIN 30% PYRITE. 30° TO CORE.					

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-8

SHEET NUMBER 3. SECTION FROM 81 TO 136 FT STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $
80-106' (CONTINUED)	AT 82' 1/2 INCH CARBONATE VEIN 30% PYRITE 30° TO CORE				
	AT 84-86' CARBONATE VEINS & SOME BRECCIATION LOW PYRITE - ? SOME MOVEMENT HEALED ? SECTION ?				
	90-106' CARBONATE VEINLETS INCREASING, SOME HAVE ASSOCIATED PYRITE				
	97-103' MOTTLED TUFF IN APPEARANCE				
	105-106' HEAVY ALTERATION AND QUARTZ-CARBONATE VEINLETS.				
106-136	ANDESITE ? SOME WHITE DEVELOPING, MINOR CARBONATE VEINLETS.				
	AT 121' ONE INCH OF 15% PYRITE AT 80° TO CORE.				
	AT 124-125' HEAVY ? CARBONATE VEINING. WITH 5% PYRITE.				
	AT 128' TWO INCH ? VEINS 30° TO 45° TO CORE.				

N.M.P., TORONTO—STOCK FORM NO. 501 REV. 12/51

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-8

SHEET NUMBER 4 SECTION FROM 136 TO 179 FT STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $		
136-193'	ANDESITIC VOLCANICS - TUFFS & OR FLOWS - MOTTLED IN APPEARANCE 139-141' HEAVY CARBONATE VEINING SOME VEINLETS ONE INCH WIDE MINOR PYRITE, SOME SLICKENSIDES ON SOME ? AT 45° CORE. AT 148' TWO 1/2 INCH WIDE CARBON-ATE VEINS AT 30° TO CORE ? ? 150-153' CALCITE VEIN 1/2 INCH WIDE. BANDED MINOR PYRITE ALWAYS PARALLEL TO CORE, SOME CALCITE VEINLETS AT 70° TO CORE SOME BRECCIATION AT 152'. MOST VEINLETS AND FRACTURES NOW AT 70° TO CORE VOLCANIC APPEARANCE ? ? ? ? 150' AT 179' 8 INCH DYKE OF VERY FINE GRAINED ANDESITE WITH FINE DISSEMINATED SULPHIDES.						

N.M.P., TORONTO—STOCK FORM NO. 501 REV. 12/51

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DIAMOND DRILL RECORD

PROPERTY SHUNSBY HOLE NO. 74-8

SHEET NUMBER 5. SECTION FROM 179 TO 195 FT STARTED

LATITUDE DATUM COMPLETED

DEPARTURE BEARING ULTIMATE DEPTH 195 FT.

ELEVATION DIP PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $	
136-193 (CONTINUED)	(179' CONTINUED) SULPHIDES IN CARBONATE VEINLETS AND FRACTURING MORE ? ONE FOOT ON EITHER SIDE OF DYKE 10% SULPHIDES - PYRITE - DYKE CUTS CORE AT 50° TO CORE. ? DYKE MOTTLED ANDESITE - FELDSPAR ? (?) FINE GROUNDMASS. 187' SOME PARALLEL CALCITE VEINLETS 189-193' - FLOW					
193-195'	TUFFS - FINE GRAINED, BROWN TO GREEN					
	END OF HOLE 195 FEET.					

SAMPLING SUMMARY

	Cu	Zn	Cu. Equiv
10-37 (27')	0.43	0.72	0.79

N.M.P. TORONTO—STOCK FORM No. 501 REV. 12/51

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DIAMOND DRILL RECORD

81-1 to 81-104.

NAME OF PROPERTY _____

HOLE NO. _____ LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. _____ SHEET NO. _____

REMARKS _____

LOGGED DWLF DENNIS FAIRBAIRN P.Eng.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
		NOTES TO O.DRILL RECORDS — M.W.R. CUNN. — 1981.
	1.	dd = "digestive diorite". A late intrusive, green-to-yellow (pea soup) in colour, which has clearly "digested" chert and sulphides with which it has come in contact.
	2.	ff = f'spar. porphyry.
	3	"Zero point" of coordinate system is No.1 post of claim 57538 (10,000 N & 10,000 E). North is true north, (decl. @ 6° ±). Elev. @ "zero": assumed @ 10,000 ft.
	4.	Note — "68" series holes are plotted on different coordinate system.
	5.	Survey for 1981 holes tied in to dd. holes #4 & #51 which were located. (closed traverse & tape by DWLF)

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS %	%	OZ/TON	OZ/TON	
	6.				"ARGILLITE" = black, fgr.-to-very f-gr. volc. sed.? Silica content varies to produce intermediates between a dark chert & graphitic argillite.				
	7.				Cpy. mode varies from "fracture" filling to disseminated, (rare), to ½"-1" blebs, to "ropey" — coarse, irregular veins. Little cpy observed in other than sl. (slightly) arg., brecciated chert.				
	8.				covers holes:				
		81-1	134'		81-14	51'		81-25	175'
		81-2	134'		81-14A	129'		81-26	155'
		81-3	131'		81-15	97'		81-30	136'
		81-5	145'		81-16	48'		81-31	122
		81-6	198'		81-17	51'			
		81-7	205'		81-18	91'			
		81-8	246'		81-19	75'		81-101	138
		81-10	97'		81-20	58'		81-103	50
		81-11	97'		81-21	98'		81-104	50
		81-12	107'		81-22	76'		30 @	3474'
		81-13	101'		81-23	107'			
					81-24	137'		30 HOLES	

DIAMOND DRILL RECORD

NAME OF PROPERTY N.W.R. CUNNINGHAM
HOLE NO. 81-1 LENGTH 134
LOCATION 10'S & 15'E of old DDH. 77
LATITUDE 10861 DEPARTURE 9521
ELEVATION 9940 AZIMUTH _____ DIP 90°
STARTED JULY 28/81 FINISHED JULY 30/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-1 SHEET NO. 1
REMARKS MARKSTAY DRILLING
LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON	ASSAYS Ag
0	9	Casing.										
9	16	Greenstone - Variolitic, typical										
16	17	Contact - Fr'st - chert. sharp(½")	3206		16'	21'	5'	0.02	0.07	nil	nil	-
17	23	Chert - brecc., interbedded black, fgr. Argillite. Some fine cpy. in fractures. Some pyrh.										
23	36	Argillite - f.gr., black; min. mainly pyr. Sparce cpy, sph., gal., Aprh.	3207		23'	28'	5'	0.08	1.00	0.02	0.002	0.27
			3208		28'	36'	8'	0.07	1.33	0.03	0.002	0.42
36	61	Argillite - fgr., black "A" banding @60°-80°										
		chert - fine pyr. cubes, & occ. blebs cpy.. Sph. 36'-42'.	3209		36'	42'	6'	0.39	3.08	-	-	-
		see note below { - 54-57, chert. br. cpy in fract.										
		see note below { - 42' - 6" ¼" blebs sph., some cpy.										
61	65	Argillite, - Black, graph.. py. cubes. @80°	3210		61'	65'	4'	0.25	2.83	-	-	-
		@62' Occ. sph. in fractures.	3211		65'	69'	4'	1.84	12.59	0.16	0.002	0.16
65'	72'	Chert-br. - 66'-69' - 2.5' massive sph. & lesser cpy. along sh. cpy. boundaries. cpy in blebs & string. ⅛"-¼" wide.	3212		69'	73'	4'	NIL	0.21	-	-	-
			3213		80'	86'	6'	0.17	0.88	-	-	-
			3214		73'	80'	7'	NIL	1.86	-	-	-
72'	73'	Tuff - grey. stringers sph. & cpy. @ 45°										
		(NOTE: 42'→61' should be sampled) →						(ditto 80'-86' in fault) →				

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-1 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-1 SHEET NO. 2

REMARKS _____

LOGGED BY DWCF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON	
73°	86°	Chert ——— brecc.. "banding" @ 30° dissem. sph. & blebs sph. & cpy.										
		~~ 81-86'. 1.0' graph.,										
		~~ 81-87' broken.										
		~~ 86-87 14°-75° — fair sphal.										
86°	109°	Chert. ——— brecc.										
		——— tuffs - 100' - 103', 103°-104°:										
		86°-91° - chert, light, sparse sph., some cpy.	3215		86°	91°	4.5	1.11	0.44	—	—	
		91°-97° - chert, dark, (Arg). f.gr. - fair 3% sp cpy.	3216		91°	97°	7.5	0.03	2.24	—	—	
		97°-100° - ch. - brecc - mass. sph. - cpy 97°-98°	3217		97°	100°	2.5	3.65	4.78	0.39	nil	—
		100°-103° - tuff, grey, - no sign. min.										
		103°-109° - chert, light + int-beds tuff	3218		103°	109°	6.0	1.81	0.05	—	—	
109°	123°	Chert. ——— 109-114 - chert. dark, (arg.) fair cpy. blebs	3219		109°	114°	5.0	1.32	0.03	—	—	
		114-117° - ditto	3220		114°	117°	3.5	3.75	0.05	0.28	.002	
		117°-119° - massive cpy. + ptr.	3221		117°	119°	2.0	19.38	0.07	1.32	.005	
		119°-123° - chert - light - cpy stringers, minor sph.	3222		119°	123°	3.5	0.55	0.02	0.04	nil	
		- apparent bond. @ 60°										

73-80' - chert + T slight Zn

DIAMOND DRILL RECORD

NAME OF PROPERTY N. W. R. CONN.

HOLE NO. 81-1 SHEET NO. 3

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON	
123	129	Diorite – f.gr. – typical. (f.gr. dark green)										
		END @ 129'										

LANGRIDGES – TORONTO – 368-1168

FORM 2

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81-2 | Page No. 1

Drilling Company: MARKSTAY.	Collar Elevation: 9946	Bearing of hole from true North: —	Total Footage: 134	Dip of Hole at: Collar 90°	Location of hole in relation to a fixed point on the claim: 10862 N. 9483 E
Date Hole Started: JULY 25/81	Date Completed: JULY 27/81	Date Logged: 27/7/81	Logged by: DWLF.	Ft. . °	Map Reference No. / Claim No.
Exploration Co., Owner or Optionee: M.W.R. CUNN.		Date Submitted	Submitted by (Signature)	Ft. °	Location (Twp., Lot, Con. or Lat. and Long.): CUNN.
				Ft. °	Property Name
				Ft. °	

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays † Cu	Zn	Ag	Au
0	7	Casing	Variolitic greenstone outcrop.										
7	68	Greenstone	Variolites. typical										
68	78	Chert.	Breccia - sharp contact @ 68'										
			- occasional blebs sph. in cpy matrix & vice versa										
			- veinlets galena.										
			- "blue" chert										
			- apparent banding @ 50° @ 78' in tuff.										
			68'-73' - ch. & ch. breccia, sch.-cpy disseminations & fracture-fill.			3201	68'	73	5.0	0.83 (Pb - 0.27)	1.29	.08	nil
			73'-78' - ch. & occ 1"-6" Tuffs			3202	73	78	5.0	1.20 (Pb - 0.94)	2.3	.13	.002
78	124	Argillite & Tuffs	- cross-bedding @ 85'										
			- f.gr. black Arg. ; some silica veinlets in tuff interbeds										
			78'-83' - tuffs, sil. veinlets blebs cpy & sph. sign. gal.			3203	78	83	5.0	2.00 (Pb - 0.71)	2.96	.16	nil
			83-88' - v.f.gr. cherty Arg. good sph. occ. cpy.			3204	83	88	5.0	1.12 (Pb - 0.49)	3.00	.12	nil
			88-93 - Lith 83-88			3205	88	93	5.0	1.34 (Pb - 0.92)	4.56	.10	.005

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the ~~long~~ axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page

Hole No. 81-2 | Page No. 3

Drilling Company		Collar Elevation	Bearing of hole from true North	Total Footage	Dip of Hole at Collar °
Date Hole Started	Date Completed	Date Logged	Logged by		Ft. °
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		Ft. °
					Ft. °
					Ft. °

Location of hole in relation to a fixed point on the claim.

Map Reference No. | Claim No.

Location (Twp., Lot, Con. or Lat. and Long.)

Property Name

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays †
128	130	Diorite	Sharp Chr-dior. contact @ 128' @ 45°							
130	132	Contact	Some C + opy + pyr.							
132	134	Chert +	Chert + Arg. ch. + some Cpy + py. + tuffs on dior. contact.							
134	+		Diorite - fgr.							
End										
@ 134' +										
			Note: No faults logged (or observed)							

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81-3 | Page No. 1

Drilling Company: MARKSTAY.	Collar Elevation: 9944	Bearing of hole from true North:	Total Footage: 131	Dip of Hole at Collar: 90°	Location of hole in relation to a fixed point on the claim: 10854 N. 9548 E
Date Hole Started: Aug. 2/81	Date Completed: Aug. 14/81	Date Logged:	Logged by: D.W.L.F.	Ft. / Ft. / Ft. / Ft.	Map Reference No. / Claim No.
Exploration Co., Owner or Optionee: M.N.R.		Date Submitted:	Submitted by (Signature):		Location (Twp., Lot, Con. or Lat. and Long.): CUNN. / Property Name

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays † Cu	Assays † Ag ppm
0	4	Casing	Colored in chert.								
4	8	Chert	Broken - no core								
8	18	Argillite	Black, fgr., dissem. py cubes. occ. 4"-12" beds dark grey tuffs. Banding @ 55°				8	18	10	samples	
18	36	Chert	Light, slight brecc.; 1-2" * light sph. @ 19', ε 21' @ 55° * * @ 23'-24' - Tuff.				18	36	10	samples	
36	46	Chert	light, banded, @ 30°. Minor min. 42.5-38.5 - scattered, 1-grade, fgr. sph + cpy + pyr. 38.5-40.0 - interb. "Tuff" black, @ 30° - some fine stringers cpy.				46	46	10	samples.	
46	71	Chert.	light C + cbr.; + mottled, 6" interbeds C. Minor sph. + cpy.				46	71	split, but very l.gr. — not assayed.		
71	71.5	Chert	C- massive - light - scattered, l-gr. sph. ε cpy.				71	76	5.0	0.56	NA NA

Form LA. 056 (11/74)

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† Additional credit available. See Assessment Work Regulations.

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81-3 | Page No. 2

Drilling Company		Collar Elevation	Bearing of hole from true North	Total Footage	Dip of Hole at	Location of hole in relation to a fixed point on the claim.	Map Reference No.	Claim No.
Date Hole Started	Date Completed	Date Logged	Logged by		Collar		Location (Twp., Lot, Con. or Lat. and Long.)	
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		Ft. °		Property Name	

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays † Cu	Zn	Ag	Au
77.5		~~~	Graphitic, broken. - 6" diorite										
77.5	79.0	Chert.	Light c.br. Dissem, blebs 5ph. & stringers cpy. 1/8"-1/4" @ 45°-60°			3229	76.0	79.0	3.0	2.04	1.96	NA.	
~~79.0~~	81.0	~~~											
79.0	81.0	Diorite	F.gr. - mass. - broken - graphitic. (fault @ 81')				79.0	81.0	N.S.				
81.0	85.5	Chert	light, massive, heavy cpy-py & light 5ph. & galena. Band @ 60°±			3230	81.0	85.5	4.5	2.98	0.54	.21	.002
85.5	92.0	Diorite	Sharp contact @ 60°. 1/2" mass. cpy.-py. conformable between Dior. & chert @ 85.5'. Diorite - f.gr. - diss. py cubes										
87		~~~											
92.0	93.5	Chert	graphitic Dark, laminated cpy @ 50° some 5ph. - py. cubes			3252	92.0	93.5	0.5	12.56	0.85	NA	
92		~~~											
93.5	97.5	Diorite	Typical: ~~, graph. @ 95', 97'										
95,97		~~~											
97.5	98.0	Chert	C br. some cpy, 5ph - py.				~~97.0~~ 97.5	~~97.5~~ 98.0	~~98.0~~ 0.5	NA. NA			
98.0	102.0	Diorite	— Typical:										
102.0	103.0	Chert	— C - graphitic										
102		~~~											

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81- 3 | Page No. 3

Drilling Company		Collar Elevation	Bearing of hole from true North	Total Footage	Dip of Hole at	Location of hole in relation to a fixed point on the claim.	Map Reference No.	Claim No.
Date Hole Started	Date Completed	Date Logged	Logged by		Collar		Location (Twp., Lot, Con. or Lat. and Long.)	
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		Ft. ° / Ft. ° / Ft. ° / Ft. °		Property Name	

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays † Cu	Assays † Ag	Assays † Au
103	106	Chert	~~~ Brecciated, banded, dark, graph. Some cpy. minor sph.			3231	103.0	106.0	3.0	1.19	0.12	.03 .002
106	107	Diorite	~~~ Broken, graphitic. lost core 4" Qtz: @ 106.6'									
107	107.5	~~~										
107.5	111.0	Chert	Banded, light, occ. blebs cpy				107.5	111.0	3.5	No Sample		
111.0	129.0	Chert	~~~ 112.0'- 116.5' — broken, banded, graph. fair to cpy.			3254	112.0	116.5	4.5	0.38	0.84	NA.
			116.5' - 121.0' - c. br. 2o/. Pyr. + minor cpy & sph.			3233	116.5	121.0	5.5	0.19	0.11	.43 .002
			121.0 - 129.0 - Arg. chert. Py. cubes				121.0	129.0	8.0	No Sample		
129	131	Diorite	Typical.									
			End @ 131. 14-8-81 @ 10.30 AM.									
			Note: Section showing above sampling.									

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-5 | PAGE NO. 1

DRILLING COMPANY: HEATH & S.	COLLAR ELEVATION: 9945	BEARING OF HOLE FROM TRUE NORTH: N 80 W	TOTAL FOOTAGE: 145	DIP OF HOLE AT: collar 80°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM: 10796 N 9561 E
DATE HOLE STARTED: SEPT. 18/81	DATE COMPLETED: SEPT. 26/81	DATE LOGGED	LOGGED BY: D.W.L.F.	ft	MAP REFERENCE NO. / CLAIM NO.
EXPLORATION CO., OWNER OR OPTIONEE: MT. W.A. CONN.	DATE SUBMITTED	SUBMITTED BY (Signature)	ft	LOCATION (Tp., Lot, Con. OR Lot. and Long.) / PROPERTY NAME: CONN.	

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION Colour, grain size, texture, minerals, alteration, etc.	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE ↕	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	Cu.	AS/Au ↕	Ag/Au
0	6	Casing										
6	14	Argillite	Black, f.gr., scattered Pyr. cubes up to 3/8".									
14	18	Chert.	Breccia. @ 18', sharp Ch.→Arg. contact @ 45°. 14'-18' – sparce sph.			33443	14.0	18.0	4.0	0.04	1.05	N.A.
18	20	"Argillite"	Graphitic, fault, fair min. sph., galena, pyr.									
20	63	Chert.	20'-21½' — core badly broken (looks like split core) fair sph.			33444	18.0	21.5	3.5	0.07	3.37	N.A.
			21.5-27 — br. – some sph. Most 2' barren. — 23'-23.5' – Arg T.?			33445	21.5	27.0	5.5	0.08	2.69	N.A.
			27'-44' — ch. br., dark, spotty & occasional cpy-sph. Fair sph. 32.5-35.5. No Sample.									
			44'-63' — ch. br. & ch. Arg. Sparce min., except 57.0-60.5 — 3.5' good ropey cpy. & lesser sph. Some bornite development. ±10% S.			33446	57.0	60.5	3.5	4.99	0.27	NA
63	64	"Argillite"	Graphitic, black, f.gr. sparce pyr.									

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-5 | PAGE NO. 2

DRILLING COMPANY	COLLAR ELEVATION	BEARING OF HOLE FROM TRUE NORTH	TOTAL FOOTAGE	DIP OF HOLE AT	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM	MAP REFERENCE NO.	CLAIM NO.
				collar			
DATE HOLE STARTED / DATE COMPLETED	DATE LOGGED	LOGGED BY		ft		LOCATION (Tp., Lot, Con. OR Lat. and Long.)	
EXPLORATION CO., OWNER OR OPTIONEE	DATE SUBMITTED	SUBMITTED BY (Signature)		ft		PROPERTY NAME	

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION (Colour, grain size, texture, minerals, alteration, etc.)	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE ↕	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	Cu.	ASSAYS Zn	Au/Pt
64.0	112.5	Chert.	64-79 – dark c.gr., fair Sph.-cpy. disseм. & blebs, scattered all the way. Band.@ 60°			3347	64.0	71.5	7.5	.02	2.29	N.A.
			-75-77 mottled chert			3348	71.5	73.5	2.0	.85	1.28	✓
			79-91 – ch. gr. – dark. @ 83' – 1" bleb cpy & sph. @ 90' – 1" bleb ✓ ✓ @(60°)			3349	79.0	83.5	4.5	.11	1.48	✓
107	108	~~~	91-112.5 – ch. – @ 107'-108.5' – scattered cpy-sph. & graph.			3350	88.0	90.0	2.0	.34	2.57	✓
			@ 108.5' – cpy veinlet leached out									
			108.5'-112.5' – fair cpy-sph., some Arg., some graphite.			3351	108.5'	112.5' ~~108.0~~	4.5 ~~3.5~~	.87	2.70	✓
112.5'	116.5'	Diorite	d.d. – becoming dig. @ 116'									
116.5'	118	Chert.	light, – good cpy in 1/4" – 1 1/2" blebs			3352	116.5'	118.5'	1.5	4.91	0.16	✓
118	119	Diorite	d.d. – some cpy remnants in d.d. @ 119'									
119	120	Chert	Arg. – black, lamin., pyr., cpy. along banding @ 20°			3353	119.5'	123.5'	4.0	1.87	0.12	✓
120.5'	134.5'	Chert	C. br. – 122-125 – white & pink Qtz.			3354	123.5'	128	5.0	0.07	0.03	✓
			– 120-128 – good cpy.			~~3355~~						
			– 123-128 – barren Qtz-Arg.									
			– 128-134.5 – good cpy 131-133'			3355	128.5'	134.5'	6.5	1.42	0.58	
134.5'	145'	Diorite										
	END		note: leaching of cpy @ 108.5' down.									

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CUNN.
HOLE NO. 81-6 LENGTH 198
LOCATION
LATITUDE 10699 N. DEPARTURE 9489E
ELEVATION 9944 AZIMUTH DIP 90°
STARTED 20-9-81 FINISHED 23-9-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-6 SHEET NO. 1
REMARKS

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	8	Casing									
8	10	chert ——— brecc. some pyr.									
10	81	Diorite (dk) ——— typical pea soup.									
		~ 54'-56'									
		@ 62' - chert remnants									
		63'-64' - ✓ ✓									
		67'-68' - ✓ ✓									
81	151	Argillite ——— 81'-96' - band. @ 70°									
		sparse pyr. occ cpy.									
		96'-114' - band @ 55°-60°									
		- pyr. - scattered & clusters cubes & d.d.									
		97'-99' - occ. blebs cpy.									
		114-133 - galaxies pyr. cubes @ 60° ±									
		133-161 - band. @ 50°									
		- pyr. cubes									
		- @ 135° - 6° d.d.									

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M.W.R. CUNNINGHAM 1.
HOLE NO. 81-6 LENGTH 109'
LOCATION
LATITUDE 10 699 DEPARTURE 9489
ELEVATION 9944 AZIMUTH DIP 90°
STARTED 20-9-81 FINISHED 23-9-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-6 SHEET NO. 1
REMARKS

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
151	173.5	Chert Breccia : 151-157 : C. br. graphitic 151-153 Fair Cu-Zn mineraliz. Cpy - in ¼" - ¾" blebs Zn - minor.
		~~ 151-153 ~~~ 157-162 : ditto - better Sch. 159-160.
		162-169 : ditto - @166 - cpy Sch. band. @ 30°?-50°, 162' - 166'
		169°-173.5 - very good Cpy-Sch. (predom. cpy). Band @55°. 3 in interst. between Cor. Cpy. in blebs & "veins".
173.5	181	Diorite (Dyke) ——— : some remnants of chert.
181	188	Chert ——— white, br.
188	192	Diorite. ~~~~ 3.8' lost core. ~~~
192	194.5	Chert ——— br., light, some ¼" cpy. not bad. no sample.
194.5	198	Diorite ———.
		END

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	Cu %	Zn %	Ag OZ/TON	Au OZ/TON
3356	7/. ±	157°	127°	6.0	1.37	0.27	.09	.005
3357	7/. ±	157°	162°	5.0	2.17	2.69	.13	.01
3358	7/. ±	162°	169°	7.0	1.30	0.64	.09	.005
3359	30/. ±	169°	173.5	4.5	6.37	6.45	.33	.02

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M.W.R Conn.
HOLE NO. 81-7 LENGTH ~~800~~ 205
LOCATION
LATITUDE 10702 N. DEPARTURE 9491
ELEVATION 9944 AZIMUTH S80°E. DIP -73°
STARTED 24-9-81 FINISHED 25-9-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-7 SHEET NO. 1
REMARKS

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	Cu ASSAYS %	Zn ASSAYS %	OZ/TON	OZ/TON
0	8	Casing									
8	63	Diorite (dd.) — Typical d.d.; @48.5, 5° cpy. stringers 51-54 - Arg., fine pyr. 54-63 - d.d. with remnants of chert & small stringers sph. & cpy.									
63	80	Argillite — Band @ 45°; occ. blebs & stringers cpy. + sph. ~ graph., 76'-77' no sample.									
80	99	Chert — breec. pyr. 80'-82' @ 83', 96', cpy.; @84', sph. some galena @ 85' 85-88.5 - Argill.									
99	~~125~~ 133	Chert. — @45° 99-116 - c + cb. occ. sph.; minor cpy. no sample. 116-118 - ch., light, occ. stringers sph, cpy, pyr. 118-120 - Arg. chert 120-122 - cbr., some cpy. 122-126 - ch. - arg. - sparse min. 126-133 - ch.br., light, 1" bleb cpy @ 126 & fair sph. to 133	3362 3363 ~~3364~~	~~Tr~~	120' 126 ~~133~~	126' 133	6.0' 7.0	0.18 0.68	0.44		

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-7 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-7 SHEET NO. 2

REMARKS _____

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Au OZ/TON	ASSAYS Ag OZ/TON
133	139	Diorite ——— Dig. Diorite – remnants of chert.									
139	165	Chert. ——— 139–142 – c. br., pyr., occ cpy.	3364		142	148	6.0	2.98	1.00	0.22	.002
		"good cpy." { 142–148 – ✓ ✓ – good cpy.	3365		148	154.5	6.5	0.75	0.54	0.06	.002
		(145–146 – ~~~, graph., cpy. in broken graph.) }									
		148 – 154 – c br. cpy stringers									
		154 – 165 – pyr., some cpy. ✓									
165	205 190	Diorite ———									
		end.									

LANGRIDGES — TORONTO — 366-1168

FORM 1

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81-8 | Page No. 1

Drilling Company: H. E. S.	Collar Elevation: 9944	Bearing of hole from true North: 310° W	Total Footage: 225'	Dip of Hole at Collar: 80°	Location of hole in relation to a fixed point on the claim.
Date Hole Started: 26-9-81	Date Completed:	Date Logged: Oct. 2/81	Logged by: DWLF.	Ft. / Ft. / Ft. / Ft.	Map Reference No. / Claim No.
Exploration Co., Owner or Optionee: M.W.R.		Date Submitted:	Submitted by (Signature):		Location (Twp., Lot, Con. or Lat. and Long.): 10695 N 9489 E
					Property Name: CUNN.

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays † Cu	Assays † Zn	Assays † Ag	Assays † Au
0	8	Casing.											
8	170	"Diorite"	"Diorite" = typical mixture of chlorite & yellow "pea-soup" digestive diorite										
170	208	Chert + Arg.	Dark c. br. + Argillites Sharp. (1"), Dior-Chert contact @ 170'										
			Fair-good sph-cpy in long stringers										
			@ 177' - dd. with knife-edge stringers cpy. (in dd.)										
			170'-180' - black c, argillaceous, "ropey" cpy in "fractures", and dissem. sph. in Arg.			3366	170	180	10.0	3.57	7.68	.27	.02
181	183	~~~	180'-186' - Argill., graphitic, cpy. stringers. some sph.			3367	180	186	6.0	1.89	2.99	-	-
188	190	~~~	186'-190' - Argil., graph. 188-190, sparse vis. mineral?			3368	186	190	4.0	1.23	1.63	-	-
			190-193 - Argill. sparse min. (1 gr.)			3369	190	193	3.0	0.08	0.37	-	-
			193-201 - C br. + Arg C — good sphal. minor cpy. some galena.		-	3370	193	201	8.0	0.38	6.51	.06	.01
			201-206 - C br. good sph. some gal.		-	3371	201	206	6.0	0.89	3.85	.07	.02
			206-208 - light. C, some sph. Sl. pyr.			3372	206	208	2.0	0.19	1.74	-	-

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ministry of Natural Resources
Ontario

Diamond Drilling Log

Fill in on every page → Hole No. 81-8 | Page No. 2

Drilling Company		Collar Elevation	Bearing of hole from true North	Total Footage	Dip of Hole at Collar °
Date Hole Started	Date Completed	Date Logged	Logged by		Ft. ° / Ft. ° / Ft. ° / Ft. °
Exploration Co., Owner or Optionee		Date Submitted	Submitted by (Signature)		

Location of hole in relation to a fixed point on the claim.

Map Reference No. | Claim No.

Location (Twp., Lot, Con. or Lat. and Long.)

Property Name

Footage From	Footage To	Rock Type	Description (Colour, grain size, texture, minerals, alteration, etc.)	Planar Feature Angle *	Core Specimen Footage †	Your Sample No.	Sample Footage From	Sample Footage To	Sample Length	Assays †
208	212	Diorite	- siliceous + pyrite							
212	225	Diorite	- diorite is banded (foliated) towards end of hole.							
	End 225'									

Form LA. 056 (11/74)

* For features such as foliation, bedding, schistosity, measured from the long axis of the core.

† Additional credit available. See Assessment Work Regulations.

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-10 | PAGE NO. 1

DRILLING COMPANY: Heath & S.	COLLAR ELEVATION: 9939	BEARING OF HOLE FROM TRUE NORTH: —	TOTAL FOOTAGE: 87	DIP OF HOLE AT: collar 90°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM: 10973N 9560E
DATE HOLE STARTED: Sept. 5/81	DATE COMPLETED: Sept. 6/81	DATE LOGGED:	LOGGED BY: J.W.L.F	ft	MAP REFERENCE NO. / CLAIM NO.
EXPLORATION CO., OWNER OR OPTIONEE: M.W.R.	DATE SUBMITTED:	SUBMITTED BY (Signature):		ft	LOCATION (Tp., Lot, Con. OR Lot. and Long.)
				ft	PROPERTY NAME: Cunn.

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION (Colour, grain size, texture, minerals, alteration, etc.)	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	Cu	As/Ag	Au/Ag.
0	8	Casing.										
8	15	Chert.	Breccia. broken, leached, some fair remnants cpy. Chert light to 15'			3287	9.0	14.0	5.0	0.97	0.12	NA.
						3288	14.0	19.0	5.0	1.27	0.06	✓
15		~~~~										
15	22	Chert	Arg., black, f. gr., 1" mass. cpy @ 19.5', 1" ✓ ✓ @ 21.0'			3289	19.0	22.0	3.0	1.32	0.76	✓
22	23	dyke	Dioritic									
23	33	Chert	Breccia - leached, 23'-30' - open voids where cpy leached out (1%)			3290	23.0	28.0	5.0	0.51	0.69	✓
						3291	28.0	33.0	5.0	0.53	0.92	✓
			- @ 30' - 1" mass. cpy - sph. @ 40°			3292	32.5	37.5	5.0	0.55	1.70	✓
			- bornite @ 35.5'			3293	37.5	42.0	4.5	0.11	0.27	-
			- 37' - blebs, stringers cpy.			3294	42.0	47.0	5.0	0.54	0.78	-
			- 46' - ✓ ✓ cpy-sph.			3295	47.0	52.0	6.0	0.51	0.19	-
			- {48' - good blebs & diss. cpy 50' but leached heavily.			3296	52.0	56.5	1.5	4.69	1.23	-
			- 52-53 — 12" 60°± cpy (1" graphite under 5)			3299	52.0	53.2	1.2	9.82	0.16	0.14 0.02
			- 55-56.5' — good cpy.			3297	59.0	66.0	7.0	0.06	0.02	
33	33	Tuffs	Grey - barren - no sample.									
33	36.5	Chert	Blebs cpy + str. ~~cpy~~. cpy. @ 60°			3298	66.0	77.0	11.0	0.07	0.40	
36.5	59.0	Tuffs	1/8 veinlet cpy. in tuff @ 59'									
59.0	77.5	Chert.	Ch. br. @ 66' - band @ 55°-60°. @ 66-75' ✓ ✓ 30° @ 70'-71' veinlets pyr-pyrh.									
77.5	87.0	Diorite	Sharp contact @ 77.5 @ 60° (NOTE - NO FAULTING @ CONTACT.									

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CONN.
HOLE NO. 81-11 LENGTH 87 ft.
LOCATION
LATITUDE 10969 DEPARTURE 9588
ELEVATION 9938 AZIMUTH DIP V 90°
STARTED SEPT. 6/81 FINISHED SEPT. 9/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-11 SHEET NO. 1
REMARKS

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON	
0	8	Casing										
8	~~11~~	Casing Core —										
		Argillite —— no sign. min.										
11	23	Chert —— light, lost core: 5 ft. some "granite" in core ∴ probably drilled through large "boulder" & into Lefriter material under- neath;			28.5	30.5	2.0					
23	~~57~~ 52.5	Chert. —— @ 29' – 1" mass. cpy.	3310		24°	28.5	4.5	0.69+	0.04+	—	—	
		@ 30' – 2" ✓						4.31+	0.20+	—	—	
		@ 31' – banding @ 10° (flat)						0.36+	2.36+	—	—	m+T
		graphitic @ 30'	3312		30	33	2.5	0.83+	3.84+	NIL	.06	
		32'–33' – Tuff no min.	3313		33°	37°	4.0	0.35+	3.37+	.002	.04	
		@ 33' – 5ph. band @ <30°	3314		37°	42°	5.0					
		33'–37' – good Zinc.	3315		42°	47°	5.0	0.11+	1.36+	—	—	
		35'–54' – c & cbr. good zone of min. – partic. zinc. – good surprize!	3316		47°	52.5	5.5	0.04+	0.50+	—	—	
		@ 35' – "band" @ 10° ±						2.0				
		@ 36' – ¼" bands mass cpy. @ 25°			42 24 18'							
		@ 42' – "band" @ 45°										
		@ 52' – ✓ ✓ ✓										
		@ 51.5 – 1.3' T galena @ 35–36 – 2–3%										

DIAMOND DRILL RECORD

NAME OF PROPERTY N. W. R. CONNINGHAM.
HOLE NO. 81-12 LENGTH 107'
LOCATION 10976
LATITUDE 10974 N DEPARTURE 9533 E
ELEVATION 994 ± AZIMUTH DIP 90°
STARTED SEPT. 7th. FINISHED SEPT. 8th.

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-12 SHEET NO. 1
REMARKS

LOGGED BY D. W. L. F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	8	Casing
8	11	Cas. Core — Chert — coarse c.br. pyr., chl. along fractures. scarce min.
11	14	Tuff — grey. sharp contact with Arg. @ 14' @ 45° ±
14	16.5 ±	Arg. — f.gr. fine veinlets cpy. @ 70° — 2" graphite @ 16'
16.5	17.0 ±	Tuff. — grey.
17.0 ±	21.5 ±	Arg. — stockwork stringers & blebs of cpy. basically @ 60°, but some ⊥ to core (vert.).
21.5 ±	23	Tuff — some fgr. sph. along bdg @ 40°
23	28	Arg. — Arg. chert, decr. cpy & incr Py. some 1/8" cubes pyr. dissem.
28	32	Chert — C. breccia - coarse - some pyr.
32	34	Arg. — occ. blebs, stringers cpy. 60°
34	42	Chert — brecc. @ 34.5 ± - 1½" cpy. on graphitic — @ 35.5 ± - 2-3" cpy. + sphal. - @ 39' - ½" cpy. @ 60° - leached @ 41'
42	47 ±	Diorite
47	48	Chert. — Br. Contact, above, @ 47' sharp @ 30° small veinlets cpy.

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS Cu %	Zn %	Ag OZ/TON	Au OZ/TON	
3305		31.0	34.0	3.0	0.84	5.21	0.12	0.002	
		34.0	35.5	1.5					
3303		17.0	21.5	4.5	3.28	1.71	NA	NA	
3304		21.5	31.0	9.5	0.38	1.62	NA	NA	
3305		31.0	34.0	3.0	0.84	5.26	NA →	NA →	
					6.15	1.95	0.56	.002	
3306		37.0	42.0	5.0	0.60	0.30	NA	NA	
			31-36	5.0 @ 0.5 @ 5.5	0.84 = 6.15 = 3.3	3.59 15.40 17.99		3.8	15.4 21.4 20.4
		36 - 37° 0.5 barren							

LANGRIDGES — TORONTO — 366-1168

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-12 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-12 SHEET NO. #2.

REMARKS _____

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
48	48.5	Diorite ——— sharp contact @ 48'	~~3307~~		~~77.0~~	~~77.5~~					
48.5	48.8	Chert ——— breccia									
48.8	68	Diorite ——— variolites? 2"- @ 61'									
	75				85.5	88.5	3.0				
75	77	Chert ——— Brecc.									
77	79	Diorite ——— Ch-D. contact @ 77 sharp @ 60°	3308		79.0	84.0	5.0	0.14	0.48	NA	NA
79	84	Chert. ——— {Brecc. sparce min. zone,	[redacted]					2.11	0.19	0.14	0.002
84	85.5	Diorite ——— {cpy & sph. leaching @ 84'									
{85.5	87	Chert ——— br., mass. cpy-py-sph., 3"									
{87	88.5}	@ 87?-									
88.5	89°	~~~									
89°	89.5	Chert ——— br.									
89.5	90.5	~~~									
90.5	92	Diorite ——— ~~~ @ 91.5 (graph.)									
92	92.3	Chert ——— br. dark- some cpy-sph.									
92.3	93.3	Diorite ———									
93.3	96-	Arg. ——— cherty.									
96-	107	Diorite									
	end.										

LANGRIDGES – TORONTO – 366-1168

FORM 1

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-13 | PAGE NO. 1

DRILLING COMPANY: H. E S	COLLAR ELEVATION: 9941	BEARING OF HOLE FROM TRUE NORTH: —	TOTAL FOOTAGE: 101	DIP OF HOLE AT: collar 90°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM: 11033 N 99 9571 E
DATE HOLE STARTED: SEPT. 10/81	DATE COMPLETED: SEPT. 11/81	DATE LOGGED	LOGGED BY	ft	MAP REFERENCE NO. / CLAIM NO.
EXPLORATION CO., OWNER OR OPTIONEE: M. W. R.	DATE SUBMITTED	SUBMITTED BY (Signature)		ft	LOCATION (Tp., Lot, Con. OR Lot. and Long.)
				ft	PROPERTY NAME: CUNN.

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION (Colour, grain size, texture, minerals, alteration, etc.)	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE +	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	Cu	ASSAYS +	Au/Ag
0	18	DIORITE										
18	30	Chert	Broken weathered, cpy leached; Scattered cpy, spy. Cpy @ 18.5' No sample – 1 gr.									
30	46	Chert	Ch. breccia, light. Sparce min. No sample.									
46	66	Chert	C & C.br., mm @ 61-65' (4' lost core) 52.5-57.0 org. chert heavy cpy, some spy. 55-57'			3330	52.5	61'	8.5	0.33	2.07	.09/.002
66	70	Chert	light col. "Fractures" @ 55° — cpy filled cpy ± 5°. No vis. cpy-spy. @ 69' – QTZ-filled fracture @ 30°			3321	66'	70'	4.0	.07	.06	.01/.002
70	101	Diorite										

Note: The 4' lost core 61-65' should have been in the "ore zone". Water lost in zone.

leaching cpy @ 18'+

DIAMOND DRILL RECORD

NAME OF PROPERTY N.W.R. CONN.
HOLE NO. 81-14A LENGTH 128'
LOCATION
LATITUDE 11031 N. DEPARTURE 9534 E
ELEVATION 9950 AZIMUTH - DIP 90°
STARTED FINISHED

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-14A SHEET NO. 1
REMARKS Drilled @ 81-14. (81-14 lost barrel & bits @ 81')
LOGGED BY JWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	10	Casing.									
10'	123'	chert. ——— 10'-27'- Sil. chert (semi-dig. chert - no sig. min.)									
		27'-46' - C + Cbr. 1 ft. fair Sphalg @ 43'. no sample.									
		46'-65' - C + Cbr. - 10" good Zn @ 64-65. otherwise minor. min (Zn)									
		65'-81' - C + Cbr - 6" good Zn @ 74' otherwise - nil. - 3" good Zn @ 69'									
		81'-100.5' - C + Cbr. - no sig. min (except 95.5'-97' - 25% Cpy. - large blebs)	5905		95.5'	97'	1.5	4.1	0.06		
		~~ 100.5'-111' - broken, graphitic cherty A. significant	5906		100.5'	104'	3.5	0.06	0.04		
		111'-118.5' { Cpy blebs & broken stringers. could be a good Cpy. Zone. (75% core recovery)	5907		104'	111.5'	7.0	0.33	0.05		
			5908		111'	118.5'	7.5	1.83	0.01		
			5909		118.5'	~~125.5'~~ 121.0'	~~7.0~~ 3.0'	0.38	0.02		
		111'-118.5' — as above	5910		121.5'	124'	2.5	0.38	0.01		
		118.5'-123' - C br. minor. min.									
123	128	Diorite ——— mottled. fspars. appear. "fluxion" — flattened — drawn out —									
	End										

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M.W.R. CONN.
HOLE NO. 81-14 LENGTH 81 ft.
LOCATION
LATITUDE 11033 DEPARTURE 9537
ELEVATION 9950 AZIMUTH DIP 90°
STARTED SEPT. 12/81 FINISHED SEPT. 14/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

~~check this survey?~~
HOLE NO. 81-14 SHEET NO. 1
REMARKS

LOGGED BY D.W.E.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	Cu %	Zn %	Au OZ/TON	Ag OZ/TON
0	8	Casing :									
8	242	Grst. V. : @12' fr. @ 30°. Pyr. chyrh. bands @ — grst. is silicified									
22	28	Chert. → Contact @ 21.5' - 22'.. band @ 55° @ 25' Some pyr - cpy., but l.gr.	3325		22'	28'	6.0'	0.06	0.02	✓	
28'	33.5'	Tuff. & C. — Pyr. band @ 60°	3326		34.5'	39.5'	4.0	.18	.35	✓	
33.5'	46'	Chert. — mass. & barren, exc. 34'-39.5' — some Zn, Pyrh. band @ 40° — 35½' - 36½', mass. pyr. & some cpy. @ 75°, — @ 45-46', 1" lamin. ch. Epyrh. @ 80°	3327		65.5'	72'	6.5	.09	.66	✓	
			3328		74'	81'	7.0	.24	.42		
46	49.5'	Chert — @ 48' — 85° — rel. barren.	~~3329~~		~~22'~~	~~28'~~	~~6.0'~~	~~.06~~	~~0.02~~		
49.5'	52'	Tuff.	~~3330~~		~~34'~~	~~39.5'~~	~~4.0~~	~~.18~~	~~.35~~		
52'	64	Chert — rel. barren. no sample.									
64	81	chert — mm @ 72' & 74' some min. 65.5' - 72', sampled Scarce Zn - some galena.									

NOTE Hard EAst lost @ 81'. (CAVE, PROBABLY AT TOP OF HOLE UNDER CASING.) THE LAST 6" OF CORE SHOWED ½ - ½" blebs of good cpy. — : WATCH DDH 81-23 AT THIS DEPTH.

LANGRIDGES — TORONTO — 366-1168

FORM 1

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-15 | PAGE NO. 1

DRILLING COMPANY: N & S.	COLLAR ELEVATION: 9939	BEARING OF HOLE FROM TRUE NORTH: –	TOTAL FOOTAGE: 97	DIP OF HOLE AT: collar 90°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM: 11032 N, 9939 E
DATE HOLE STARTED: SEPT. 9/81	DATE COMPLETED: SEPT. 10/81	DATE LOGGED:	LOGGED BY: DWCF.	ft	MAP REFERENCE NO. / CLAIM NO.
EXPLORATION CO., OWNER OR OPTIONEE: MT. W. R.	DATE SUBMITTED:	SUBMITTED BY (Signature):		ft	LOCATION (Tp., Lot, Con. OR Lat. and Long.)
				ft	PROPERTY NAME: CUNN.

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION (Colour, grain size, texture, minerals, alteration, etc.)	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	ASSAYS + Cu	ASSAYS +	Ag/Au
0	7	Casing										
7	22	Chert	Chert bracc. 14'-15' fair cpy in interstices. 13-21: c. or. sparse min. some cpy, sph.			3317	13	21	8.0	0.41	0.36	NA
22	26	Dyke	Dioritic, barren.									
26	42	Chert	Ch. bracc. Good cpy, some sph. cpy. massive 28°–29.5. v. @ 26' (3") ~~~ 29.5 – 12" graphitic			3318	26.0	30.2	4.2	6.54	0.82	.33/.005
			30.2–42° — mod. col. chert, becom. argillaceous @ 40°. Decreasing cpy & incr. dissem. pyr towards end.			3319	30.2	42.0	11.8	0.14	0.18	NA
42	97	Diorite										
		End @ 97'										

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CUNNINGHAM
HOLE NO. 81-17 LENGTH 51
LOCATION
LATITUDE 11332 N. DEPARTURE 9559 E.
ELEVATION 9973 AZIMUTH DIP 90°
STARTED SEPT. 17/81 FINISHED SEPT. 17/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-17 SHEET NO. 1
REMARKS

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON
0	9	Casing.									
9	51	Diorite — typical "aa-soup" dd.. occasional "remnant" chert — broken - more diorite in roots. No visible mineralization (dd)	no samples								
		(This hole was to check the down-dip mineralization in 81-16 — and missed.)									
		(In spite of chert exposure on ~~the~~ east face of the escarpment, a hole in the section, ~~about 80'~~ ~~east of 81-16-17 and @ 55° east is warranted)~~ ?									
		@ 10 W of DDH 8 & 75 Vertical									

LANGRIDGES — TORONTO — 366-1168

DIAMOND DRILL RECORD

NAME OF PROPERTY N. W. R. CONN.
HOLE NO. 81-18 LENGTH 91 Ft.
LOCATION
LATITUDE 11341 N DEPARTURE 9598 E
ELEVATION 9976 AZIMUTH EAST. DIP -80°
STARTED Oct. 2/81 FINISHED Oct 3/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-18 SHEET NO. 1
REMARKS

LOGGED BY DWCF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS Cu %	Zn %	Ag OZ/TON	Au OZ/TON
0	8	Diorite: (dd) Dig. Dio. in caving core.									
8°	~~5~~ 42°	Chert: 8'-15': good sph., lesser cpy cb. both in blebs & stringers sph. "bed": @ 80°? some galena along 'fract.'	3391		8°	15°	7°	.03	4.5	✓0.05	0.002
		15'-20': some digestion @ 16' cb. minor mineralization	3392		15°	20°	~~7~~ 5°	.03	1.56		
		20-28': good sph. in blebs & cb. stringers. 22°-26°.	3393		20°	28°	8°	.05	0.92		
		28-33': fair sph., minor cpy. cb some galena.	3394		28°	33°	5°	0.14	1.14		
		33'-37': mottled cbr. slight cb-dd. digestion. no sig. min.									
		37'-42': partly dig. chert - some sphalerite remnants. No Samp.									
42° ~~60~~ 5	60°	Diorite: (dd) 42-60°: d.d.									
60°	64	Chert: light col., pyrite stringers, (occ) no sig. min.									
64°	68°	Chert: cbr. light sph. ePyr.	3395		64°	68°	4°	0.01	0.80		
68°	74	Dior. (dd)									
74	82	Dior.									
82	86	Chert: —— cbr. fair sph., heavy galena.	3396		82°	86°	4°	0.15	3.94	0.07	nil 81/01 = 8?
86	91 END	Dior: —— some dd.									

LANGRIDGES – TORONTO – 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CONN.
HOLE NO. 81-19 LENGTH 75 ft.
LOCATION
LATITUDE 11203 N. DEPARTURE 9576 E.
ELEVATION 9976 AZIMUTH ~~EAST.SHE~~ DIP 60°
STARTED Oct. 1/81 FINISHED Oct 2/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-19 SHEET NO. 1
REMARKS
HOLE STOPPED at 75, in ccy., in error. (could not pick up).
LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
0	5	Casing.									
5	5	Diorite (dk)									
5	~~75~~	Chert + A — 5'-14' - cbr. fair 3w, minor ccy.	3377		5	14	8.5	.47	3.05	0.07 NA	0.002 NA
		14'-19' - cbr. - oxid. - minor mineral.	3378		14	19	5.0	.05	1.09		
		19'-23' - A @35°. vf.gr. finely div. pyr. & some sph. 21-23' - sl. dol.	3379		19	23	4.0	.03	0.16		
		23'-27' - A @30° - v.f. gr. - banded sph., good, 23'-26'	3400		23	27	3.5	0.69	8.12	Ag 0.14	Au nil
		27'-40' - A, typical no sig min	5901		27	31	4.0	2.62	0.95	0.28	.002
		- 27'-31' - fgr. Arg. C. diss. ccy @ 28' minor min.									
		- 31-40' - Arg. & c.c.b.	5902		31	40	9.5	0.51	0.33		
		- 40'-45' - C. br. min min.	5903		40	45	4.5	0.16	1.64		
		45'-75' - 4" sph. & ¼" blebs & stringers @ 46'									
		- 1" bleb ccy @ 59' (no samples)									
		74'-75' - fair to good ccy, sph. in stringers and dissemations.	5904		74	75	0.5	0.88	6.43	0.14 Ag	0.002 Au
End 75'											

LANGRIDGES — TORONTO — 366-1168

Ontario

THE MINING ACT – MINISTRY OF NATURAL RESOURCES

DIAMOND DRILLING LOG

Start a new page for every new hole, but fill in top portion of form only on first page for each hole.

FILL IN ON EVERY PAGE ▶ HOLE NO. 81-20 | PAGE NO. 1

DRILLING COMPANY: H. E. S.	COLLAR ELEVATION: 9976	BEARING OF HOLE FROM TRUE NORTH: EAST	TOTAL FOOTAGE: 58	DIP OF HOLE AT: collar 70°	LOCATION OF HOLE IN RELATION TO A FIXED POINT ON THE CLAIM: 11203N 9576E
DATE HOLE STARTED: SEPT. 17/81	DATE COMPLETED: SEPT 18/81	DATE LOGGED	LOGGED BY: D.W.L.F	ft	MAP REFERENCE NO. / CLAIM NO.
EXPLORATION CO., OWNER OR OPTIONEE: M.N.R.	DATE SUBMITTED	SUBMITTED BY (Signature)		ft	LOCATION (Tp., Lot, Con. OR Lot. and Long.)
				ft	PROPERTY NAME: CUNN.

FOOTAGE FROM	FOOTAGE TO	ROCK TYPE	DESCRIPTION (Colour, grain size, texture, minerals, alteration, etc.)	PLANAR FEATURE ANGLE °	CORE SPECIMEN FOOTAGE †	YOUR SAMPLE NUMBER	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE LENGTH	Cu	ASSAYS + Zn	Ag/Au
0	6	Casing										
6	15	Diorite	Dig. Diorite – broken.									
15	21	Chert	Ch. grgcc. — some mottled chert, slight alt. Slight leaching of cpy. Some massive chert. Sparce min.			3335	15.0	21.0	6.0	.08	.58	NA
21	25.5	Chert	Chert – "black" – fair-to. good Cu-Zn @ 23-25'			3336	21.0	25.5	4.5	.49	1.47	NA
25.5	50.0	Argill.	f. gr. – "black") – massive some calcite stringers Sph. in "fractures" (breaks) Sph. f. gr. – disseminated. @ 35' – 1" cpy.			3337	25.5	30.0	4.5	.46	2.47	NA
						3338	30.0	34.5	4.5	.12	3.69	NA
						3339	34.5	39.0	4.5	.54	2.96	NA
						3340	39.0	44.0	5.0	.06	0.31	✓
						3341	44.0	48.0	4.0	.50	3.74	✓
						3342	48.0	50.5	2.5	.155	4.02	.08/.002
			39-50, as above, but incr. cpy & sph. + galena towards diorite contact @ 50'									L.S-3.4 L.S
						3339	34.5	39.0	4.5	0.54	2.96	0.08/nil
50.0	58.0	Diorite	12" slightly broken @ contact @ 50'. (no graphite)									.
	End. @ 58'											

DIAMOND DRILL RECORD

NAME OF PROPERTY: N. W. R. CUNNINGHAM
HOLE NO.: 81-21 LENGTH: 98'
LOCATION:
LATITUDE: 11145 N. DEPARTURE: 9570 E
ELEVATION: 9972 AZIMUTH: DIP: 90°
STARTED: SEPT. 16 FINISHED: SEPT. 17

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-21 SHEET NO. 1
REMARKS:
LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
0	8	Casing									
8	24	"Diorite" — silicified & d. diorite @ 50°									
24	27	Chert. — massive - no sign. min.									
27	34	"Diorite" — silic. & d.d. @ 45°									
34	45.5	Chert — mass. @ 70° @ 38' — @ 40.5 → 44.0, diss. Sph. & Cpy. in small bands & occ. veinlets. No sample.									
45.5	48°	~~~ — broken & lightly graphitic	3330	66°	73°	7.0'		.88	.06	NA	NA
48°	48.5	"Diorite" — silic. (d.d.).	3331	77°	78°	1.0'		2.15	.20	NA	NA
48.5	65°	Chert — mass. & c.br. — few blebs Cpy @ 57', 60.5', @ 61'; minor veinlets Cpy.						2.15	0.20	0.13	nil
65°	73°	Chert. — breccia. — blebs & stringers Cpy @ 66, 69', & in c.br., from 70.5 - 73°; blebs. Cpy. in interstices. — 70°-70.4', dd.									
73	75	~~~ — remnants - "dior.".									
75	77	"Diorite" — d.d.									
78	83	"Diorite" — broken, silic.									
83	98	" (end) — 77-78 - broken, graphitic, ~~~ some Cpy. remnants.									

Removed for Cu by C. Petrescu 77-78

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY: NT. W. R. - CUNNINGHAM
HOLE NO.: 81-22 LENGTH: 76
LOCATION:
LATITUDE: 11072N DEPARTURE: 9608E
ELEVATION: 4999 +/- AZIMUTH: DIP: 90°
STARTED: SEPT. 12/81 FINISHED: SEPT. 12/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-22 SHEET NO. 1
REMARKS:
LOGGED BY: D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	% SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	Zn %	Ag OZ/TON	Au OZ/TON	Pb
0	12	Casing										
12	13	Chert — casing core, c br. + mass. good cpy-Sph, - ad mixed e interbed. 12s - 13°. (This may be a large boulder, but probably in place, with foreign material @ 13' in fracture)	3322		12°	16°	4°-	0.70	4.77	- NA	NA	
			3323		17°	21°	4°-	0.17	1.62	✓NA	NA	
13°	13⁹	Foreign — broken, c. gr. diorite	3324		21°-	32⁵-	11⁵-	.05	0.68	✓NA	NA	
13³	16°-	Chert — br. fair Zn, dissem. e bands, 1/4" - 1" Zn-Pyr. minor cpy. small cubes py.										
16	17	Diorite — dyke.?			lost core			21' - 26'		27' - 30'		
17	20	Chert — as 13³ - 16°										
20	21	Chert + A — c br. + Arg. "contorted".										
21	26	Lost Core — 4' lost core - remnants are graph. e-br. highly graphitic @ 26'. only vis. min. is Pyr. cubes - small - 1/32".										
26	27	? — some foreign {at 3 / ~~at 4~~} ~~diorite~~ ?										
27	30	Chert — br. 27° - 27⁵. 1" Diorite @ 27⁵.	3322		12°	16°	4°	.07	.06			
		lost core 27⁵ - 30' - 2.6' lost core	23		17°	21°	4°	0.7	1.77			
30	31	Arg. — graphitic. 30⁵ - 1/2" blebs cpy. @ end of Arg. leached @ 31'	24		21	32⁵	11⁵	0.17	1.62			
31	33	Chert — minor Zn, specs galena,										
33	76	Diorite — 10 vis cpy.										

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CUNNINGHAM
HOLE NO. 81-23 LENGTH 107
LOCATION
LATITUDE 11074 DEPARTURE 9551
ELEVATION 9957 AZIMUTH DIP 90°
STARTED SEPT. 15th. FINISHED SEPT. 16th.

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-23 SHEET NO. 1

REMARKS NO MINERALIZATION EXCEPT. 84.5-86°.!

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
0	8	Casing									
8	13.5	Gist. V. — interbedded gist. v.c chert. Scattered pyr. in gist. 1"-2" cpy, light, @ 10.5									
13.5	19.5	Diorite — Dyke.									
19.5	26°	Chert — Diss. py. @ 23.5 - "band" @ 60° @ 21½ - " " 45° — No sign. min.									
26°	27°	Diorite — Dyke.									
27°	39.5	Chert — Banded & brecc. @ 32' - 60° 39.5 - 55° 31.5' - 32.5' - 12" cpy & sph. Blebs & stringers — otherwise - barren chert.									
39.5	41.5	Diorite — Dyke	3379		84.5	86°	1.5	0.98	7.87	0.15	0.02
41.5	42.5	Chert — or sil. "diorite".									
42.5	46.5	Diorite —									
46.5	64°	Chert — banded - @ 60° ± no signif. mineralization.									
64	81	Chert — banded @ 55-60° med. col., little chert br., no min. except very occ. pyr.!									
81	96	Chert — fair sphal. & cpy. 84½ - 86°! in chert breccia. (Arg. & cont.									
96	102	Diorite —									
102	105	Chert — chr., Arg., some pyr. Mo Cu, tr									
105	107	Diorite — end @ 107!									

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY N.W.R. CUNNINGHAM.
HOLE NO. 81-24 LENGTH 81 ft. — 137 ft.
LOCATION 37' N12°E of DDH. 81-1
LATITUDE 10896 N DEPARTURE 9527 E.
ELEVATION 9942 AZIMUTH DIP 90° and 2/9/81
STARTED 14-8-81 FINISHED 16-8-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-24 SHEET NO. 1
REMARKS 37' N 12E from DDH 81-1
MARKSTAY DRILLING
LOGGED BY O.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0'	4'	Casing.
4	13	Chert (br.) — dark chert breccia, light cpy along fractures plus small blebs. occ. Pb. Fair Sph.
13	24	Chert (Arg.) — f.gr. arg. chert. + black c. brec. some cpy., Sph., Sal., Py.
24	26	Chert (Arg) — as 13'-24'
26	43.5	Tuff — grey, f.gr.; @ 36.5 - 0.7' white c tuff qtz. (latter looks like Scheelite), @ 37' - 8" black, graphitic some occ. fair Sph. some pyr. & occ. galena.
43.5	52	Chert. — Grey, fair Sph. & cpy. some blebs cpy.
52	62.5	Chert (Arg) — dark, arg. chert occ. cpy. & Sp. @ 51', 55', "band." @ 40°
62.5	65.5	Sphitic
65.5	81	Chert — blue-grey chert & c.-breccia fair Sph. & occ. 3/8" blebs cpy-py -Sph. @ 78' - 6" green, chlorite. bending @ 60°
		(End @ 81 - drill broke down. — Driller fired)

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	Cu %	Zn %	Ag OZ/TON	Au OZ/TON	Pb
3234		4	7	3.0	.02	.41	.01	—	.12
3235		7	10	3.0	.05	2.04	.02	—	.46
3236		10	15	5.0	.16	0.80	.03	.002	.20
3237		15	20	5.0	.40	0.91	.05	.002	.01
[redacted]									
3240		29	34	5.0	.19	0.48	.02	—	0.16
3241		34	39	5.0	.03	0.63	.01	—	0.11
3242		39	44	5.0	.05	1.38	.01	—	0.25
3243		44	46	2.0	.63	2.25	.03	.005	0.13
3244		46	49	3.0	.11	2.00	.03	.002	0.37
3245		49	54	5.0	.35	0.80	.03	.005	0.14
3246		54	59	5.0	.10	0.74	.01	.002	0.03
3247		59	64	5.0	.51	0.53	.05	—	0.04
3248		64	68	4.0	.05	1.46	.01	—	0.05
3249		68	72	4.0	.18	1.92	.03	—	.07
3250		72	77	5.0	.84	2.17	0.12	.002	.60
3251		77	81	4.0	.25	0.05	0.03	—	.03
3238	—	20	24	4.0	.16	7.50	.09	.005	1.82
3239		24	29	5.0	.45	3.19	.01	.002	0.94

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M. & R. Cunningham
HOLE NO. 81-24 LENGTH 137
LOCATION
LATITUDE 10896N; 9527E DEPARTURE FINISH @ 137' Sept. 2/81
ELEVATION AZIMUTH DIP
STARTED Aug. 30/81 FINISHED @ 80 ft. (from drill floor) 79 ft from top casing

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-24 SHEET NO. 2
REMARKS
HEATH & JASPERWOOD
LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
80'	104.5'	chert ——— 80 – 88.5' c black, Aq. cpy 84'–86', 86 – 88.5'
		—— 88.5' – 93' – c., light., sp. min.
		—— 93 – 104.5' – c br. – .
		— 93 – 102.5' c br. – blebs c str. cpy.
		— 104.5' – 104.5' – v – lean (sp. min).
		— 100° – 102.5' – 1" mass. cpy. some Zn.
		— 96.5' – 100° – ½" – ¾" blebs cpy. & stringers cpy. some Zn
104.5'	107	mix c → diorite
107'	137	diorite

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	Cu %	Zn %	Ag OZ/TON	Au OZ/TON	Pb.
3260		80'	86.5'	6.0	0.37	.81	.04	—	
3261		86'	88.5'	2.5	1.62	1.37	.17	.00 ✓	
3262 ✓		88.5'	93'	4.5	0.07	0.39	—	—	
3263		93'	96.5'	3.5	0.44	0.08	—	—	
3264		[illegible]			2.26	1.93	0.16	.00 ✓	
[illegible]		[illegible]			0.57	0.56	0.07	.00 ✓	
3266		102.5'	104'	2.0	1.14	0.13	0.07	.00 ✓	
3264		96.5'	100'	3.5	2.26	1.93	0.16	.002	
3265		100'	102.5'	2.5	0.57	0.56	0.07	.002	
3266		102.5	104.0	2.0	1.14	0.13	0.07	.002	

ASSAYS

LANGRIDGES – TORONTO – 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M. W. R. CUNNINGHAM
HOLE NO. 81-25 LENGTH 135' 178
LOCATION
LATITUDE 10738 N DEPARTURE 9518 E
ELEVATION 9944 AZIMUTH WEST (270) DIP 80°
STARTED 28-9-81 FINISHED 30-9-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-25 SHEET NO. 1
REMARKS

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON	ASSAYS Pb
0	38	Diorite (d.d). — Typical. Possibly, some remnants of variolitic g'st.?										
38	45	Chert — Fine c."br." & highly silic. "diorite", some cpy. & sph. @ contact @ 38' and @ 41'. 38'-43' — dark, mass. chert	3373		38'	43'	5.0'	0.11	1.79	NA	NA	—
45		Chert (Arg.) — f.gr. Arg. chert @ 60° Sph. & cpy. along "fractures" Possibly good v.f.gr. diss. Sph. (typical - could surprise re Zn)	3374		43'	50'	7.0'	0.13	1.12	NA	NA	—
		43'-50' — very f-gr. Arg. C. dissem Zn. - cpy. along "fract"	3375		50'	60'	10.0'	0.08	0.79	NA	NA	—
		50-60' - ditto 43'-50'. some fairly heavy galena approaching 60'	3376		60'	65'	5.0'	0.14	5.91	0.17	.005	2.23
		60-65' - ditto 43-50. Increasing galena. cpy @ 60°										
		Note: some leaching of cpy @ 43'										
		@ 62' - mn?, broken, graphitic										
		65-67.5 - very f-gr. Arg. C., galena, + dissem. Sph. & some cpy	3377		65°	67.5	2.5'	0.60	3.79	- NA	- NA	
		67.5-72.5 - mass. cpy - 70'-71'. Sphal. + galena.	3378		67.5	72.5	5.0	1.73	6.48	0.45	.002	
		72'-74' - graphitic & broken mn										

LANGRIDGES — TORONTO — 366-1168

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-25 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-25 SHEET NO. 2

REMARKS _____

LOGGED BY O.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON	
45°	162.5	chert (Arg) A — 72.5 - 80' - v. f. gr. bl. Arg. c. Pyrite cubes - no vis. mineralization.										
		— 80' - 97' - uniform, black, fgr. "arg." - pyr. - cubes up to 1/4" - 1/2" - dissem. no vis. mineralization										
		— 94' - 95' - broken, graphitic some banding @ 88' - 90', 96' } @ 80°										
		— 97' - 116' - mass., fgr. Arg. C. @ 75°. diss cubes pyr. 1st cpy with pyr. @ 100' @ 103' band. @ 75° - 80° @ 110' first stringers of cpy, inserts. to 115' @ 116', blebs & 1/4" veinlets of cpy AND FINELY DIVIDED & DISSEM. CPY. (up to 3% cpy)	3380		109.2	115.5	6.3	2.84	2.56	0.15	0.002	—
		— 109.2 - 115.5 — v. f. gr. Achert; Knife-edge stringers cpy, blebs cpy. minor sph Py-cpy admixed.	3									

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. _____ LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-25 SHEET NO. 3

REMARKS _____

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
45	162.5	chert & cherty A { 115.5 – 121.5 – stringers cpy. & mass. blebs cpy. also finely dissem. cpy with pyr.
		121.5 – 127.5 – arg. chert some cpy.
		127.5 – 134° – chert – mass. (1/4") veinlets cpy. @ 133.5, 131, 132.5.
		134 – 137 –
		137° – 144° –
		144° – 147.5 –
		147.5 – 152° –
		152° – 158° – light c.; diss. cpy. & small blebs cpy.
		158 – 162.5 – graph. & broken, fair cpy. 158-9 161-2
162.5	163°	Diorite (dd) Pea Soup
163	170	Diorite (dd) —— Interb. d, dd., & remnants of chert. No vis. min.
170	178	Diorite
end.		

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	Cu %	Zn %	Ag OZ/TON	Au OZ/TON
3381	✓	115.5	121.5	6.0	5.16	0.39	—	—
3382	✓	121.5	127.5	6.0	~~2.08~~ 0.94	~~0.18~~ 0.27	—	—
3383		127.5	134°	6.5	3.08	0.48	0.26	nil
3384		134°	137°	3.0	6.18	0.24		
3385		137°	144°	7.0	0.44	1.04	—	—
3386		144°	147.5	3.5	10.10	2.31	.37	.005
3387		147.5	152°	4.5	1.54	0.39		
3388		152°	158°	6.0	1.32	0.69		
3389		158°	162.5	4.5	1.49	0.60		
					Cu	Zn		
		60' - 72.5			—	5.71		
					5.0	5.91	89.53	
	5.0	0.14	0.70		2.5	3.19	9.47	
	2.5	0.60	1.50		5.0	4.49	32.90	
	5.0	1.73	8.65					
	12.5	0.87	10.85		12.5	5.71	71.42	
	6.3	2.84	17.90	119.5 to 121.5	6.3	2.56	16.15	
	6.0	5.16	30.96		6.0	0.39	2.34	
	17.3	3.97	48.85		17.3	1.50	10.49	
			123	3.97	1.50			
		104.5	147.5	38.5	3.42	1.04		
3390		162.5	170°	7.5	.09	.15		

LANGRIDGES – TORONTO – 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY M.W.R. - Conn.
HOLE NO. 81-26 LENGTH 155
LOCATION
LATITUDE 10738 N DEPARTURE 9516 E
ELEVATION 9944 AZIMUTH WEST (270°) DIP 55°
STARTED 30-9-81 FINISHED 1-10-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-26 SHEET NO. 1

REMARKS Dip too flat. Probably went down west contact of min. in 81-25

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS %	ASSAYS %	ASSAYS OZ/TON	ASSAYS OZ/TON	
0	12	Casing										
12	142	Diorite (dd) — Typical, predom. pea soup. ?(some remnants var. grst?) — becoming dark, argillaceous, @ 59' to 66' — 66 - 142' - typical pea soup.										
142	143.5	Chert — black, good cpy. - dissem. & fract. filling.										
143.5	147'	Diorite (dd) — partially digested chert. some sphal. no vis. cpy.										
148	-152	Diorite										
	-155	Diorite										
eod.												

Note 6" chert & good min. @ 142'

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY Mt. W. R. Cunn.
HOLE NO. 81-30 LENGTH 130
LOCATION @ ↗ 81-24
LATITUDE 10896 N DEPARTURE 9527 E
ELEVATION 9943 ✓ AZIMUTH ~~[illegible]~~ 75°W. DIP
STARTED Sept. 2/81 FINISHED Sept. 3/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-30 SHEET NO. 1
REMARKS
H. & S. DRILLING.
good zone 112'-117'
LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	4	- casing.
4	7	- Dark, fgr. chert. No sig. min.
7	22	- Chert - dark, ~~fgr.~~ ~~becoming~~ cbr. becoming f.gr., dark, @ 21 ft. 16-23 some v.f.gr. diss. sph. & lt. grey.
22	28	- Chert - dark, fgr. f.gr. diss sph. cpy. galena.
28	34	- Chert - dark, arg., "bed" @ 60°, some @ 20° ± Knife-edge to ¼" veinlets @ 3, white
34	37	- Tuff - grey, barren.
37	38	- ~~~ - graph., broken, @ 37.2' - 2" cpy blebs + some sph. - (resting on fault)
38	48	- Tuff - + tuff. chert. "bed" @ 60° & 70° ±
		- GENERAL - The v.f.gr., black, arg. chert - typically cont. very fine, diss. sphal - possibly 1-5%. Zn - & cpy & galena along fractures.
48	72	Chert — black, arg., fgr., interbeds (1"-2") grey tuffs, sph. diss., & cpy in veinlets, fractures, @ 60° ±
72	86	Chert — breccia. Good. cpy-sph. 72°→74.5'. 80'—86'. ~~~ @ 71', 84' (graph. 6" ±)
		74.5' - 80' - "white" barren chert.
		66' - 72' - black', Arg. Ch, pyr. @ 60°

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	Cu %	Zn %	Ag OZ/TON	Au OZ/TON	
3270		16	23	7.0	0.56	2.72	NA	NA	
3271		23	28	5.0	0.31	2.66	NA	NA	
3272		28	34	6.0	1.38	5.77	NA	NA	0.24/0.002
3273		48	55	7.0	0.26	0.89	NA	NA	
3274		62	66	4.0	0.48	3.45	NA	NA	
[illegible]		[illegible]	[illegible]	[illegible]	1.84	6.33	.26	nil	
					0.51	2.29	.06	nil	
3276		80	86	6.0	0.75	0.53	NA	NA	
3277		86	91	5.0	1.33	1.00	NA	NA	
3278		91	95.5	4.5	0.86	2.25	NA	NA	
3279		95.5	100	4.5	1.75	1.65	NA	NA	
3280		100	104	4.0					
3275		72.0	74.5	2.5	1.84	6.33	.26	nil	

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-30 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-30 SHEET NO. 2

REMARKS _____

LOGGED BY _____

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
86	104	Chert — c.gr. - fair coy. & sch. all the way. ~~~ (4") @ 87'
104	105.5	Diorite — f.gr. (dyke)
105.5	117	chert — blebs, ½-1", & stringers coy. (116'-117°) 5% mass coy.
117	130	Diorite — sharp c-diorite contact @ 117'

Work: Trenching

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS Cu %	Zn %	Ag OZ/TON	Au OZ/TON
3267	[redacted]	105.5	110°	4.5	1.14	0.54	.06	.002
3268	[redacted]	110°	112°	2.0	1.0	0.24	.05	.002
3269	[redacted]				8.76	0.11	.29	.002
3269		112°	117°	5.0	8.76	0.11	.29	.002

LANGRIDGES — TORONTO — 366-1168

DIAMOND DRILL RECORD

NAME OF PROPERTY N. W. R. Conn. Tw'p.
HOLE NO. 81-31 LENGTH 122 ft.
LOCATION @ π 81-24 & 81-30
LATITUDE 10896 N DEPARTURE 9527 E
ELEVATION 9943 AZIMUTH East DIP 80E)
STARTED Sept. 3/81 FINISHED Sept. 5th/81

Dip 41-3° / 26-45°

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-31 SHEET NO. 1
REMARKS

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION
0	4	Casing
4	26	Chert —— br. + interb. Tuff - some fair Zn, but sampling if 81-24 & 81-30 kick). Some cpy.. @21-21.5 variolites?
26	30	Chert Argillite —— black, fgr., Arg. C., some Sph. - cpy - pyr. @ 60°
30	31	~~~~
31	40.5	Chert —— Arg.: Py. + some Sph. "Bed" @ 50°-60°
40.5	44.5	Chert —— Breccia. Fair cpy & Sph.
44.5	47.5	Tuff.
47.5	56.5 / 65	Chert —— Brec. Sparce Cu + Sph.
65°	86	Chert —— C. + cbr., interbeds T & light chert
86	87	~~~~
87	89.5	Tuff
89.5	98.5	Chert —— br. + good cpy. + pyr. ✓ minor ~~ @ 98.5
98.5	106	Lost Core —— (lost water @ contact ~~?)
106	122	Diorite —— ~~ @121!

SAMPLE NO.	% SULPHIDES	FOOTAGE FROM	FOOTAGE TO	FOOTAGE TOTAL	ASSAYS Cu %	Zn %	Ag OZ/TON	Au OZ/TON
3281	L	40.5	44.5	4.0	0.66	0.71	NA	NA
3282		36.5	61°	4.5	0.27	2.76 ✓	NA	NA
3283		74.5	82°	7.5	0.26	0.83	NA	NA
3285		[redacted]			1.76	1.64	.15	nil
3286		94°	99°	5.0	0.51	0.23	.05	nil
3284		85.5	86.5	1.5	1.36	1.27	NA	NA
3285		89.5	94.0	4.5	1.76	1.64	.15	nil

Note 98.5-106, lost core, probably carried good values

LANGRIDGES — TORONTO — 366-1168

FORM 1

DIAMOND DRILL RECORD

NAME OF PROPERTY Mt. W. R. Conn.
HOLE NO. 81-101 LENGTH 188
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP 90°
STARTED 6-10-81 FINISHED 8-10-81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-101 SHEET NO. 1
REMARKS

LOGGED BY DWCF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAY Cu %	ASSAY Zn %	ASSAY Ag OZ/TON	ASSAY Au OZ/TON
0	15	Casing.									
15	19	Diorite — pea soup - remnants gist? (dd)									
19	31.5	Gr'st. — variolitic (finely variolitic)									
31.5	33	Diorite — pea soup.									
33	38.5	Gr'st. — variolitic									
38.5	43	Diorite — d.d. & digested gr'st.									
43	45	Alt. — grading to semi-dig. chert.									
45	46	Chert — Alt. & digested — remnants cpy & sph.									
46	52	Arg. Chert — Numerous calcite stringers of all angles. Some cpy-sph. Graphitic @ 52'									
		46-51 — Arch., calc. stringers, py cubes & scattered cpy. Galena @ 51'.	59111		46	51	5.0	0.13	0.69	NA	NA
52	54	Arg. ch. — minor sph., cpy, gal.	59112		51	54	3.0	0.38	3.39	NA	NA
54	56	Dyke. — light grey.									
56	61	Chert — calc. some fair ½"-1" bands cpy @ 30°	59113		56	63	7.0	1.08	1.69	NA	NA
61	67	chert — as 52-61									
		56-63: Arg. ch. occ 1"-3" zones good cpy-sph-galena.									
		63-67: light chert. some dissem. cpy. minor sph.	59114		63	67	4.0	0.28	0.31	NA	NA

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-101 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-101 SHEET NO. 2

REMARKS _____

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
67	69	Chert ——— Argillaceous – ~~barren~~. some miner cpy. No sample.									
69	73	" ——— Argill. – barren.									
73	87	Dyke ——— dioritic – remnant chert@84' (3") with good cpy.									
87	105	Chert (Arg.) ——— Argill. diss. cpy & graphite @ 89' – not broken.									
		87-93 – v.f.gr. lam. arg. Pyrite stringers tightly folded - some galena sph ? cpy?	~~5916~~ 5915		87°	93°	6.0	0.23	1.17	.05	.002
		93-101 – graphitic very argillaceous – occ. galena ———									
		@89° – band. @ 15° @95° – " " 80° graphitic +Qtz. @20° @100' graphitic @ 104'									
105	128	Argillite (ch.) ——— As 87-105, but no sample,									
128	141	Dyke ——— light cream, silic., no visible mineralization. mottled in places									

DIAMOND DRILL RECORD

NAME OF PROPERTY _____

HOLE NO. 81-101 LENGTH _____

LOCATION _____

LATITUDE _____ DEPARTURE _____

ELEVATION _____ AZIMUTH _____ DIP _____

STARTED _____ FINISHED _____

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-101 SHEET NO. 3

REMARKS _____

LOGGED BY _____

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
141	~~141~~ 155	Argillite — same as above - sampled 150'-165' - "just in case"	5917		150	155	5.0	.04	.17	.02	.002
155	162	Argillite — band. @ 30°. Bands of pyr. Some sil. zones showing flow-roll and cross-bedding. Very graphitic 155-156	5918		155	162	7.0	.03	.06	NA	NA
162	165	Chert — light c. chert, massive. Bands of Py-Cpy?	5919		162°	165°	3.0	.05	.06	NA	NA
165	171	Dyke — f. gr. - dioritic									
171	173°	Chert — light min.									
173°	188	Diorite — typical.									
		Cut									

DIAMOND DRILL RECORD

NAME OF PROPERTY MWR. CONN.
HOLE NO. 81-103 LENGTH 50'
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP 90°
STARTED Oct. 8/81 FINISHED Oct 8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-103 SHEET NO. 1
REMARKS

LOGGED BY DWLF.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
0	8	Casing									
8	22	T ——— Qtz-fsp. 1/8" phenocrysts.									
22	28 30.5	Chert ——— light c.br. fair sch. in scattered. spots.									
		22-28 - mainly barren light chert — occ. sph. —	5920		22.0	28.0	6.0	.06	1.10	NA	NA
		28.5-30.5 - light chert fair sch. — some pyr.	5921		28.0	30.5	2.5	0.18	1.35	NA	NA
30.5	43.0	T ———									
43.0	50.0	diorite ——— (dd) digestive									
		end									

LANGRIDGES – TORONTO – 366-1168

DIAMOND DRILL RECORD

NAME OF PROPERTY N. W. R. CONN.
HOLE NO. 81-104 LENGTH 50'
LOCATION
LATITUDE DEPARTURE
ELEVATION AZIMUTH DIP 90°
STARTED Oct 8/81 FINISHED Oct. 9/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH

HOLE NO. 81-104 SHEET NO. 1
REMARKS

LOGGED BY D.W.L.F.

FOOTAGE FROM	FOOTAGE TO	DESCRIPTION	SAMPLE NO.	SAMPLE % SULPHIDES	SAMPLE FOOTAGE FROM	SAMPLE FOOTAGE TO	SAMPLE FOOTAGE TOTAL	ASSAYS Cu %	ASSAYS Zn %	ASSAYS Ag OZ/TON	ASSAYS Au OZ/TON
0	4	Casing.									
4	12	Chert ——— c.gr. some sph., f.gr., no sample.									
12	13	"									
13	17	Chert ——— fair Cu + Zn.	5922		13'-	17'-	4.0	0.52	1.64	.05	nil
17	22	Chert ——— c gr.									
22	32	Lost Core ——— " @ 22' & 32'									
32	34	- Sil. Diorite									
34	38.5	- Diorite									
38.5	43'	- Chert ——— light, fair cpy. & sph. in scattered blebs. - otherwise, relatively barren.	23 5923		38.5-	43'-	4.5	0.07	1.04	NA	NA
43	50	- Argillite ——— v. f-gr. pyr. stringers.	24 5924		43'-	49'-	6.0	.02	2.80	NA	NA
			25		49'-	50'	1.0	0.13	11.68	0.11	.002
		mud									

NOTE DRILLERS PULLED LAST HOLE @ 50' —
49-50 - 11.68% Zn.
(See DDH. 68 -

LANGRIDGES — TORONTO — 366-1168

CONSOLI
9000
10000
11000
23000
22000
21000 N
20 000 N
19000 N
18000 N
34944
34945
34946
34947
57538
57539
11 44 01
Tower Road
Hirom Lake
Kettle Lake
Beaver Lake
LONG SECTION
1.2% Cu. 1.28% Zn
Av. 30.0'
Av. of 30 D.D.H's.
BASE LINE No. 2
L-0 SOUTH GRID
200

To Correlate Grid locations to Claims see
Map: Consolidated Shunsby Mines Ltd.
Revised to FEB. 1969
1"=100'

63.4004

M.W. RESOURCES LTD.
CUNNINGHAM TOWNSHIP
NORTH ZONE
1955 - '56 - '80 - '81
DIAMOND DRILLING
INTERSECTIONS
ASSAYS RECORDED IN % EQU. COPPER
1981 MAPPING BY
DENNIS FAIRBAIRN P.Eng.

Scale: 1 in. = 30 ft. NOV. 1981

OMER81-5-C-55

OMEP81-5-C-55
63.4004
GEOLOGICAL PLAN
NORTH SECTION
CONSOLIDATED SHUNSBY MINES LTD.
Scale : 1" = 100'
GEOLOGY — C.W. ARCHIBALD, R. MUDFORD & 1965-1966 WORK
Drawing prepared by:
ATKINS MINING CONSULTANTS LIMITED
From information supplied by:
CONSOLIDATED SHUNSBY MINES LTD.
REVISED TO FEB, 1969
REVISED, JUNE, 1978.
1. Add: D.D.H. 74-1 to 74-21.
2. Add: Model Vert. Sections.
REVISED, FEB. 1979
1. Add: Geochem. Survey of 1974
2. Add: E.M. Anomalies 1965.
SYMBOLS
JEEP ROAD
TRAIL
STRIKE & DIP OF BEDDING
STRIKE & DIP OF SCHISTOSITY
SHEAR ZONE
OUTCROP
SULPHIDE OUTCROPPING
FAULT
TRENCH
GEOLOGICAL BOUNDARY
ASSUMED CONTACT
MUSKEG
HILL
DIAMOND DRILL HOLE
0.9 2.4 / 23.5 Cu Zn / Feet M (middle) B (basil)
Model Boundary
of Model Sections
Zn. Anomaly. - Range in p.p.m. (400-2800)
Cu. Anomaly. - Range in p.p.m. (63-270)
LEGEND
Qd QUARTZ DIABASE
L LAMPROPHYRE
TT PORPHYRY, QUARTZ PORPHYRY
d DIORITE
s SLATE
c CHERT
gr ANDESITE
T TUFF
11000
12000
23000
22000
21000
20000
19000 N
18000 N
L-28 N
L-24 N
L-20+30N
L-16 N
L-12+25 N
L-8 N
L-4 N
L-0+00
L-4 S
L-8 S
L-10 S
L-12.5
L-16 S
L-20 S
L-24 S
L-0 SOUTH GRID
LIMIT OF GEOCHEMICAL SURVEY, 1974.
E.M. ANOMALY EXTENDS TO L-8 S. GRID (PLATE T-2)
SLOUGH
Beaver Lake
Lake
61829
61830
57539
34946
114402
121596
400-2800
400-3400
400-1400
68-17
68-18
68-20
SE.2
SE.3
SE.4