

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.09.09

ASSESSMENT REPORT 18039

MINING DIVISION: Kamloops

PROPERTY: CM
LOCATION: LAT 51 18 00 LONG 120 07 00
UTM 10 5686916 701003
NTS 092P08E

CLAIM(S): CM 2-3
OPERATOR(S): Skylark Res.
AUTHOR(S): Farmer, R.
REPORT YEAR: 1988, 84 Pages

COMMODITIES
SEARCHED FOR: Copper, Zinc, Silver, Gold

GEOLOGICAL
SUMMARY: The CM claims are underlain by a north-northwest striking, steeply east dipping sequence of mafic volcanics and sediments of the Permian Fennell Formation. The sediments are host to two small massive sulphide occurrences consisting of pyrite, chalcopyrite and magnetite as exposed in old trenches.

WORK
DONE: Drilling
DIAD 610.2 m 6 hole(s);NQ
Map(s) - 7; Scale(s) - 1:5000
SAMP 78 sample(s) ;ME
FILE: 092P 101

LOG	1130	RD.
AC.		
FILE NO.		

ASSESSMENT REPORT
BARRIERE LAKES PROJECT
CM CLAIMS
1988 DIAMOND DRILLING

Kamloops Mining Division
NTS: 92P/8E

FILMED

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VANCOUVER, B.C.	

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,039

BPVR 88-10

R. Farmer
November, 1988.

SUMMARY

Diamond drilling was carried out in two separate programs on the CM claims.

Seven holes were drilled in the first program of which only one is being filed for assessment here (CM-88-3). This hole was drilled to follow up copper rich massive sulphides intersected in 1987 drilling. The massive sulphides were not intersected during the current program suggesting the mineralization is a small pod, or perhaps a ? fragment.

In the second program six holes were drilled, five of which are being reported on here (CM-88-8 to 12). This program was designed to test outcropping massive sulphide and magnetite here termed the Upper and Lower Showings. Results were disappointing as massive sulphide mineralization was not intersected. Two of the holes, however, CM-88-8 and CM-88-11 intersected strong alteration along with stringer and fracture fill base metal mineralization. The section is very complex due to prominent faulting and additional drilling is required along strike.

RECOMMENDATIONS

1. Diamond drill geophysical targets to the south of the area currently drilled (Program 2), which appear to be on strike with Upper and Lower Showing mineralization.

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INTRODUCTION

During 1988 follow-up diamond drilling was carried out on the CM 1-7 mineral claims. Drilling was done in two separate programs.

In the first program a total of seven holes were drilled, only one (CM-88-3) of which is being reported on in this report. Hole #3 was drilled to follow up massive sulphides intersected in 1987 drilling and was drilled to a total depth of 197.86 metres. Drilling was carried out from May 25th to May 31st, 1988.

The second program consisted of six holes, of which five are reported on here (CM-88-8 to 12) for a total of 412.34 metres. This program was designed to test exposed massive sulphide mineralization of the Upper and Lower Showings. Drilling for program 2 was carried out from August 9th to August 24th, 1988.

This report describes the programs and results.

LOCATION AND ACCESS

The CM claims are located near Chinook Mountain approximately 15 kilometres north of Barriere, B.C., (Figure 1). The geographic centre of the claims is at latitude 51°18' north and longitude 120°07' west on N.T.S. mapsheet 92P8E.

Access to the property is gained via the Dunn Lake Road from Barriere, B.C. After following the Dunn Lake Road for approximately 17 kilometres a right turn is made onto the Cold Creek logging road which follows Newhykulston Creek. It is approximately two kilometres to the property from this point.

TOPOGRAPHY AND VEGETATION

Topography is fairly rugged as the claims are situated along a prominent ridge on the east side of the North Thompson River.

Elevations vary between 2,000 feet (615 m) A.S.L. and 5,000 feet (1538 m) A.S.L.

Vegetation consists of a mixed forest of spruce, pine, fir, birch and poplar.

LAND STATUS

The CM 1-7 claims (Figure 2) lie within the Kamloops Mining Division on N.T.S. mapsheet 92P/8E. All claims are registered in the name of BP Minerals Limited.

Claim statistics are shown in Table I below:

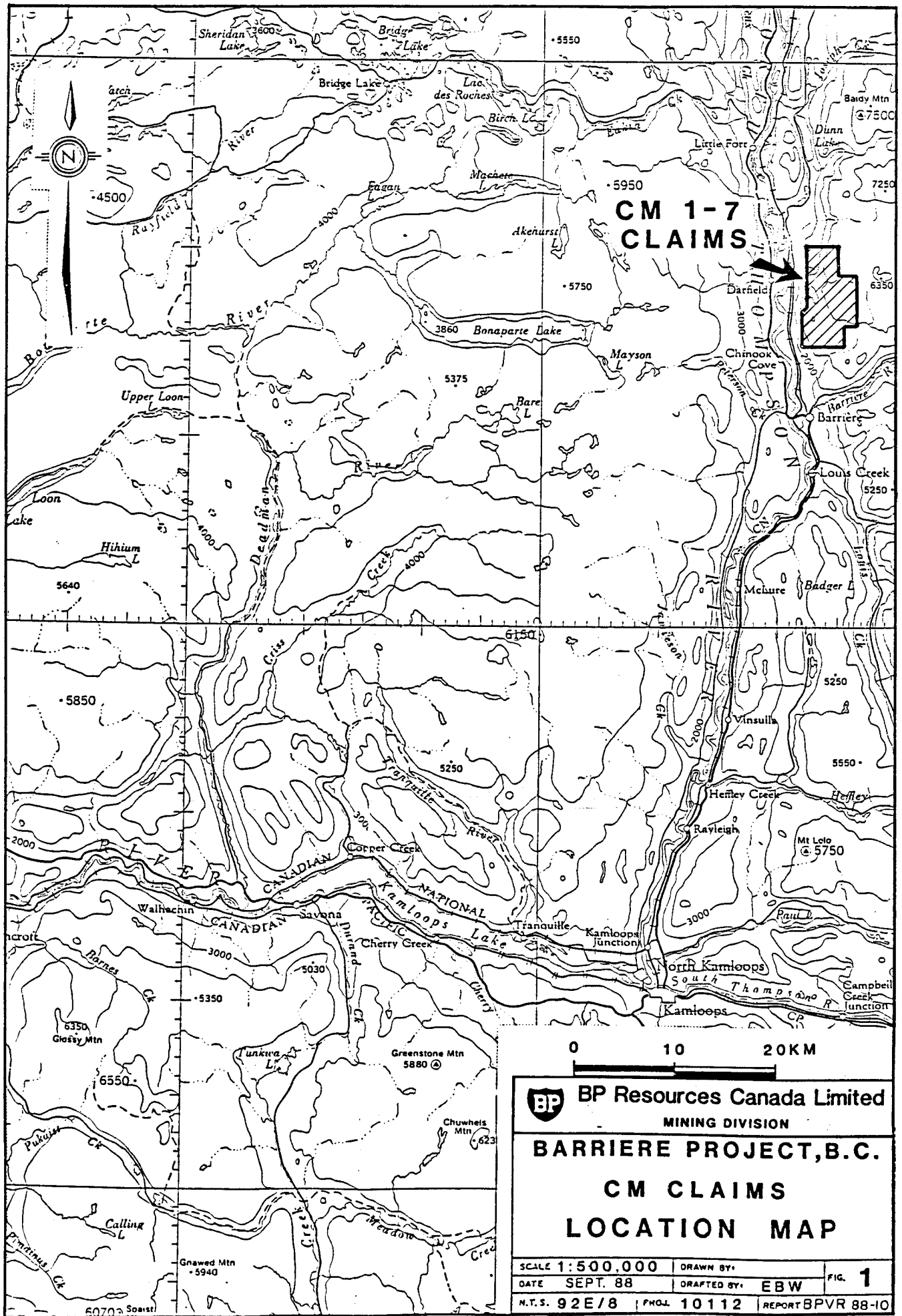
TABLE I: Claim Statistics

<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Record Date</u>	<u>Expiry</u>
CM 1	6367	20	Sept. 13/85	1993
CM 2	6368	20	Sept. 13/85	1993
CM 3	6369	20	Sept. 13/85	1993
CM 4	6370	15	Sept. 13/85	1993
CM 5	6469	9	Dec. 30/85	1993
CM 6	6470	8	Dec. 30/85	1993
CM 7	7342	12	Nov. 3/87	1993

Total: 104 Units

CM 1, CM 3, CM 5, CM 6, CM 7, Grouped as CM A Group
 CM 2, CM 4, Grouped as CM B Group

Note: Expiry dates based on approval of this report.



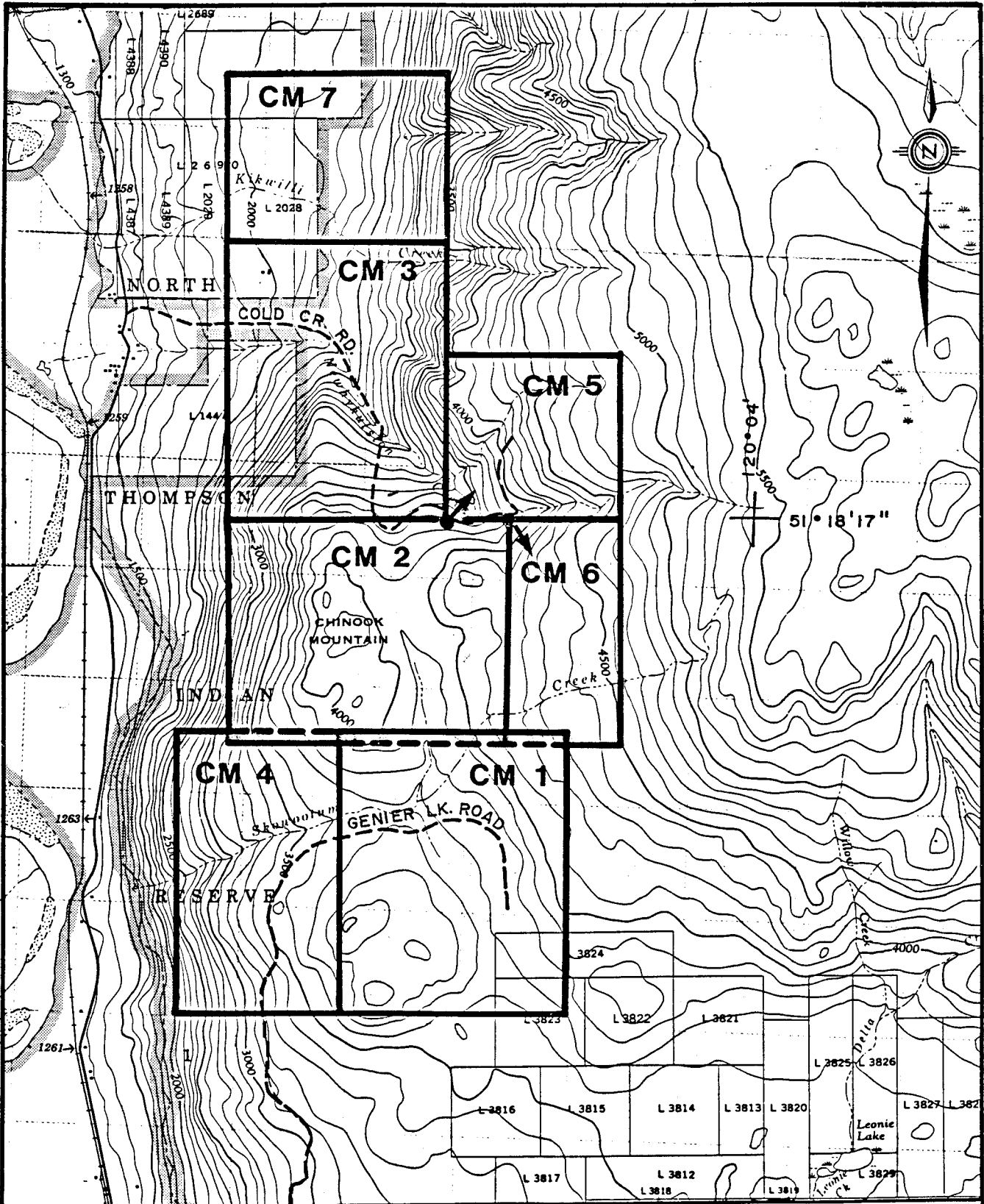
**CM 1-7
CLAIMS**

BP BP Resources Canada Limited
MINING DIVISION

BARRIERE PROJECT, B.C.

**CM CLAIMS
LOCATION MAP**

SCALE 1:500,000	DRAWN BY:	FIG. 1
DATE SEPT. 88	DRAFTED BY: EBW	
N.T.S. 92E/8	FNOL 10112	REPORT BPVR 88-10



BP BP Resources Canada Limited
MINING DIVISION

**BARRIERE PROJECT, B.C.
CM 1-7 CLAIMS
CLAIM
LOCATION MAP**

SCALE 1 : 50,000	DRAWN BY : R. F.	FIG. 2
DATE SEP 1, 1988	DRAFTED BY : H. R. Z.	
N.T.S. 92 P / 8 E	PROJ. 10 112	REPORT BPVR 88-10

GEOLOGY AND PREVIOUS WORKa) Previous Work

In the Newhykulston Creek area a gossan was uncovered in the 1950's and subsequent trenching followed the gossan for several hundred metres. The property has had some small diameter drilling done on it sometime pre 1970. This drilling evidently intersected a two foot band of massive sulphide which was later exposed by further trenching.

During 1970 some trenching and approximately 1200 feet of diamond drilling in three holes were done by Rio Tinto Canada under an option agreement from Kel Glen Mines.

In 1978 Noranda optioned the property and carried out an airborne VLF survey, Shootback EM, and magnetometer surveys, and a grid controlled soil survey.

In 1979 Craigmont flew a Dighem III survey covering all of the Fennell Formation between Barriere and Clearwater, B.C., including the CM Claims area.

In 1986 BP Resources Canada Limited carried out ground Max/Min EM and magnetics, soil sampling and, geologic mapping on four small grids.

In 1987 BP Resources Canada Limited carried out linecutting (17.2 line KM), ground geophysics (22.65 line km Max/Min EM, 17.2 line

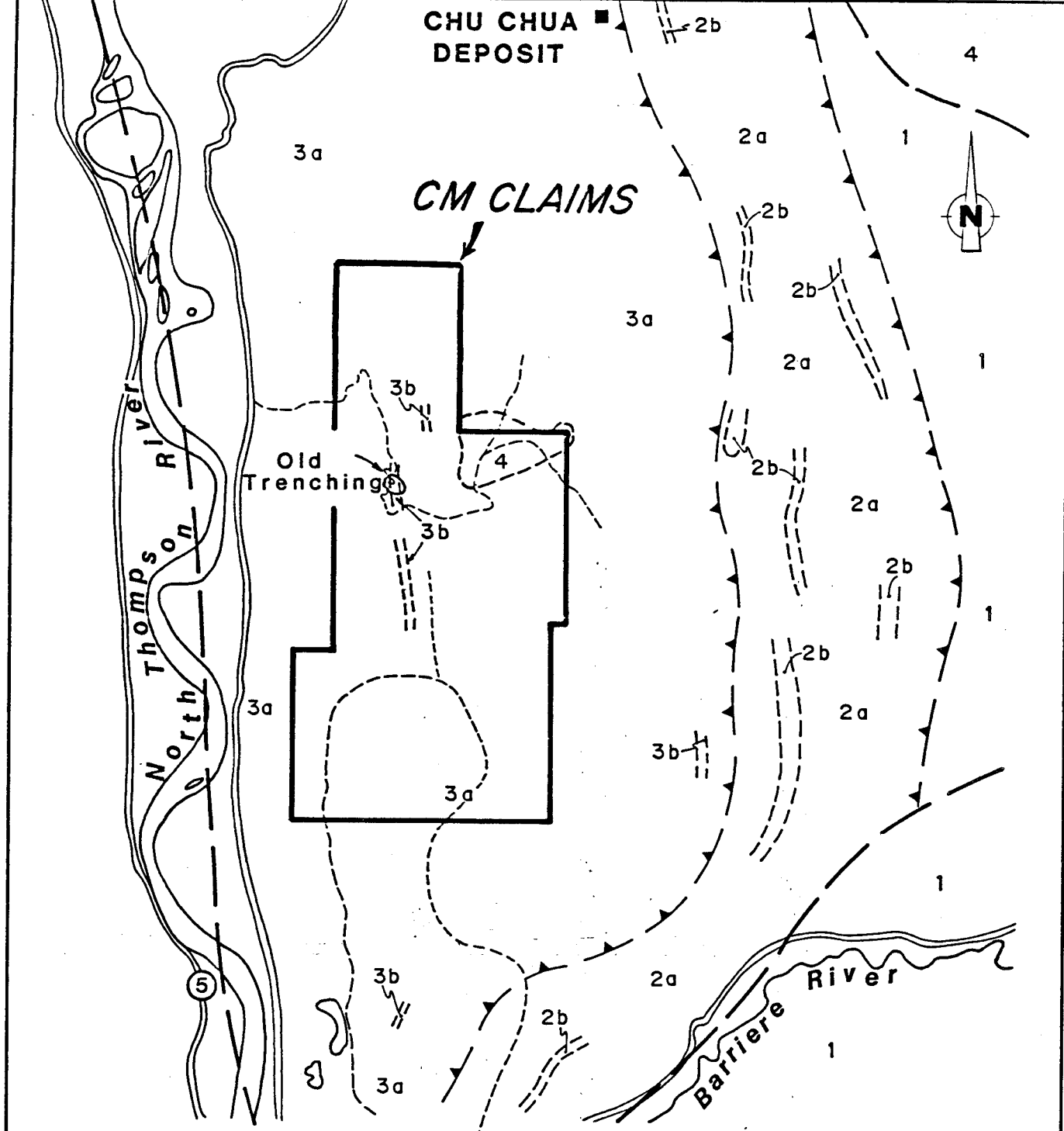
km magnetics, 11.9 line km I.P.), soil sampling (563 samples), geological mapping, trenching (7 trenches) and, diamond drilling (2 holes for 242.99 metres).

b) Geology

The regional geology has been mapped by Preto and Schiarizza (1984) and Schiarizza (1983) of the British Columbia Ministry of Energy, Mines and Petroleum Resources.

The CM claims are located within the Fennell Formation of Mississippian age. Fennell Formation rocks consists of basalts, chert and minor argillite and conglomerate occurring in a belt roughly 10 km wide, extending northwards from Barriere, B.C. for at least 100 km. The section has been divided into an upper and lower structural unit by Preto and Schiarizza (1984), separated by a thrust fault (Figure 3), with chert being more common in the lower structural unit. Fennell rocks are locally intruded by Cretaceous granitic rocks of the Baldy and Raft Batholiths.

The CM claims are within the upper structural unit and are underlain predominantly by basalt. Minor sediments consisting of chert and argillite are also present and a small granitic plug, likely related to the nearby Baldy Batholith, intrudes the section in the northeast corner of the property (Figure 3). A narrow belt of sediments trends NNW throughout the central portion of the property. The sediments generally dip vertically, and consist primarily of grey to green chert with minor black argillite. This



CHU CHUA DEPOSIT

CM CLAIMS

North Thompson River

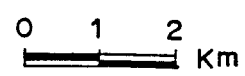
Barriere River

Old Trenching

LEGEND

- CRETACEOUS**
BALDY BATHOLITH
- 4** Granite, granodiorite
- MISSISSIPPIAN**
FENNEL FORMATION
UPPER STRUCTURAL UNIT
- 3** 3a - Basalt
3b - Chert, argillite
- LOWER STRUCTURAL UNIT
- 2** 2a - Basalt, minor sediments
2b - Chert, argillite
- DEVONIAN? & OLDER
EAGLE BAY FORMATION
- 1** Intermediate to felsic volcanics, sediments, limestone
- — — — — THRUST FAULT
- - - - - FAULT
- - - - - ROAD

Simplified after Preto and Schiarizza 1984



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BARRIERE LAKE PROJECT
CM CLAIMS AREA
REGIONAL GEOLOGY

SCALE 1:100,000	DRAWN BY R.F.	FIG. 3
DATE SEPT. 1988	DRAFTED BY EBW	
N.T.S. 92E/8	PROJ. 10112	REPORT BPVR 88-10

belt of sediments is host to two small massive sulphide occurrences as exposed in old trenches, identified as the Upper and Lower Showings on Figure 5.

The Upper Showing consists of a zone of massive magnetite three to four metres thick, with local, narrow zones of mixed sulphide (pyrite-chalcopyrite) and magnetite. Mineralization is hosted by massive, grey, pyritic chert.

The Lower Showing is located approximately 70 metres downslope and along strike. This trench is largely sloughed in and characterized by a thick ferricrete development, up to three metres thick. Massive sulphide mineralization is exposed in the bottom of the trench. The mineralization is variably oxidized and consists of fine-grained pyrite and chalcopyrite with malachite and chalcocite and is 1.4 metres thick as exposed. Host rock exposed on the west side of the mineralization consists of grey, pyritic chert and black, cherty (silicified ?) and pyritic argillite. Rocks adjacent to the mineralization are strongly sheared. In the trench wall at the south end of the trench, shearing is very intense producing a breccia consisting of large clasts of chert and massive sulphide. This shear zone forms part of a prominent airphoto lineament trending SSE through the CM claims and it seems likely that mineralization may be related to this structure.

Unfortunately the mineralization is poorly exposed and hence its extent is unknown. Host rock is poorly exposed on the west

side and not exposed on east side at all, hence little information is available on detailed stratigraphy and alteration.

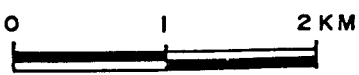
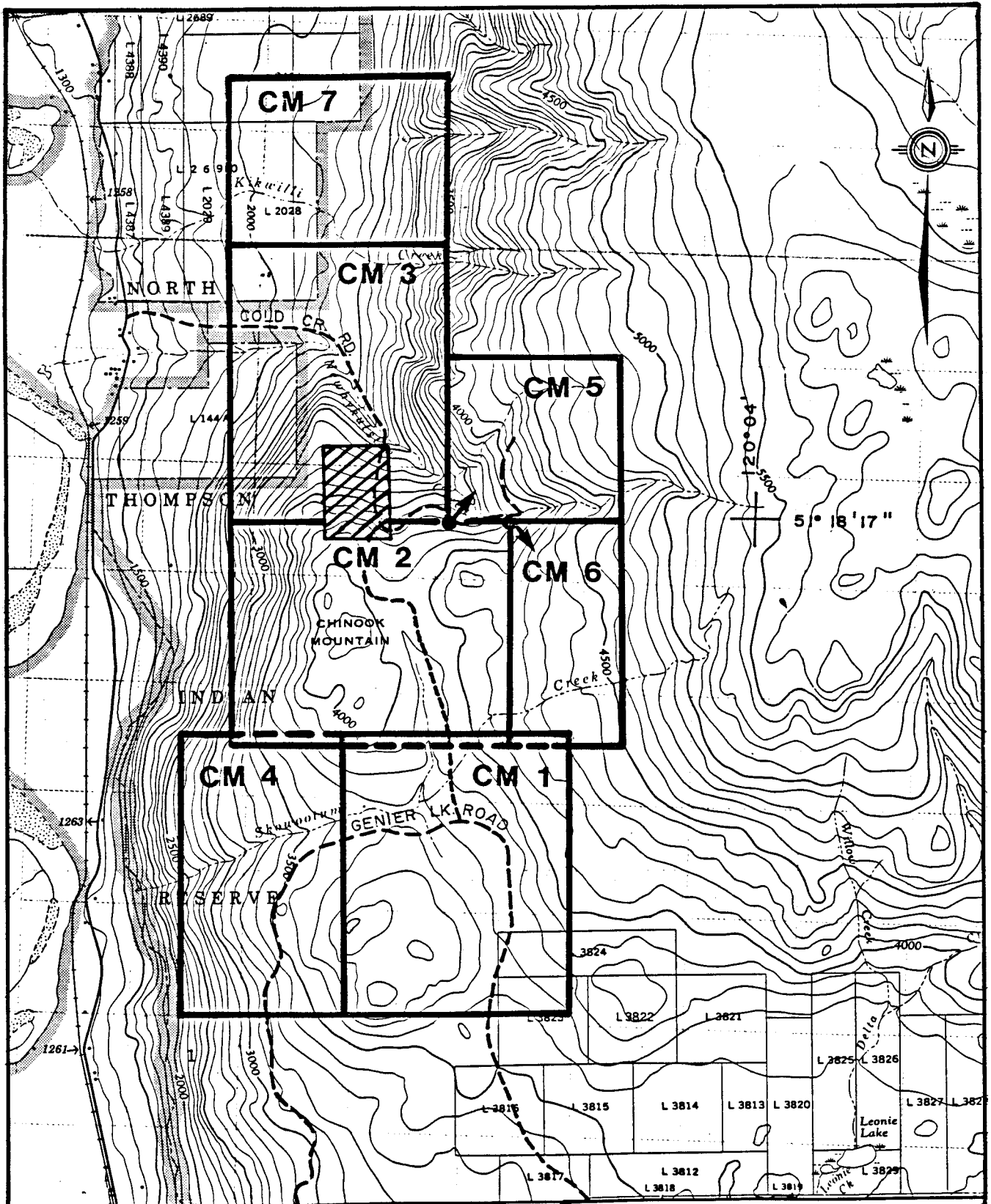
DIAMOND DRILLING

This report describes diamond drilling carried out in two separate programs, which are described separately below. The area of drilling is indicated on Figure 4 and drill locations plotted on Figure 5, and Figure 12. Table 2 summarizes all pertinent drill data.

The core was logged by R. Farmer and is stored at a warehouse in Barriere, B.C. For both programs core recovery averaged around 80% overall, however, numerous sections of broken, caving ground were encountered, resulting in recoveries in the 20%-40% range, as well as, slow, costly drilling. Newhykulston Creek was used as a water source, and water pumped to the drill sites.

Selected portions of the core were split and analysed for 30 elements by ICP plus gold by A.A. Samples were sent to Acme Analytical Labs Ltd., in Vancouver, B.C., for analysis.

Sample locations and lengths are shown on the drill sections (Figures 6-11 in pocket). Drill logs are included in Appendix III and Certificate of Analyses for all core samples are included in Appendix IV.



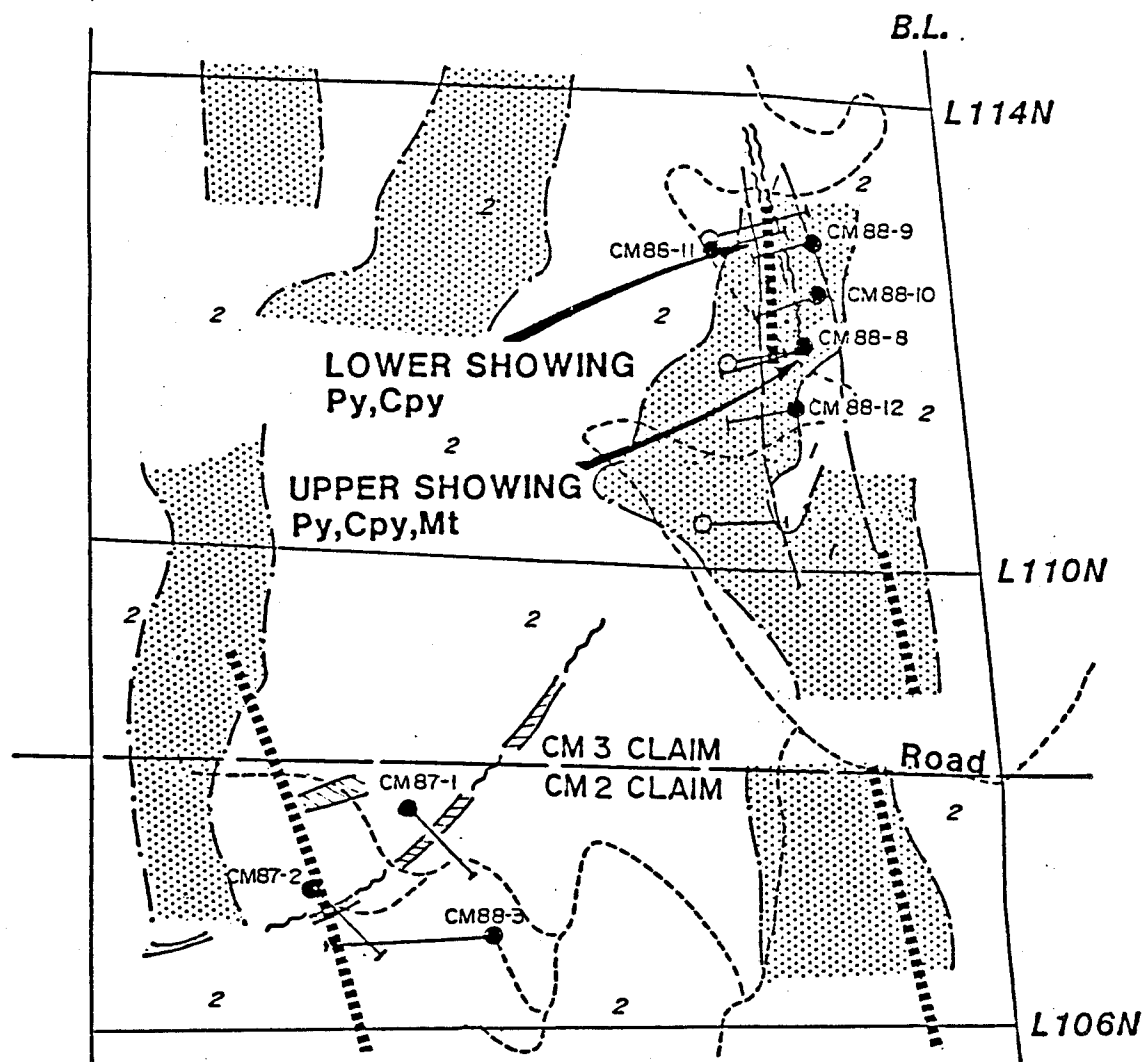
 AREA OF 1988 DRILLING
(Detailed on Fig. 5)

BP BP Resources Canada Limited
MINING DIVISION

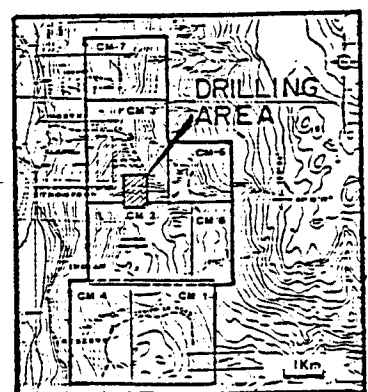
BARRIERE PROJECT, B.C.
CM 1-7 CLAIMS

DRILL LOCATION

SCALE 1 : 50,000	DRAWN BY: R. F.	FIG. 4
DATE SEPT. 1988	DRAFTED BY: E.B.W.	
N.T.S. 92 P/8 E	PROJ. 10 112	REPORT BPVR 88-10



0 100M.



PALEOZOIC

- 2 Mafic volcanics
- 1 Sediments-chert, argillite
- Quartz/carb. veins
- Maxmin axis
- IP chargeability anomaly
- BP-Skylark drill hole
- Rio Tinto(1970) drill hole

BP Resources Canada Limited		
MINING DIVISION		
BARRIERE PROJECT, B.C.		
CM 1-7 CLAIMS		
COMPILATION MAP		
DRILL HOLE LOCATIONS		
SCALE AS SHOWN	DRAWN BY: R. F.	FIG. 5
DATE SEPT. 1988	DRAFTED BY: CHONG	
N.T.S. 92 P/8 E	PROJ. 10 112	REPORT BPVR 88-10

TABLE 2: DIAMOND DRILL HOLE DATAProgram 1:

<u>Hole No.</u>	<u>Grid Location</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Length</u>	<u>Claim</u>
CM-88-3	106+55N- 95+50E	1190 m	270°	-45°	197.86 m	CM 2
					Total: 197.86 m	

Program 2:

<u>Hole No.</u>	<u>Grid Location</u>	<u>Elevation</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Length</u>	<u>Claim</u>
CM-88-8	111+95N- 98+19E	980 m	260°	-55°	102.44 m	CM 3
CM-88-9	112+85N- 98+50E	956 m	260°	-50°	60.97 m	CM 3
CM-88-10	112+50N- 98+55E	966 m	260°	-50°	60.21 m	CM 3
CM-88-11	112+98N- 97+48E	970 m	080°	-50°	96.04 m	CM 3
CM-88-12	111+50N- 98+22E	991 m	260°	-50°	92.68 m	CM 3
					Total: 412.34 m	

a) Program 1

In the first program a total of seven holes were drilled, however, only one hole (CM-88-3) is being filed here for assessment. Hole CM-88-3 was drilled from May 25th to May 31st, 1988, to a total depth of 197.86 metres. Ten samples were collected and sent for analysis. This hole was drilled to follow-up massive sulphide mineralization intersected in 1987 drilling (Hole CM-87-2, Assesment Report No. 16596). Diamond drilling was under contract to Iron Mountain Drilling Ltd., of Merritt, B.C. A Longyear 44 wireline rig was used to drill the NQ sized holes.

i) DDH CM-88-3 (Figure 6, in pocket)

This hole was drilled to follow-up massive sulphide mineralization intersected in hole CM-87-2 (Assessment Report No. 16596) and was designed to intersect the mineralization close to the 1987 intercept to confirm the direction of dip of the section prior to further drill testing along strike.

The hole intersected largely fine grained, massive Fennell basalts. Five narrow zones of sediments were intersected as follows: 104.57-105.23 m, 110.06-111.44 m, 115.01-116.87 m, 163.75-166.42 m and 174.22-175.40 m. Sediments consist primarily of grey to black argillite, locally graphitic, with lesser amounts of massive to banded grey to green chert. Sediments typically display strong soft sediment deformation, with slump breccias being very common. Direction of dip was confirmed to be steep to the east.

The massive sulphide mineralization was not intersected and could represent a small, discontinuous pod or perhaps a fragment? Sediments are generally weakly pyritic and locally contain minor chalcopyrite (i.e., 110.6-111.44 m), however, results are poor. Best results are as follows:

Sample No.	Section	Length m	Results			
			Cu(ppm)	Zn(ppm)	Ag(ppm)	Au(ppb)
203019	110.96-111.43 m	0.47 m	2749	975	0.9	27

b) Program 2

A total of six holes were drilled in the second program, five of which are being filed for assessment (CM-88-8 to 12). The five holes were drilled between August 9th and 24th, 1988, for a total of 412.34 metres. This program was carried out to test an area of outcropping massive sulphide mineralization previously described (under Geology) as the Upper and Lower Showings. Diamond Drilling was under contract to Bergeron Drilling Ltd., of Greenwood, B.C. A Longyear 38 wireline rig was used to drill the NQ sized holes. A total of 68 samples were collected and analysed from the five holes.

i) DDH CM-88-8 (Figure 7 in pocket)

Hole 8 was drilled under the Upper Showing and was designed to test not only the surface mineralization but also mineralization encountered in a Rio Tinto (1970) drill hole which was not analysed for precious metals.

The hole intersected the usual fine grained and massive mafic volcanics as well as two sedimentary horizons which occur as follows; ? 31.10 m-47.78 m and 86.88 m-102.44 m E.O.H. Both consist of grey, green or black chert on the uphole side grading to, grey to black argillite, wacke and mudstone, with occasional chert bands down hole. The argillite/wacke sections are well laminated to bedded (steep east dip) and locally graphitic. The upper contact for the first horizon at 31.10 metres is an approximate location as the contact zone

occurs within a major zone of faulting and alteration. The section from 28.05–44.41 metres is likely a broad fault zone consisting of a series of more discrete fault gouge and breccia zones. This fault zone coincides with a prominent topographic lineament trending SSE through the property.

A broad zone of alteration is present at 16.77–42.68 metres, roughly coincident with the fault zone. Alteration consists of clay, carbonate and silicification, and starts out as a bleaching (pervasive clay/carbonate) of the mafic volcanics to a light grey/green colour. Narrow silicified zones are present which increase in frequency down hole. At 31.10–36.05 metres an intense silicified zone is present. The rock is aphanitic, light grey in colour and cherty-looking. As all textures are destroyed it is not clear whether this rock represents altered volcanics or sediments, however, the zone seems to occur at a sediment–volcanic contact. Below the silicified zone clay/carbonate alteration continues to about 42.68 m, weakening gradually.

The altered zone is strongly pyritized and minor chalcopyrite is present throughout. Native copper was identified at one location (25.61 m). Sulphides occur as fracture fillings, fine disseminations and sulphide-rich bands (to ~ 12 cm thick). Sulphide bands cross the core at all angles and in places appear to be matrix to a brecciated rock, perhaps suggesting a relationship to early faulting ?

The massive magnetite and sulphide exposed on surface was not encountered nor were the massive sulphides encountered in the Rio Tinto hole. Best results are as follows:

<u>Section</u>	<u>Length (metres)*</u>	<u>Results**</u>
18.60-42.68 m including:	24.08 m	4634 ppm Cu
(1) 24.39-36.10 m	11.71 m	6859 ppm Cu
(2) 25.30-26.98 m	1.68 m	18028 ppm Cu

Note: * - Core Length
 ** - Weighted average grade.

Precious metal (Au,Ag) values are all very low.

ii) DDH CM-88-9 (Figure 8 in pocket)

Hole 9 was drilled under the Lower Showing to test massive sulphide mineralization exposed in old trenches.

Under 15-24 metres of overburden a diorite to gabbro intrusive was intersected until 51.36 m. The intrusive is medium grained and dark green in colour. Hornblend crystals are locally evident, however, the dominant texture consists of indistinct chloritized patches to 1 cm in diameter, in a distinctive matrix of tiny, white, randomly oriented, feldspar laths.

A major fault zone is present from approx. 40.0 m to 55.79 m. The intrusive here displays strong clay/carbonate alteration

(bleached to light grey/green colour) with minor greenish ? talc on fracture surfaces. Black chert was intersected below the intrusive and at 53.81-54.57 m it contains probable bands of semimassive chalcopyrite and pyrite. Only a few ground marbles were recovered, however, (20% recovery) and the extent and nature of mineralization is not clear. The hole was lost in a fault at 54.57 metres and had to be triconed to 55.79 metres to continue. After triconing the remainder of the hole (to 60.97 E.O.H.) is in mafic volcanics which are not mineralized. Best results are as follows:

Sample No.	Section	Length m	Results	
			Cu(ppm)	Zn(ppm)
203095	53.81-54.57 m	0.76 m	20,692	1208

Note: Since recovery for this interval is only 20% the grades may not be representative.

Mineralization of the type exposed on surface (Lower Showing) was not intersected in the drill hole and may have been cut off by the intrusive, or weakened at depth to that observed in the section above.

iii) DDH CM-88-10 (Figure 9 in pocket)

Hole No. 10 was collared 35 metres south of hole 9 and was drilled to test the mineralization outside of the intrusive encountered in hole 9. The dioritic intrusive was intersected again in this hole under 18.29 metres of overburden. The

diorite is the same as that described in hole 9 and was intersected until 43.49 metres. From 43.49 metres to the end of the hole at 60.21 metres sediments were intersected. Sediments consist of chert (black, grey, green) which are massive to locally banded and highly fractured. At about 56 metres sediment is no longer chert but has become a siliceous clastic sediment (wacke or siltstone?). A major fault zone is present from about 54 metres to 60.21 metres where the hole is lost in the fault due to squeezing of the rods. Mineralization was not encountered in this hole. Only minor pyrite is present within the sediments.

iv) DDH CM-88-11 (Figure 10 in pocket)

Hole No. 11 was collared west of the Lower Showing and slightly north, and drilled back towards the 'mineralized trend'. This hole was drilled from the opposite side with respect to hole CM-88-9 in an attempt to intersect the mineralized zone prior to encountering the intrusive and also, to test a zone of fracture related pyrite, chalcopyrite mineralization, encountered in a similarly drilled Rio Tinto (1970) hole, for precious metals.

The hole collared into mafic volcanics under 15.24 metres of overburden. The volcanics start out as light green coloured fine grained, massive flows but become increasingly bleached (pervasive clay+carbonate alteration?) down hole. At 19.56 metres the volcanics are in fault contact with grey to black

chert to cherty argillite. The chert is intensely brecciated and recovery is very poor. The section 20.12 m - 20.73 m contains bands of massive sulphide to 1 or 2 cm thick consisting of fine grained pyrite, chalcopyrite, and pyrrhotite. At 20.73 metres the hole was lost (in mineralization) in a fault and casing had to be advanced to 24.39 metres to continue.

The section 24.39 m - 68.86 m is mafic volcanics again, similar to that at the top of the hole, except, alteration is not evident.

Sediments consisting largely of chert are again encountered from 68.86 metres to the end of the hole at 96.04 metres. Chert is generally multicoloured here (grey, green, black) and often brecciated. The section is intruded by intensely altered diorite dykes, similar in appearance to the intrusive encountered in holes No. 9 and 10. The frequency of dykes increases down hole, and this section is also likely a broad fault zone.

Mineralization is present from 71.62 m to 82.32 metres and likely corresponds to the zone intersected by Rio Tinto. Mineralization consists of fracture fillings, bands and occasional fragments of pyrite with minor chalcopyrite which constitutes an estimated 2-5% of the rock. The zone does not carry significant precious metals. Best results are as follows:

Sample No.	Section	Length m	Results			
			Cu(ppm)	Zn(ppm)	Ag(ppm)	Au(ppb)
203105	20.12-20.73	0.61	8842	2200	7.4	102
203106	71.62-72.32	0.70	952	398	4.0	325
203107	72.32-73.62	1.30	2761	1147	4.3	103
203110	77.38-77.94	0.56	1479	2596	3.5	50

v) DDH CM-88-12 (Figure 11 in pocket)

Hole 12 is a stepout 50 metres to the south of hole CM-88-8 to test the strike extent of alteration/mineralization encountered in hole 8.

Bedrock consisting of argillaceous sediments was intersected at 27.44 metres. In general the hole intersected argillaceous sediments from 27.44 m - 53.98 m; then mafic volcanics 53.98 m - 80.09; followed by; argillaceous sediments until 92.68 m E.O.H. While the mafic volcanics and lower sediments seem correlative with those in hole 8, the mineralized chert and silicified section was not intersected. While hole 12 could have overshot the mineralized section due to overburden depth the upper argillaceous horizon has thickened considerably from hole 8 and it seems likely that the mineralized portion has either pinched out or been faulted off.

A total of nine samples were collected from this hole, however, no significant values in either base or precious metals were obtained.

CONCLUSIONS

Program 1

Hole CM-88-3 confirmed the direction of dip of the section (steep to the east) but failed to intersect the massive sulphide mineralization encountered in hole CM-87-2. It is not clear whether the mineralization was simply 'missed' or whether only a small pod or ? fragment is present. Additional drilling updip and along strike would be required to confirm the situation.

Program 2

Holes CM-88-8 to CM-88-12 were drilled to test an area of outcropping massive sulphide mineralization, referred to here as the Upper and Lower Showings. Massive sulphide mineralization was not encountered, however, two of the holes, No's. 8 and 11 intersected stringer and fracture fill mineralization associated with strong silicification and clay/carbonate alteration. Both holes were drilled close to known mineralization. In holes 9 and 10 the section appears to be cut off by a dioritic intrusive. In hole 12 the section either pinches out or is offset by the prevalent faulting.

The most significant intercept was in hole 8 where 24.08 metres averaged 4634 ppm Cu.

Additional drilling is required along strike to test possible extensions of the mineralized horizon.

REFERENCES

1. Preto, V.A. and Schiarizza, P. (1984): Geology of the Adams Plateau-Clearwater Area. B.C. Ministry of Energy, Mines and Petroleum Resources; Preliminary Map No. 56.
2. Schiarizza, P. (1983): Geology of the Barriere River-Clearwater Area. B.C. Ministry of Energy, Mines and Petroleum Resources; Preliminary Map No. 53.
3. Dvorak, Z. and Fraser, D.C. (1979): Dighem III Survey of North Thompson River, British Columbia, for Craigmont Mines Limited by Dighem Limited; Assessment Report No. 7659.
4. Assessment Report #7555, Nook Claims by Noranda Exploration.
5. Assessment Report #16596, CM Claims (1987); BP Resources Canada Limited.

APPENDIX I

Statement of Costs

Cost Statement

CM B GROUP - PROGRAM 1

1. Diamond Drilling

a) Iron Mountain Drilling Ltd., Hole CM-88-3
197.8 metres @ \$107.53/metre all in cost
May 25th - May 31st, 1988. \$21,275.88

b) Logging and splitting Core:

R. Farmer - Project Geologist
May 29,30; June 2, 1988.
3 days @ \$200/day. \$ 600.00

Sub Total - Drilling: \$21,875.88

2. Analytical

Acme Analytical Labs Ltd.
10 samples for I.C.P.+Au @ \$15.24 each \$ 152.40

Sub Total Analytical: \$ 152.40

3. Transportation

4 x 4 Pickup truck, including
fuel, rental, insurance
7 days @ \$25/day \$ 175.00

Sub Total Transportation: \$ 175.00

4. Room and Board

a) Accommodation - Apartment
7 days @ \$10/day \$ 70.00

b) Food
7 days @ \$20/day 140.00

Sub Total Room and Board: \$ 210.00

5. Report Writing

R. Farmer - Project Geologist
3 days @ \$200/day \$ 600.00

Sub Total Report Writing: \$ 600.00

6. Drafting and Typing

a) Drafting
10 hours @ \$17.00/hr. \$ 170.00

b) Typing
1 day @ \$100/day 100.00

Sub Total Drafting and Typing: \$ 270.00

TOTAL COST OF PROGRAM: \$23,283.28

Cost Allocation - Program 1

Work was done on the CM 2 mineral Claim. Work to be applied to CM B Group (CM 2, CM 4 claims) as indicated below:

CM B Group

CM 2 - 20 units - 3 years applied	-	\$12,000.00
CM 4 - 15 units - 3 years applied	-	\$ 9,000.00
Total Value Applied	-	\$21,000.00
Remainder applied to BP Minerals Limited PAC account	-	\$ 2,283.00

Cost Statement

CM A GROUP - PROGRAM 2

1. Diamond Drilling

a) Drilling Costs

i) Bergeron Drilling Ltd.
5 holes - CM-88-8 to CM 88-12
August 9-24, 1988.
412.5 metres @ \$93.05/metre all in cost \$38,383.12

ii) Mobilization/Demob. - lump sum cost 336.00

b) Drill Site Construction

D6 Cat. - 15 hrs. @ \$74.50/hr. 1,117.50

c) Logging and Splitting Core

i) Andres Mendosa - Assistant
August 11-24, 1988 - 13 days
13 days @ \$65.00/day 845.00

ii) R. Farmer - Project Geologist
August 10-24, 1988 - 13 days
13 days @ \$200/day 2,600.00

Sub Total Drilling: \$43,281.62

2. Analytical

Acme Analytical Labs. Ltd.
68 sample for I.C.P.+Au @ \$15.24 each \$ 1,036.32

Sub Total Analytical: \$ 1,036.32

3. Transportation

4 x 4 Pickup truck, including
fuel, rental, insurance - August 9-24, 1988
16 days @ \$25.00/day \$ 400.00

Sub Total Transportation: \$ 400.00

4. Room and Board

a) Accommodation - Apartment
16 days @ \$10.00/day \$ 160.00

b) Food
32 man/days @ \$25.00/man/day 800.00

Sub Total Room and Board: \$ 960.00

5. Report Writing

R. Farmer - Project Geologist
5 days @ \$200/day \$ 1,000.00

Sub Total Report Writing: \$ 1,000.00

6. Drafting and Typing

a) Drafting
40 hours @ \$17.00/hr. \$ 680.00

b) Typing
2 days @ \$100.00/day 200.00

Sub Total Drafting and Typing: \$ 880.00

TOTAL COST OF PROGRAM: \$ 47,557.94

Cost Allocation - Program 2

Work was carried out on the CM 3 mineral claim. Work to be applied to CM A Group (CM 1,3,5,6,7 claims) as indicated below:

CM A GROUP

CM 1	-	20 units	-	3 years applied	-	\$12,000.00
CM 3	-	20 units	-	3 years applied	-	\$12,000.00
CM 5	-	9 units	-	3 years applied	-	\$ 5,400.00
CM 6	-	8 units	-	3 years applied	-	\$ 4,800.00
CM 7	-	12 units	-	3 years applied	-	\$ 6,000.00

Total Value Applied - \$40,200.00

Remainder applied to BP Minerals
Limited PAC account - \$ 7,357.00

APPENDIX II


Certificate of Author

CERTIFICATE OF AUTHOR

I, Randy Farmer, of #103-4955 Newton Street, Burnaby, British Columbia, hereby certify that:

1. I am a geologist residing at the above address.
2. I am a graduate of Lakehead University, Thunder Bay, Ontario, with an Honours B.Sc. degree in Geology (1980).
3. I have practiced my profession for more than eight (8) years.
4. I supervised the diamond drilling on CM 1-7 claims and assembled the data described herein.
5. I hold no interest, direct or indirect, in the CM claims which are the subject of this report.

Respectfully submitted



Randy Farmer
Project Geologist

November, 1988.

APPENDIX III

Diamond Drill Logs



BP Resources Canada Limited

MINING DIVISION

DRILL LOG

HOLE NO. CM-88-3

DRILLING CO.	LOCATION SKETCH ↑ -N-	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED:	PROJECT:
IRON MOUNTAIN DRILLING LTD.		COLLAR	-45	270°	DATE COMPLETED:	N.T.S.:
		195 m	-50		COLLAR ELEV.:	LOCATION:
					NORTHING:	
					EASTING:	
					AZIMUTH:	
HOLE TYPE				DEPTH:	DATE LOGGED:	
DDH				197.86 m	May 29 - June 1/88	
				CORE SIZE:	LOGGED BY:	
				NQ	R. Farmer.	

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE		REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
0	3.05	Casing								- o/c @ surface	
										- casing later extended to 24.39 m	
										due to bad, broken, caving ground.	
3.05	104.57	Mafic Volcanics								- usual flow breccia	
										- dark brown quenched ? sections with	
										irregular lt. green brecciated bands	
										and patches. Locally may be amygdaloidal ?	
										(i.e., 13.45 m)	
										- ground badly broken - recovery variable but poor	
										- breccia continues until ~ 23.8 m	
										- core badly ground (marbles) 13.23-15.66 m	
										20.03-21.04 - flow bx. with abundant	
										irregular qtz. veinlets (~ 3 mm wide)	
										@ 23.8 m becomes fine grained, massive,	
										lt. green amygdaloidal ? flow. Tiny 1 mm	
										rounded black amygdules ? filled with chlorite ?	



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
3.05	104.57								minor ff py @ ~ 28.5 m	
Continued									- amygd. until ends ~ 29.6 m then back into flow bx. 29.37-29.6 0.5-1% very fine dissm. pyrrhotite.	
									- 1 cm qtz. vein @ ~ 29.65 m (core broken)	
									- 3 cm qtz. vein @ 30° to C.A. @ 30.00 m.	
									@~34.15-42.0 - fine grained variety again - 'mottled' texture near top becoming amygdaloidal ? near bottom	
									- local minor dissm. po again and some ff py	
									- contacts indistinct	
									- back to flow bx. ? @ ~ 42 m again	
									- doesn't look like usual bx. here (i.e., have dense brownish 'quenched' material but lt. green breccia 'matrix' rare	
									have massive greenish bands locally (ep rich ?)	
									e.g., 2 cm @ 44.45 m @ 45° to C.A.	
									and this angle is common.	
									Po present throughout as fine dissm. and ff generally 1% or less.	
									@ 52.44-53 m have variolites? (rare) to 1 cm	
									lt. green quenched interstitial material here could be pillow margins ? Po still pres.	

DRILL LOG

HOLE NO. CM-88-3

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS
3.05	104.57									
Continued		Mafic Volcanics continued.								- @ 56.52-~59.15 ?? have coarser grained segment (med.gr.) which may be central part of flow ? or gabbroic intrusive ? - contacts indistinct almost appear gradational back into ? flow bx. ?
										- @ 65.5 5m - 3 cm white bleached margins qtz. vein @ 40° to C.A.
										- @ 66.5 5m - 3 cm qtz. veined zone in part bx. vein @ 30° to C.A.
										- becomes fine grained dark and massive - avg. 3-5 veinlets per metre - usually qtz. loc. black chlorite (45° to C.A. most common
										- trace py in veinlets which are generally 1 cm wide.
										- 83.09-83.34 m - med. grained mafic dyke - feldspar porph. ? - top contact indistinct, bottom @ 30° to C.A. dyke has chilled margins and chunks of wallrock have locally been assimilated.

DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
3.05	104.57									@ 83.84-85.06 - medium grained mafic dykes again -	
Continued.		Mafic Volcanics								similar to above except here	
		continued.								contains rounded amygdules ?	
										to 1 cm (felds/epidote+calcite filled)	
										top contact @ 70° to C.A. - chilled	
										bottom also @ ~70° and chilled	
										@ 85.96-87.2 - dyke same as above	
										- bottom contact @ ~55° to C.A.	
										- in both cases amygdules are larger	
										and more abundant in the centre of	
										the dyke	
										- weakly magnetic	
										- narrow 'quenched' sections still	
										present in the volcanics - (i.e. 10 cm	
										with lower contact @ 89.66 m	
										@ ~70° to C.A.)	
										- flow breccia starts again @ 93.54 m	
										- 4 cm gouge zone (fault bx.) @ 93.82	
										@ 60° to C.A.	
										- flow bx. continues until ~97.26 m	
										contact lost in ground core section	

DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS	
3.05	104.57	Mafic Volcanics									- back to very fine grained massive volcanics
Continued.		continued.									lt. brownish colour which seems to gradually
											lighten down hole.
											- ground clayey core last ~ 15 cm
											to 104.57 m - probable fault
104.57	105.23	Black Cherty Argillite.									- 10 cm recovered on either side
											of 0.61 m ground core (lost)
											- recovered pieces strongly qtz. veined
											@ 30° to C.A. Tr. py.
											- ground (lost) core again at bottom
105.23	110.06	Mafic Volcanics									- back to very fine, massive, indistinct
											volcanics - lt. brown colour here
											Tr. dissm. py and black chloritic ? microfractures
110.06	111.44	Sediments									- strange contact ? to grey/green chert
											- contact parallel to C.A.
											- chert shows banding 30-50° to C.A.
											highly variable and even local parallel to C.A.
											110.06-110.98 - is chert with 1-2% ff py
											narrow hairline fractures also silica microveins
											110.98-111.44 - becomes an argillaceous
											sediment but a breccia containing - arg., chert,
											and silty angular irregular, sometimes wispy frags.
											"SLUMP BX."



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
110.06	111.44										- 110.98 - 111.44 continued.
Continued											This arg. slump bx. contains 2-4% sulphide, as ff. stringers along foliation and sulphide rich patches
											- py, chalcopyrite (common) and sphalerite
											- bottom contact indistinct, i.e., seds. seem to become a matrix for underlying volcanics before seds. disappear
111.44	115.01	Mafic Volcanics?									- fine grained lt. to med. brown quenched and divitrified hyaloclastic ? local brecciated zones show an irregular wispy feature which looks like divitrification (i.e., @ 112.5 m)
											- sulphide contact drops to Tr
115.01	116.87	Argillaceous Breccia (Slump?)									- upper contact not clear seems to be volc. w/sed. clasts then sed.w/volc. clasts ? @ 115.65 m alignment of clasts @ 70° to C.A. becomes less clastic - more mass. black arg. @ 116.1 m then brecciated again around lower contact (@ ~35° to C.A. ?)
											- ~ 1% dissm. py. - No discernable base metals.



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
116.87	155.18	Mafic Volcanic									<ul style="list-style-type: none"> - lt. greenish/brown and locally variolitic (2% pillowed?) until ~ 120.2 m - then intercolated green/brown volcs. likely flow bx. type ? - locally variolitic again 130-135 m but still appear to be somewhat brecciated - 3-10 qtz/calcite veinlets/metre (<1 cm) throughout @ ~ 136-149.23 becomes fine grained massive green volcanic - black chloritic microfractures abundant 139-141 m @ 143- ~ 143.5 m brecciated fault gouge @ 20°-30° to C.A. - @ 149.23-150.0 m becomes brecciated with strong qtz/calcite veinlets (10-45° to C.A.) 150-155.18 m - becomes a locally slightly maroon colour with irregular white patches (- 1-3 mm) which may be irregular amygdules ? - still locally brecciated.
155.18	156.71	Mafic Dyke									<ul style="list-style-type: none"> - green/brown feldspar+pyroxene ? + olivine ? porphyritic (all phenos 1-3 mm) Tr py Upper and Lower contacts @ 50° and show weak chilling.

DRILL LOG

HOLE NO. CM-88-3

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
156.71	157.11	Mafic Volcanics								- green fine grained and massive	
157.11	158.88	Mafic Dyke								- Same as previous. Upper contact @ ~40° Lower @ ~30° to C.A. These dykes appear fresh and maybe younger ?	
158.88	159.75	Mafic Volcanics								- Same as previous. Strong qtz/carb. veinlets (20-40° to C.A.) Tr Py and reddish mineral ? in veinlets	
159.75	163.75	Mafic Volcanics intruded by same dykes								- dykes @ follows 159.75-160.16 160.55-160.78 163.01 163.75 - volcanics - same as 158.88 - 159.75 including veining - @ 162.45 - 10 cm of sheared and veined volc. - fault ? @ ~10° to C.A.	
163.75	166.42	Black Cherty Argillite								- fairly massive looking black cherty argillite. Banding locally as zones of breccia with wispy clasts of grey to maroon chert (at 30-40° to C.A.) - ~1% dissm. Py as large crystals and groups of crystals which are subhedral - 8-10 qtz/calcite veinlets (< 1 cm) per metre (@ 40-90°) - appear barren.	



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS	
163.75	166.42	Argillite								- becomes increasingly brecciated towards lower contact	
Continued.										lower contact @ ~30° to C.A. and is with ~15 cm of fine grained volcanics which may be variolitic ?	
166.57	167.88	Mafic Dyke								- Same as previous. - Upper Contact @ 40° - Lower Contact @ 35°	
167.88	174.22	Mafic Volcanics								- 167.88-168.94 - aphanitic, hard, maroon coloured volcanics, probably quenched ? - minor py - lower contact @ ~55° to fine grained green massive volcanics - continues as alternating zones of maroon and green volc. to 174.22 m - maroon sections are variolitic	
174.22	175.40	Argillite								- top and bottom of interval (20 cm or so ea.) are banded consisting of black arg. bands + greenish, wispy to rounded volcanic ? fragments, banding @ 25° - contact ? @ 174.96 m @ 40° but irregular could be dominantly volcanic below this ? rather than sed. → TR - 1& Py.	



DRILL LOG

HOLE NO.

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS
175.4	197.86	Mafic Volcanic							- Same alternating green and maroon volcanics to end of hole. Maroon variety still locally variolitic, and black-chlorite ? microfractures common	
									- contacts between maroon and green volcs. @ ~ 40°	
									- <u>186.16-186.63</u> - strong qtz/calcite veinlets including 2 cm 'Bx vein' @ bottom	
									- @ <u>191.60</u> - 15 cm of black argillite, weakly graphitic. 5-8% ff and dissm. Py	
									- may be 10-15 cm of core lost here as core is ground and contacts not evident	
									- strong qtz/carb. veinlets to ~ 193 m core badly broken	
									- <u>193.29-194.66</u> - fault zone w/gouge (@ 40° to C.A.) core badly ground and broken, poor recovery. Again strong veining in this area.	
									<u>E. O. H.</u>	



BP Resources Canada Limited

MINING DIVISION

DRILL LOG

HOLE NO. CM-88-8.....

DRILLING CO.	LOCATION SKETCH	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED:	PROJECT:
BERGERON DRILLING LTD.		COLLAR	-55°	260°	Aug.9/88	CHINOOK MOUNTAIN
		102m	-60°	--	DATE COMPLETED:	N.T.S.:
					Aug.12/88	92P/8E
					COLLAR ELEV.:	LOCATION:
					980 m ASL	
					NORTHING:	
					111+95N	
					EASTING:	
					98+19E	
					AZIMUTH:	
					260°	
					DEPTH:	DATE LOGGED:
					102.44m	Aug.10-14/88
HOLE TYPE					CORE SIZE:	LOGGED BY:
					NQ	R. Farmer

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
0	10.67m	Casing	-		in overburden					
10.67	16.77	Mafic volcanic	-		generally a fine-grained, indistinct, medium green rock.					
			-		locally shows irregular wispy texture similar to some of the flows in the area.					
			-		narrow greyish silicic zones are believed to be alteration? These zones carry 1-2% fine dissm. + ff py. (i.e. around 11m)					
			-		@ 12.81m possible flow contact? @ 70° to C.A.					
			-		TR py overall, but local narrow zones up to 1-2%					
			-		@ 15.55 - 15.80m have fault gouge (+ fault Bx). Seems to be @ approx. 60° to C.A.					
					Contains 1-2% py as dissm. and as sulphide rich fragments (tectonic).					
16.77		Mafic volcanics?	-		after 16.77m rock becomes a medium to dark grey colour and very siliceous.					
			-		however believe this is still volcanics (silicified), as a very fine texture (feldspars?) can often be seen. Local narrow zones look cherty.					
			-		Core is extremely badly broken + ground with very poor recovery.					
					Entire section here is a fault zone.					
			-		Sulphide content is increasing -- avg. now approx. 1%, mostly as very fine dissm.					



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS
16.77	31.10	Mafic volcanics? cont'd	-	volcanics may be a fine tuff which has been silicified (also clay on fractures)					+ mineralized.	
			-	fault Bx 18.80 - 19.00m - angle unknown						
			-	fault gouge - 5 cm recovered @ 19.46 - 19.51m contains approx. 1% Py - angle unknown						
			-	chalcopyrite first appears @ approx. 19.6m as minor grains assoc. with fracture fill py.						
			-	19.51 - 21.04m - series of narrow fault Bx and gouge zones - angles not clear.						
			-	23.17 - 24.39 (approx.) - very cherty looking rock -					1-2% Py, Tr, cpy mostly ff	
			-	24.39 - 27.29m - sulphide content increases to avg. 3-5% and cpy more common.						
			-	@ 25.61 - 10 cm piece heavily mineralized						
			-	contains a 2 cm sulphide rich (nearly massive) fracture @ 35° to C.A.						
			-	section has the appearance of a brecciated rock with sulphides in matrix.						
			-	sulphides consists of py with considerable cpy. Native copper is also present in several places.						
			-	overall this 10 cm contains approx. 20% sulphides.						
			-	@ 26.2 - 26.90 (approx.) - 5 - 8% py with Tr cpy - seems to be fracture controlled but core is badly ground (marbles)						
			-	26.9 - 27.29 - sulphides back to approx. 3% - minor cpy + bornite locally						
			-	sulphides seem to be tapering off towards 27.29m						
			-	27.29 - 28.05 - similar only minor sulphides. Very poor recovery.						
			-	28.05 - 30.49 - fault zone - considerable gouge (no angles as recovery very poor)						
			-	advanced casing here - No core approx. 29.0 - 30.49 m.						



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
16.77	31.10		-	30.49 - 31.10	- ground up marbles mostly of very siliceous rock with approx. 10% sulphide (py).						
	cont'd				- occasional volcanic fragment?						
31.10	36.05	Silicified zone	-	light grey colour,	very hard, intensely silicified						
			-	not sure if still dealing with altered volcanics or if now are sed?							
			-	weak banding @ 30° to C.A. @ 31.20m							
			-	8-10% py mostly as f.f. + veins but minor dissm.							
			-	sulphide rich veins and fractures are irregular and at all angles, but seems to be a predominance towards subparallel to core axis?							
			-	sulphide content generally increases downward in section but is irregular							
			-	minor chalcopyrite is present throughout.							
			-	@ 32.7m - irregular massive veinlets to 1 cm thick show a 'banded' texture parallel to the veinlet walls suggestive of episodic mineralization filling open fractures?							
			-	33.45 - 34.4m - sulphides average 15%, first 12 cm massive py, Tr cpy, @ 33.82 - 28 cm approx. 20% sulphide,							
			-	20% sulphide last 10 cm 34.35 - 34.45.							
			-	believe are likely originally sed? now?							
			-	34.4 - 35.25m - average 25 - 30% sulphide local narrow zones 40 - 50%, i.e. 34.78 - 35.05m							
			-	sulphides generally consist of coarse-grained py with minor cpy, Tr? po occurring as bands and fracture fills + dissm. Matrix is very fine + very siliceous.							



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS
31.10	36.05	Silicified/ Mineralized Zone (seds?) cont'd	-	also considerable	clay along many	fractures.				
cont's				- @ 34.05m	sulphide bands	1-2 cm wide	@ 35° to C.A.			
				- @ 34.81m	banding in sulphides	@ 35° to C.A.				
				- 1 cm	sulphide band	@ 35.30m @ 65° to C.A.				
				- gouge/fault Bx (10 cm)	at 35.65m @ 45° to C.A.	(sulphide bearing approx. 8%)				
			-	35.25 - 36.05m	- sulphides down to approx. 10%	but a little more cpy here.				
					- becoming increasingly brecciated	towards bottom.				
					- also a light greenish cast	becoming apparent.				
36.05	36.8	Fault Zone	-	gouge zones seem to be @ approx. 40° to C.A.?						
				- fault is in greenish cherty looking rock.						
				- sulphides down to 1-2% - most common in gouge.						
36.8	37.57	Chert?	-	massive greenish chert, still 1-2% f.f. sulphide same as above.						
37.57	40.55	Fault Zone	-	upper contact @ 30° to C.A.						
				- still in greenish chert, with approx. 2% sulphides py, minor cpy.						
				- consist of narrow, fractured but competent sections surrounded by narrow gouge zones. Recovery poor.						
40.55	42.68	Sediments	-	becoming more sedimentary looking.						
			-	zone @ 40.55 - is bleached white + contains 1-2 mm greenish patches. Also soft.						
			-	may be dyke?? - min. 20 cm thick (core badly ground).						
			-	2 cm gouge in this zone @ 45° to C.A.						



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
40.55	42.68	Sediments	-	@ approx.	40.75 - 41.05m	-	5-8% sulphide	as wispy irregular bands.		
								locally the sulphide display a colloform? texture.		
			-	10 cm soft white gouge.	Very poor recovery.	bleached zone again @ approx. 41.6m				seems to be related to fault
			-	@ approx. 41.65m	black cherty argillite band @ 40°					to C.A.
			-	rock gradually becoming	darker in colour.					
			-	1-2% sulphide avg., local	narrow zones (10 cm) @ approx.					5% py+cpy to 42.68
42.68	44.41	Black argillite or greywacke	-	hard, somewhat cherty?, massive +	highly fractured + brecciated (still in fault zone).					
			-	sulphide content has dropped to Tr.						
44.41	47.78	Lt grey greywacke/ siltstone?	-	similar to above except for colour.						
			-	@ 44.56m gouge @ 30° to C.A.						
			-	sulphide contact has dropped to Trace						
			-	bottom contact @ 40°						
			-	includes narrow zones of black argillite.						
47.78	86.88	Mafic volcanics	-	bleached to a buff colour near contact, generally light green here otherwise (still altn'n?)						
			-	very fine-grained + massive						
			-	@ 50.29 - 53.27m - sheared strongly veined zone (calcite?, dolomite (black))						
					- veining @ 10° to C.A., Tr py assoc. with veining.					
					- some of the black veining may be argillaceous material?					



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
47.78	86.88	Mafic volcanics		- @ 53.27m	- 20 cm of veined black argillaceous? sediment					
		ont'd			- contains approx. 1% py					
					- fragment?					
					- 20 cm bleached (buff) volcanics on down hole side.					
					- mafic volcs here generally fine-grained, massive, locally displaying 1-2 mm chloritic patches (chloritized mafics?)					
					- after 57m occasional white quartz carbonate vein to 1 or 2 cm usually @ approx. 40° to C.A.					
					- continues same to 86.88					
86.88	102.44	Sediments			- starts out as grey to black chert					
					- contact irregular and strange - seems to be @ approx. 90° to C.A., however banding in chert @ 86.95m @ 65° to C.A.					
					- approx. 1% py (dissm and f.f.) in chert					
					- sulphide content pick up quickly -- i.e. by 88.0m 2-3% very fine-grained py, often occurring as wispy bands (@ 10° to C.A. @ 88.0m)					
					- 88.1 - 89.0m fault zone - several gouge zones, core badly broken					
					- not sure of angle but believe to be @ approx. 45° to C.A.					
					- still 2-3% py					
					- after fault seds more varied - greywacke/arg. with local chert bands. -- i.e. @ 89.44m banding @ 30° to C.A.					
					- @ 89.94m -- approx. 20 cm fault Bx and gouge @ unknown angle.					
					Bx contains pyritic clasts. -- followed by approx. 4 cm calcite vein @ 40° to C.A.					



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
86.88	102.44	Seds cont'd	-		seds after this fault avg		approx.	5% very fine py.			
	cont'd				seds here become somewhat of a breccia (slump) and contains rare bleached volcanic fragment.						
			-		banding @ 90.88 @ 35° to C.A.						
	E.O.H.		-		from 91.18 - 92.38m -- sulphide content averages approx. 15% as very fine pyritic bands (primary) Tr cpy noted in crosscutting microfractures.						
			-		banding @ 92.3 @ 40° to C.A.						
			-		very fine, banded pyrite (primary?) is crosscut by coarser f.f. py.						
			-		locally Tr Mt or Po? i.e., weakly magnetic.						
			-		@ 92.5m - silty bed 2 cm thick @ 45° to C.A.						
			-		from 92.38 - 94.06m - approx. 10% sulphide avg.						
			-		94.06 - 94.21m volcanic? fragment						
			-		after 94.21m sulphide content drops to approx. 1 or 2%						
			-		grey silty bed @ 45° to C.A. @ approx. 96.0m						
			-		97.09 - 97.42m - 8-10% py again - banding @ 15°						
			-		@ 97.81 - 5 cm py rich band - 8-10%						
			-		@ 99.44 banding @ 50° followed by approx. 20 cm of gouge @ 40° to C.A.						
			-		seds 99.64 - 102.44m (EOH) -- become black in colour and more argillaceous						
			-		102 - 102.44m - weakly graphitic (on fractures). Locally somewhat cherty						
			-		Tr - 1% sulphide py ± Po (weakly magnetic)						
										E.O.H.	



DRILL LOG

sample data

S A M P L E					C O R E R E C O V E R Y		V I S U A L E S T I M A T E S (% O R E M I N E R A L S)	A S S A Y R E S U L T S					
N U M B E R	F R O M	T O	T O T A L M E T R E S	S p. G r	%	A M T. L O S T		C u (p p m)	Z n (p p m)	A g (p p m)	A u (p p b)		
203063	18.60	19.51	0.91		60	0.31 m		2387	338	0.5	2		
203064	19.51	21.04	1.53		51	0.75 m		7067	367	1.2	3		
203065	21.04	22.26	1.22		47	0.64 m		1229	301	0.4	1		
203066	22.26	23.17	0.91		34	0.60 m		5083	373	1.0	1		
203.067	23.17	24.39	1.22		16	1.03 m		525	246	0.3	2		
203068	24.39	25.30	0.91		42	0.53 m		5290	214	1.2	14		
203069	25.30	26.22	0.92		42	0.53 m		13826	292	1.6	12		
203070	26.22	26.98	0.76		38	0.47 m		23114	591	2.1	10		
203071	26.98	28.05	1.07		39	0.65 m		6263	500	1.1	5		
203072	28.05	31.10	3.05		10	2.75 m	tri-coned (no core for 1.49 m)	2147	185	0.7	1		
203073	31.10	32.10	1.00		96	0.04 m		3196	45	0.5	4		
203074	32.10	33.10	1.00		98	0.02 m		3139	42	0.6	9		
203075	33.10	34.10	1.00		91	0.09 m		5021	47	1.1	8		
203076	34.10	35.10	1.00		93	0.07 m		11674	73	1.1	21		
203077	35.10	36.10	1.00		78	0.12 m		8935	616	1.0	14		
203078	36.10	37.50	1.40		59	0.57 m		1398	52	0.5	1		
203079	37.50	39.02	1.52		40	0.91 m		1729	65	0.3	2		
203080	39.02	40.55	1.53		52	0.74 m		2100	96	0.5	1		
203081	40.55	42.68	2.13		35	1.38 m		1752	74	0.8	3		
203082	89.94	91.19	1.24		87	0.16 m		269	178	1.6	23		
203083	91.18	92.38	1.20		86	0.17 m		371	124	3.0	21		
203084	92.38	94.21	1.83		79	0.39 m		376	232	2.3	40		
203085	97.09	97.56	0.47		72	0.13 m		176	84	2.6	36		
203086	97.56	98.26	0.70		84	0.11 m		159	104	1.9	45		



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
15.24	51.36	Diorite	-	generally	is likely	a broad shear zone with			local gouge zones after 40m	
cont'd		cont'd		(difficult to get	core angles)					
			-	alteration mod - strong - chloritized mafics,	strong	clay (fract.rel.), pinkish mineral				
				and minor fracture greenish, greasy mineral -- talc?						
			-	veinlets common but generally calcite, pyrite common		but generally <1%				
			-	fault -- approx. 43.29 - 43.79m)						
				approx. 41.9 - 42.2) angles unknown						
			-	approx. 20 cm gouge around 45.12m						
			-	after 45.12m alteration strong -- clay + greenish-yell. mineral-sericite? and pink mineral						
			-	after 46.89 - 48.17 - sericite? particularly strong		as is qtz/carb veining qtz generally				
				grey and carb white, py present		but generally minor.				
				- veining continues mod.-strong		after 48.17.				
				- approx. 10 cm gouge @ 48.57m						
				Major fault - Bx and gouge 49.39 - prob. 55.79m						
				49.65 - 51.36m - fault gouge - milled Bx contains up to 1% py. But py here is as						
				massive sulphide clasts rather than grains (max. clast size approx.						
				0.5 cm) -- gouge @ approx 50° to C.A.						
51.36	55.79	Sediments	-	in middle of fault zone clasts and rock are		sediment rather than intrusive, largely multicoloured chert.				



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
51.36	55.79	Sediments	-	51.36 - 52.13m	- is fault breccia which is qtz/carb veined and matrix silicified - 2-3% py						
cont'd		cont'd			mostly with veins/silicification, but some within chert clasts as well.						
			-	52.26 - 52.82m	- fault gouge here appears to be intrusive again (large fragment?)						
			-	52.82 - 53.81m	- chert hosted fault Bx again approx 1% py locally as clasts -						
					3 cm milled fault breccia band @ 45° to C.A.						
			-	53.81 - approx. 55.79	- black chert with qtz veinlets from 53.81 - 54.57m (recovered approx. 20 cm worth of marbles)						
			-		perhaps 1/2 doz marbles contain 30-40% sulphide (py, cpy) which is cpy-rich (fg and stony). May be vein related but not sure.						
					54.47 - 55.79m - Triconed (lost hole in gouge)						
			-		in first 0.3m or so (diamond drilled) only core recovered is intrusive and likely cave material as cuttings remained black. Contact somewhere in this interval.						
55.79	60.97	Mafic volcanics	-		light green, very fine-grained, massive, indistinct volcanic						
			-		contains minor calcite veinlets and dk green, soft greasy fracture fillings - possibly talc?						
		E.O.H.									
						E.O.H.					



BP Resources Canada Limited
MINING DIVISION

DRILL LOG

sample data

S A M P L E				C O R E R E C O V E R Y		V I S U A L E S T I M A T E S (% O R E M I N E R A L S)	A S S A Y R E S U L T S						
N U M B E R	F R O M	T O	T O T A L M E T R E S	S p . G r	%		A M T . L O S T	C u (p p m)	Z n (p p m)	A c (p p m)	A u (p p b)		
203087	18.60	19.37	0.77		94	0.05							
203088	29.18	30.15	0.97		91	0.09							
203089	36.74	37.80	1.06		58	0.44							
203090	37.80	39.02	1.22		70	0.37							
203091	46.89	48.17	1.28		94	0.08							
203092	49.65	51.36	1.71		51	0.83							
203093	51.36	52.13	0.77		82	0.15							
203094	52.82	53.81	0.99		76.8	0.23							
203095	53.81	54.57	0.76		20	0.61	Cpy	(20,692)					
203096	52.44	55.49	3.05				Sludge Sample	(2,702)		1208	7.4	50	



BP Resources Canada Limited

MINING DIVISION

DRILL LOG

HOLE NO. CM-88-10

DRILLING CO. BERGERON DRILLING LTD.	LOCATION SKETCH N	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED: August 15, 1988.	PROJECT: CHINOOK MTN.
		COLLAR	-50	260	DATE COMPLETED: August 17, 1988.	N.T.S.: 92P/8E
HOLE TYPE D.D.H.					COLLAR ELEV.: 966 m ASL	LOCATION:
					NORTHING: 112+50N	
					EASTING: 98+55 E	
					AZIMUTH: 260°	
					DEPTH: 60.21	DATE LOGGED: August 17, 1988.
			CORE SIZE: NQ	LOGGED BY: R. Farmer.		

INTERVAL		ROCK TYPE	DESCRIPTION					STRUCTURE		REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	
0	18.29	Casing	-	IN OVERBURDEN						
18.29	43.49	Diorite	-	same as in Hole #9						
				- dark green colour, medium to coarse grained in appearance.						
				- contains roundish green patches to 1 cm - chloritized mafics						
				- matrix of random, tiny feldspar laths and tiny brownish grains ?						
				- weakly magnetic when fresh						
				- may be a gabbro rather than diorite ?						
				- bleached to a pale grey colour plus pinkish mineral to veining					(same as Hole #9) adjacent	
				- @ 22.67 - ~ 20 cm fault gouge - angle not clear but					believe to be 50° to C.A.	
				- preceded by ~ 10 cm white qtz/carb veining (Tr py)						
				- below gouge is zone of intense white qtz/carb. veining (also black ? chlorite)						
				- till 23.87 m then moderate veining till					24.37 m	
				- veins vary from ~ 10° to C.A. to ~ 45°					with higher angle ones seemingly later	
				TR py.						
				- again strong veining 27.07 - 27.98 m - qtz/carb. often black TR py.						
				- majority @ ~ 45° to C.A., but 10° also common. 2 cm gouge @ 80° to C.A.						



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS	
18.29	43.49	Diorite/Gabbro	-		gradually becoming lighter						
Continued		Continued	-		also have grey-bleached zones showing up intermittently which are not obviously related to veins or veining intensity.						
			-		qtz/carb. veinlets generally avg. 2-5/metre to ~ 39 m.						
			-		10 cm fault gouge @ 32.95 m (roughly 1 m bleached intrus. here - mostly on down hole side)						
			-		veins locally carry minor py.						
			-		after ~ 40 m intrusive generally becomes finer grained and lighter in colour (increasing alt'm. ?)						
			-		@ ~ 42.69 - ~ 15 cm fault gouge unknown angle						
				41.4 - 43.49	- intrusive is now intensely altered and all original textures destroyed						
					- is light brownish (buff) coloured and very soft (clay-rich)						
					- cut by clear to white to grey qtz/carb. veinlets (< 1 cm) often microveins						
					- TR to minor py assoc. with veins.						
				Contact @ 43.49	consists of broken/ground core - possible fault.						
43.49	60.21	Chert.	-		varicoloured - black through light to dk. grey to green.						
					- generally massive to fractured, qtz/carb. microveins common						
					- only rare TR py						
					- this interval is also a major fault zone in its entirety						
				44.58 - 45.12	- fault gouge and Bx. 0.61 m. No core.						
				46.95 - 49.33	- fault gouge and Bx. - poor recovery (@ ~ 47.7 - 45°, @ ~ 49.08 - 50° to C.A.						



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS
43.49	60.21	Chert.	-	from 49.08 - 54.88	- recovery good			still foliated though		
Continued		Continued		48.37 - 48.47	10 cm 1% py (fault Bx.)					
				48.47 - 48.78	- rock is buff coloured, intensely clay alt'd. Minor dissem. py					
					- altered volc. ? intrus. ? or clastic sed. (fine) ?					
				49.38 - 49.68m	- cherty rock has a 'mottled' texture			- looks like chert clasts		
					- in an intensely alt'd. matrix ? bottom contact is fault to usual chert @ 60°					
					- approaching 1% py here.					
				50.85 - 51.52m	- chert is intensely brecciated					
					- @ 51.20 m - 2.5 cm zone with ~ 3% Py + minor cpy. seems to be fracture related and @ ~ 80° to C.A.					
				51.52 - 52.44m	- back to fine altered rock			- first 10 cm buff		
					- first 10 cm 1-2% py dissem. and ff and this diminishes quickly down hole					
					- has the look of an altered volcanic or intrus. ?					
					- last 10 cm fault gouge					
					- after 52.44 back to greyish chert					
					- 52.8 banding @ 70° to C.A.					
					- 54.8 banding ? @ 40° to C.A.					
					@ 55.8 fault gouge 2 cm @ 60°					



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS	
43.49	60.21	Chert	-	54.88 to 60.21 (E.O.H.)	-	major FAULT zone	with very poor recovery				
Continued		Continued									
			-	after 56.40 m rock is darker grey.		Still very siliceous but with					
				a very faint clastic looking texture - probably clastic		sediment but could be an altered fine tuff similar to that in Hole #8 ?					
			-	only rare Trace Py.							
				Hole is lost in fault zone at 60.21 m.							
				E. O. H.							



BP Resources Canada Limited

MINING DIVISION

DRILL LOG

HOLE NO. CM-88-11.....

DRILLING CO. BERGERON DRILLING LTD.	LOCATION SKETCH	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED:	PROJECT:
		COLLAR	-50°	080°	August 17, 1988.	CHINOOK MTN.
		96.0 m	-49°		DATE COMPLETED:	N.T.S.:
					August 20, 1988.	92P/8E
					COLLAR ELEV.:	LOCATION:
					970 m A.S.L.	
					NORTHING:	
					112+98N	
					EASTING:	
					97+48E	
					AZIMUTH:	
					080°	
					DEPTH:	DATE LOGGED:
					96.04	August 19-21,
HOLE TYPE					CORE SIZE:	LOGGED BY:
D.D.H.					NQ	R. Farmer.

INTERVAL		ROCK TYPE	DESCRIPTION					STRUCTURE		REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
0	15.24	Casing	-	in overburden						
15.24	19.56	Mafic Volcanics	-	light grey/green colour	- becomes increasingly greyish towards bottom					
			-	of interval (alteration - bleaching - pervasive clays ?) + carbonate						
			-	texture also increasingly destroyed down hole and greasy talc-like mineral						
			-	on fractures.						
			-	volcanics are very fine grained and contain irregular greenish (chloritic ?)						
			-	patches 1 mm in size. Not sure if these were originally phenocrysts or amygdules ?						
			-	black veinlets and microfractures also common (chlorite/carbonate) and contain						
				TR py.						
			-	TR to - minor fracture fill Py throughout these altered volcanics						
19.56	20.73	Sediments	-	approx. first 20 cm ground broken	core (fault contact)					
			-	fragments a mixture of altered volcanics and grey to black cherty/argillaceous						
			-	sediments - probably a brecciated or transitional contact zone ?						
			-	core is very broken and ground throughout interval - poor recovery.						
			-	to 20.12 rock consists of a brecciated grey chert, matrix consists						
			-	of qtz/carb. vein material containing fragments of chert and black						
			-	argillite (~ 10% matrix). Sulphides restricted to minor ff py.						

DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS	
19.56	20.73	Seds. Continued	-	20.12 -	20.73	-	rock is essentially a light grey to black chert to cherty argillite containing ff and bands (to 1 or 2 cm) of sulphide. Bands are massive				
Continued							- sulphides consist of Py, Cpy, Po and local reddish-brown oxidation spots suggest TR sph. ? Also minor black mineral of uncertain composition				
							- section averages perhaps 20% sulphide overall - very poor recovery - hard to estimate.				
							- sulphide bands @ 15-20° to core axis				
20.73	24.39	No core					- at 20.73 rock is still mineralized but hole is lost in fault. Have to advance casing to 24.39 m to continue. - No core 20.73 - 24.39 m				
							- entire sediment zone is likely a fault zone ?				
24.39	68.86	Mafic Volcanics					- same as top of hole except here are light green and not altered, or at least much less so (i.e., contains 1-2 mm cream coloured secondary mineral, I have termed a hydrothermal carbonate ? in past				
							- @ 54.25 - 54.86m - moderately strong qtz/carb. veining - @ all angles though ones @ 45° or greater contain TR Py and one @ 54.25 also contains black, metallic looking mineral ? and these are cut by barren veins @ angles generally <45°				
							- @ 59.66 - 60.36m - again moderate veining and volc's. here bleached to light brown colour.				
							- @ 60.82 - 63.72m - core badly broken - poor recovery.				
							- last 0.3 m - weakly bleached to a lighter green colour.				

DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS
68.86	96.04	Sediments	-	contact	irregular	but seems to be @	~ 15° to	C,A.		
			-	starts out as massive grey/green chert which is fractured and						
				qtz/carb. microveined						
			-	minor ff py						
			-	contains minor black chert fragments.						
			-	Mineralization - starts @ 71.62 m where ff py increases to 1-2%						
			-	71.92-72.32 - about 5% ff py, possible TR Cpy (also sulph. as discontinuous bands 0.5 cm thick)						
			-	irregular black chert bands @ ~ 55° to C.A.						
			-	72.32-73.62 - brecciated chert/chert Bx. ? dominately grey with frags. of green and black chert.						
				py down to ~ 2% here						
			-	@ 72.86 m sulphide clot (~ 3 cm) (frag. ? part of band ?)						
			-	essentially m.s., mostly py, TR Cpy ?						
				72.76 - 73.62 - back to 3-5% sulphide.						
			-	73.62-75.51 - grey to green chert, locally banded @ ~ 10° locally brecciated						
			-	avg. 2-4% sulphide						
			-	75.51-77.38 - fault zone - gouge @ 45° @ top, contact @ 20° at bottom - looks like altered volcanics ? at 77.13 have hble. laths to 0.5 cm partially replaced by py this zone altered hble. diorite dyke.						



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION						STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
68.86	96.04		-	~ 2%	clotty sulphide	in this fault/dyke zone	- py, po, ± Cpy			
			-	77.38 - 77.94 m		black argillaceous breccia (qtz. veined)	- Bx. alignment			
						@ ~ 10° to C.A.	- contains 2-3% sulphide as ff and fragments to ~ 1 cm			
			-	77.94 - ~ 83.0m		fault zone again				
						seems to be mostly in grey chert	but			
					81.24 - 81.89	probably altered	dyke again			
						1-2% sulphide				
						unsure of angle but probably 40-50°				
						poor recovery	78.96 - 79.57 m			
			-	~ 83.0 - 84.0m		grey chert again - fractured				
						only TR ff py.				
				84.0 - 85.67m		altered intrusive ? again	~ 1% py+po			
				85.67 - 88.47m		grey chert again w/black microfractures and white				
						qtz. veinlets				
						TR-1% ff py.				
				88.47 - 92.30m		altered intrusive again (also fault zone)				
						shearing 10-20° to C.A. ?				
						1-2% py. Alteration is clay and carbonate				
					90.33-90.76	a remnant intrusive-looking texture				
						is present (very felds. rich - similar to intrus. in Holes #9 and 10 ?)				



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC.)	MINERALIZATION, TYPE, AGE RELATIONS	
68.96	96.04		-	back to	usual highly altered	intrusive ?			90.76-92.30 m		
<u>E.O.H.</u>			-	local pinkish mineral present ?	related to	veining ?					
			-	92.30 - 93.45 m	- black chert, w/occasional grey chert fragments ?						
					- highly qtz. veined in particular @ top of interval						
					- top and bottom contact irregular but @ ~80° to C.A.						
					- black colour due largely to black microfractures (Mn ?)						
					- @ 92.5 m - 4 cm Bx. zone - chert frags. in white silica matrix cut by clear silica veinlets						
					- only TR py present.						
			-	93.45 - 95.39 m	- intrusive again - very fine grained, brownish colour, only weakly altered. Minor - 1% ff Po.						
					- bottom 30 cm strong calcite + qtz. veining probable fault contact to -						
			-	95.39 - 96.04 m	- chert again, grey to black - fractured strongly calcite veined						
					- no significant sulphide.						
				<u>E. O. H.</u>							



BP Resources Canada Limited

MINING DIVISION

DRILL LOG

HOLE NO. CM-88-12.....

DRILLING CO. BERGERON DRILLING LTD.	LOCATION SKETCH N	DEPTH	TESTS DIP ANGLE	AZIMUTH	DATE STARTED: August 24, 1988.	PROJECT: CHINOOK MTN.
		COLLAR	-50°	260°	DATE COMPLETED: August 24, 1988.	N.T.S.: 92P/8E
		92.0 m	-50°	-	COLLAR ELEV.: 991 m A.S.L.	LOCATION:
					NORTHING: 111+50N	
					EASTING: 98+22E	
					AZIMUTH: 260°	
					DEPTH: 92.68 m	DATE LOGGED: August 22, 1988
HOLE TYPE D.D.H.					CORE SIZE: NQ	LOGGED BY: R. Farmer

INTERVAL		ROCK TYPE	DESCRIPTION					STRUCTURE		REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC)	MINERALIZATION, TYPE, AGE RELATIONS
0	27.44	Casing	-	In Overburden						
27.44	53.98	Sediments	-	starts out as black argillite (somewhat cherty)						
			-	contains 1-2% Py throughout as fracture fillings, fine dissem. and associated with quartzose lenses and qtz/carb. microveins						
			-	@ 31.64 - lamination (bedding) @ 45° to C.A.						
			-	@ 31.56 - 2 cm gouge @ 50° to C.A.						
			-	@ 31.86 - sediments become light grey in colour and more siliceous						
			-	probably more of a greywacke; Seds. here also more frequently bedded.						
				only Tr - Minor Py - mostly ff here						
				- banding @ 31.85 m @ 40° to C.A.) bedding						
				- banding @ 33.33 m @ 35° to C.A.)						
				@ 35.40 m @ 40° to C.A.						
				- probable shear zone 34-36 m - broken - ground core						
				- around 35.2 - 35.4 strong qtz/carb. veinlets - brecciated appearance						

DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS	
27.44	53.98	Sediments	-		fault zone from	36.88 - 41.0 m (0.91 m lost @ 40.09 m)					
Continued		Continued	-	37.96 -	✓ 39.33	- dk. grey chert	1-2% ff and fine dissem. py again				
			-	39.33 -	40.09	- argillaceous fault zone Bx. and gouge	- 2-4% py, TR Cpy ?				
						- calcite microveining locally intense					
						- after 41.0 back to dk. grey bedded arg/greywacke					
						- only minor py in this					
			-	@ 42.84 -	44.92	m - fault zone	- broken ground core, local gouge zones				
						- mixture of the grey arg/greywacke, and black argillite					
						- the section 43.14 - 44.51 m	1-2% py again generally assoc. with the blacker, more argillaceous sections (fault gouge and Bx. generally).				
			-	after 44.92 m	back to grey bedded greywacke	- beds generally ~ 0.5 cm thick and are lighter grey in colour. Minor py only					
						@ 45.42 @ 25° to C.A.					
						@ 46.17 @ ~ 15° to C.A.					
						@ 46.45 @ parallel to C.A. and highly disrupted by micro fractures (several cm offset)					
						46.04 - 47.0 - ~ 1% ff py and occurring along lighter beds.					
			-	@ 48.83 m	- becoming darker and more argillaceous again	also Fault zone again ~ 49.0-53.83 (@ ~ 50° @ bottom)					
						48.83 - 50.76 m - 1-2% py, possible TR cpy ?					
						52.59 - 53.20 m - ~ 1% py - black arg. here					
						- bottom contact of sed. @ 45°					



DRILL LOG

INTERVAL		ROCK TYPE	DESCRIPTION							STRUCTURE	REMARKS
FROM	TO		COLOUR	GRAIN SIZE	TEXTURE	ALTERATION	ORE MINERALS	FRACTURES PER METRE	(FRACTURES, FAULTS, FOLDING, BEDDING, ETC):	MINERALIZATION, TYPE, AGE RELATIONS	
53.98	80.09	Mafic Volcanics	-	fine grained, medium green	massive	with 1-2 mm chloritic patches					
			-	first 0.33 m clay altered	(faulted)	(~ 50°)	(5 cm gouge @ 54.26 m)				
				59.52 - 60.10 m	- probable mafic dyke, upper contact	@ 50° to C.A. and chilled					
					lower contact obscure (diabase)						
				60.10 - 69.26 m	- mafic volcanics, likely in part intrusive but difficult to distinguish. Minor qtz/carb. veinlets.						
				69.26 - 70.23 m	- mafic dyke - this time has 'spotted' appearance due to 3-5 mm feldspar crystals						
					- both contacts sheared						
			-	usual volcanics (+ intrusive) to 80.09 m							
80.09	92.68	Sediments	-	contact is a fracture @ 20° to C.A.							
			-	last 10 cm of volcanics have a chilled appearance and are highly qtz/carb. veined							
			-	starts out as light grey coloured massive chert, only TR py							
			-	@ 80.60 m becomes bedded with greywacke bedding @ 80.89 m @ 40°							
				by 81.2 m chert is gone and have light to dark grey coloured wacke TR - 1% py							
				bedding @ 83.1 m @ 45°							

APPENDIX IV

Sample Results - Acme Certificates

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 06 1988 DATE REPORT MAILED: June 9/88 ASSAYER: *C. Leong* D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

BP RESOURCES PROJECT-10112 File # 88-1772

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB
203017	1	66	2	68	.1	30	19	707	4.99	4	5	ND	1	18	1	2	2	144	4.23	.042	2	35	1.83	5	.41	5	3.80	.04	.01	1	2
203018	2	289	14	107	.1	70	19	2509	5.54	8	5	ND	2	40	1	2	2	155	2.11	.090	10	54	1.49	13	.17	2	2.55	.03	.03	1	6
203019	24	2749	43	975	.9	64	27	1561	5.77	11	5	ND	1	30	3	2	2	132	2.89	.144	7	105	2.09	9	.24	7	3.14	.08	.03	1	27
203020	1	76	2	59	.1	51	20	1108	4.81	2	5	ND	1	24	1	2	2	116	2.86	.047	2	35	2.15	13	.40	5	2.88	.07	.04	1	1
RE 203026	2	268	19	113	.1	57	15	1466	5.22	9	5	ND	2	33	1	2	2	118	2.81	.164	7	113	1.56	20	.19	2	2.51	.06	.06	1	13
203021	5	834	5	77	.1	58	22	1209	5.32	10	5	ND	2	27	1	2	2	126	1.69	.140	6	105	2.29	12	.24	2	2.53	.06	.05	1	3
203022	9	503	7	94	.1	64	19	1224	5.66	7	5	ND	2	32	1	2	2	134	2.51	.155	10	181	2.09	7	.23	6	2.53	.04	.02	1	3
203023	4	81	12	189	.5	54	5	389	1.62	8	5	ND	4	40	1	2	2	47	6.69	.412	19	199	.36	39	.10	9	1.59	.01	.03	1	2
203024	5	122	12	348	.5	100	7	352	2.21	10	5	ND	4	38	1	2	2	61	4.04	.296	17	355	.51	74	.11	4	1.51	.04	.07	2	4
203025	10	284	19	222	.7	92	11	452	3.08	8	5	ND	5	63	1	2	2	93	3.95	.235	14	258	.73	33	.10	4	1.72	.06	.09	1	1
203026	2	272	16	112	.1	58	16	1492	5.35	10	5	ND	3	34	1	2	2	121	2.85	.159	7	114	1.61	21	.21	2	2.58	.07	.08	1	16

cm 3

RAW-4. CHINOOK 1/TH.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604)253-3158 FAX (604)253-1716

RECEIVED
AUG 23 1988
 BP RESOURCES - MINING
 VANCOUVER, B.C.

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR NH FF SE CA P LA CR HG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 15 1988 DATE REPORT MAILED: Aug 22/88 ASSAYER: C. Leong... D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

BP RESOURCES CANADA LTD. PROJECT 10146 File # 88-3584

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Cr	P	La	Ce	Hg	Ba	Tl	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB
203063	2	2387	1	338	.5	55	27	810	5.73	10	5	ND	4	5	4	2	2	83	.21	.080	8	81	3.63	30	.01	7	3.15	.01	.01	1	2
203060	30	6179	12	215	1.2	56	102	299	8.90	23	5	ND	4	4	5	11	2	52	.13	.036	6	107	3.04	9	.01	9	2.07	.01	.01	1	18
203064	17	7067	13	367	1.2	51	30	351	6.34	9	5	ND	4	5	4	6	2	95	.20	.067	8	92	3.76	31	.01	13	3.46	.01	.01	1	3
203065	16	1229	5	301	.4	60	78	425	10.46	12	5	ND	4	7	4	3	2	100	.26	.087	10	110	3.57	46	.01	14	3.49	.01	.01	1	1
203066	41	5083	10	373	1.0	81	85	377	7.28	46	5	ND	4	5	5	4	2	75	.16	.052	12	86	3.55	38	.01	12	3.13	.01	.01	1	1
203067	32	525	7	246	.3	21	30	295	4.60	10	5	ND	2	4	1	2	2	30	.11	.035	4	53	2.22	28	.01	8	1.81	.01	.01	1	2
203068	30	5290	13	214	1.2	55	103	296	9.01	23	5	ND	3	4	3	10	2	52	.13	.038	6	107	2.98	12	.01	10	2.89	.01	.01	1	14
STD C	18	58	43	126	7.0	68	29	989	4.00	39	21	8	37	49	18	18	19	59	.46	.089	35	60	90	159	.07	34	1.94	.06	.14	13	
203069	3	13826	10	292	1.6	25	79	317	7.75	14	5	ND	3	3	5	10	3	82	.15	.046	6	73	3.14	14	.01	9	2.73	.01	.01	1	12
203070	1	23114	11	591	2.1	30	104	420	9.74	18	5	ND	3	7	6	5	2	57	.29	.117	5	95	2.26	17	.01	13	2.06	.01	.01	1	10
203071	32	6263	12	500	1.1	58	32	493	7.81	14	5	ND	3	6	4	6	2	75	.37	.144	9	204	4.15	40	.01	8	3.45	.01	.01	1	5
203072	40	2147	11	185	.7	74	16	355	7.06	18	5	ND	3	6	2	6	2	106	.37	.104	10	176	4.57	33	.02	7	3.35	.01	.01	1	1
203073	11	3196	14	45	.5	29	12	175	12.45	18	5	ND	3	10	4	13	2	55	.76	.050	12	48	2.26	9	.01	12	1.89	.01	.01	1	4
203074	14	3139	10	42	.6	40	19	219	17.36	19	5	ND	4	7	3	13	2	83	.61	.123	12	75	2.70	9	.01	8	2.27	.01	.01	1	9
203075	14	5021	25	47	1.1	24	16	225	17.28	23	5	ND	4	18	7	20	2	244	1.66	.677	12	326	2.36	15	.01	11	1.83	.01	.01	1	8
203076	8	11674	15	73	1.1	17	21	214	18.14	23	5	ND	4	16	4	30	2	220	1.68	.681	11	259	1.73	9	.01	8	1.32	.01	.01	1	21
203077	9	8935	23	616	1.6	33	78	297	17.42	21	5	ND	5	9	4	19	2	202	.73	.329	17	243	3.19	18	.01	11	2.67	.01	.01	1	14
203078	6	1398	8	52	.5	32	98	329	9.00	15	5	ND	3	3	3	11	2	56	.13	.034	12	74	4.22	19	.01	11	2.96	.01	.01	1	1
203079	2	1729	4	65	.3	22	73	346	7.93	12	5	ND	3	3	3	12	2	46	.09	.026	8	48	4.31	17	.01	10	2.99	.01	.01	2	2
203080	13	2100	15	96	.5	42	67	588	8.87	15	5	ND	3	5	2	13	2	76	.46	.064	17	155	4.39	17	.01	7	3.33	.01	.01	1	1
203081	6	1752	13	74	.8	63	27	1967	9.57	14	5	ND	2	17	5	7	2	252	1.14	.211	15	166	4.32	21	.01	10	3.59	.01	.02	1	3
STD C/AU-R	19	62	42	134	7.2	73	31	1108	4.16	41	19	8	38	52	19	22	19	63	.52	.093	41	62	.93	182	.08	34	2.03	.06	.15	13	505

508 P01

DDH 8

ACME LABS

AUG 22 '88 16:17

CHINOOK MTD
FILES

RECEIVED
AUG 23 1988
BP RESOURCES - MINING
VANCOUVER, B.C.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE (604) 253-3158 FAX (604) 253-1956

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR NA K SR CA P LA CR MG BA YI B W AND LIMITED FOR NA K AND AL. AN DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: CORE/SLOUGH AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 16 1988 DATE REPORT MAILED: Aug 22/88 ASSAYER: C. Leong, D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

BP RESOURCES CANADA LTD. PROJECT 10146 File # 88-3622

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	V	Au	Tb	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPM
203082	1	269	79	170	1.6	49	14	5831	5.69	29	5	ND	2	32	1	6	2	125	5.33	.145	13	94	2.16	37	.12	2	2.71	.01	.03	2	23
203083	1	371	83	124	3.0	64	17	7299	8.25	40	5	ND	4	30	1	17	2	185	1.74	.415	26	130	2.15	24	.01	3	2.58	.01	.05	2	21
203084	1	376	100	232	2.3	72	17	4520	5.35	91	5	ND	3	20	1	8	2	70	1.18	.151	23	71	2.40	32	.01	2	2.25	.01	.08	1	40
203085	1	176	49	84	2.6	66	15	4450	7.75	54	5	ND	3	12	1	9	2	144	1.81	.213	30	122	2.06	12	.01	3	2.23	.01	.09	1	36
203086	1	159	83	104	1.9	57	13	4077	5.62	41	5	ND	3	16	1	7	2	97	1.11	.226	29	93	2.07	27	.01	2	2.14	.01	.09	1	45
203087	1	30	6	57	.5	39	21	1005	6.04	14	5	ND	1	18	1	13	2	134	5.36	.042	2	70	1.50	33	.08	2	2.96	.03	.01	1	11
203088	5	47	6	67	.7	27	22	1125	6.18	20	5	ND	1	37	1	9	2	143	5.66	.052	2	35	2.09	62	.19	4	3.21	.02	.01	1	8
203089	2	32	7	65	.5	17	15	1063	4.65	11	5	ND	1	47	1	5	2	100	6.54	.037	2	23	2.02	202	.03	4	2.63	.01	.10	1	4
203090	1	43	7	76	.6	24	22	1165	5.37	11	5	ND	1	53	1	4	2	157	5.87	.052	3	33	2.87	336	.09	4	3.50	.01	.03	1	1
203091	1	50	7	64	.7	27	21	1017	5.57	11	5	ND	1	47	1	5	2	107	6.61	.044	4	38	1.83	150	.01	2	3.03	.01	.06	1	7
203092	1	42	7	62	.8	31	20	919	5.56	16	5	ND	1	20	1	8	2	106	5.81	.046	3	48	1.94	99	.01	3	3.06	.01	.06	1	21
203093	7	182	5	92	1.0	27	9	642	2.74	22	5	ND	1	27	1	14	2	35	6.67	.074	4	47	.82	52	.01	2	1.29	.01	.04	1	15
203094	10	423	4	40	1.0	58	13	519	3.60	22	5	ND	2	41	1	10	3	44	6.11	.187	8	136	1.21	55	.01	4	1.82	.01	.03	2	20
203095	10	20592	9	1208	7.4	42	36	245	7.29	21	5	ND	3	21	5	19	2	33	1.67	.174	9	156	1.72	18	.01	3	1.87	.01	.03	1	50
203096	10	2782	12	160	3.3	63	43	736	6.75	16	5	ND	2	32	1	14	2	87	4.18	.120	7	144	2.16	33	.02	3	2.91	.01	.03	60	13
STD C/AU-R	17	55	37	133	7.4	65	28	1078	4.07	41	16	7	37	49	18	13	21	56	.49	.090	34	55	.90	169	.06	30	1.96	.04	.12	12	520

DDH 8

DDH 9

SID 201

ACME LABS

AUG 22 '88 16:40

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 23 1988

DATE REPORT MAILED: Sept 1/88

ASSAYER: C. Leong, D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

BP RESOURCES CANADA LTD. PROJECT 10147 File # 88-3818

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	PPM	PPB	
203096	1	24	11	48	.9	30	19	825	5.14	8	5	ND	4	56	1	2	2	145	6.98	.045	3	65	2.03	164	.20	6	4.65	.01	.08	1	1
203097	1	34	9	60	.9	24	17	780	4.82	4	5	ND	4	41	1	2	2	132	7.94	.040	3	47	2.06	60	.21	9	4.71	.01	.12	1	1
203098	1	20	25	58	.9	61	24	1195	5.96	5	5	ND	4	84	1	2	2	164	5.19	.054	6	146	3.70	47	.01	2	4.96	.02	.09	1	1
203099	1	15	9	32	.9	45	21	990	4.61	4	5	ND	4	39	1	2	2	69	5.97	.064	4	58	1.55	25	.01	2	2.24	.02	.09	2	2
203100	1	83	6	43	.8	49	21	1261	5.31	4	5	ND	5	55	1	2	2	90	6.74	.059	6	94	2.35	59	.01	2	3.28	.02	.07	1	1
203101	1	713	3	20	.6	20	9	670	2.21	2	5	ND	4	24	1	2	2	17	4.61	.036	7	31	.64	63	.01	2	.98	.02	.07	2	1
203102	1	225	9	64	.8	77	31	1068	9.47	3	5	ND	3	20	1	2	2	167	2.86	.061	5	151	3.77	85	.01	2	5.77	.02	.07	1	1
203103	1	93	10	91	.9	73	27	3766	7.87	29	5	ND	3	33	1	2	2	174	2.24	.060	7	116	3.16	61	.01	2	4.54	.01	.05	1	1
203104	34	666	63	754	1.1	47	16	2974	5.44	23	5	ND	4	25	3	2	2	95	3.77	.099	15	97	1.76	40	.01	2	2.86	.01	.05	1	13
STD C	18	58	36	127	6.6	65	27	1042	4.05	40	18	6	36	47	17	16	18	56	51	.084	38	54	.90	175	.06	33	2.01	.06	.17	11	
203105	11	8242	125	2200	7.4	37	48	3005	11.37	54	5	ND	5	12	9	10	5	82	1.17	.102	11	80	1.71	11	.01	4	2.59	.01	.06	2	102
203106	2	952	165	398	4.0	48	17	1423	11.47	59	6	ND	5	42	2	51	3	242	2.72	.553	15	154	.83	5	.01	20	1.64	.02	.11	2	325
203107	10	2761	107	1147	4.3	47	27	849	9.42	65	5	ND	4	20	5	20	4	54	.95	.182	9	45	.99	4	.01	2	1.35	.01	.10	4	103
203108	6	791	12	426	1.4	35	12	765	4.92	39	5	ND	5	29	1	2	3	47	2.27	.090	6	31	1.13	24	.01	3	1.53	.01	.08	3	19
203109	2	253	31	631	1.2	60	23	1124	6.53	17	7	ND	3	42	4	2	2	97	5.14	.061	4	87	3.07	35	.01	2	3.97	.01	.07	1	36
203110	3	1479	116	2596	3.5	38	13	1172	4.81	12	5	ND	4	48	9	2	5	58	7.28	.104	4	56	1.06	41	.01	2	1.81	.01	.05	4	50
203111	1	33	5	45	.6	34	11	775	2.84	5	5	ND	4	38	1	2	2	50	5.62	.048	4	74	1.26	51	.01	3	1.99	.01	.07	1	1
RB 203108	6	789	10	420	1.2	35	12	772	4.89	41	5	ND	4	30	1	2	2	46	2.30	.090	6	31	1.13	20	.01	3	1.53	.02	.06	2	17
203112	1	23	5	20	.7	26	7	422	1.86	8	5	ND	5	25	1	2	2	24	3.39	.074	9	56	.78	64	.01	2	1.20	.01	.07	1	1
203113	1	12	7	34	.5	30	15	709	4.01	2	5	ND	4	33	1	2	2	87	3.58	.051	8	39	1.78	67	.01	2	2.77	.01	.06	1	1
203114	1	160	10	87	.7	68	28	1456	7.04	5	5	ND	2	52	1	2	2	164	3.77	.060	5	157	4.14	83	.01	2	5.39	.01	.04	1	1
203115	1	234	4	64	.4	24	6	339	1.13	2	5	ND	4	27	1	2	2	26	2.16	.093	12	78	.85	50	.01	7	1.14	.01	.04	2	1
203116	1	9	2	17	.4	25	6	312	1.13	2	5	ND	4	20	1	2	2	28	1.46	.078	12	100	.95	31	.01	4	1.08	.01	.02	1	1
203117	1	7	8	44	.7	66	24	1577	4.45	3	5	ND	4	46	1	2	2	98	4.02	.077	8	154	3.43	134	.01	3	4.37	.02	.10	1	1
203118	1	7	9	48	.8	70	26	2072	5.74	4	5	ND	2	59	1	2	2	139	5.04	.062	5	165	4.38	83	.01	2	5.39	.01	.08	1	2
203119	1	8	11	55	.5	91	32	1653	6.25	9	5	ND	2	51	1	2	2	194	1.77	.053	4	225	5.96	205	.01	2	6.37	.01	.04	1	1
203120	1	32	3	91	.3	15	5	444	1.11	2	5	ND	3	24	1	2	2	19	2.33	.013	6	27	.70	302	.01	2	1.01	.01	.06	1	1
STD C/AU-R	18	57	38	127	7.2	64	27	1057	4.02	43	17	7	36	47	17	17	17	55	.49	.084	37	55	.89	170	.06	34	1.95	.06	.14	12	485

CM-10

CM-11

CHINOOK MTN.

FILED
 SEP 1 1988
 PP 111

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: Core AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

BP RESOURCES - VANCOUVER, B.C.

DATE RECEIVED: AUG 31 1988

DATE REPORT MAILED: *Sept 5/88*

ASSAYER: *C. Leong*, D. TOYE OR C. LEONG, CERTIFIED B.C. ASSAYERS

BP RESOURCES CANADA LTD. PROJECT 10146 File # 88-4086

CHINOOK MTN.

SM 12

SAMPLE#	Mc PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Hg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	Au* PPM
203121	5	151	29	178	.7	70	9	1838	2.61	6	5	ND	4	19	1	2	2	26	1.34	.099	15	128	1.27	70	.01	4	1.27	.01	.12	1	1
203122	5	159	76	271	.9	72	10	1770	2.51	2	5	ND	4	25	1	2	2	22	1.42	.095	14	103	1.01	75	.01	2	1.07	.01	.12	1	1
203123	4	139	16	137	.8	48	13	2649	2.71	2	5	ND	3	17	1	2	2	28	1.19	.041	9	33	.87	54	.01	6	.93	.01	.07	1	2
203124	3	303	16	104	3.2	69	17	10742	4.55	7	5	ND	3	34	1	3	2	36	1.34	.062	8	22	.82	40	.01	12	.77	.01	.07	1	1
RE 203128	1	76	11	69	1.0	29	9	1146	2.06	11	5	ND	3	36	1	2	2	22	1.95	.061	20	41	.79	90	.01	4	.89	.01	.08	1	1
203125	1	59	3	50	1.2	53	14	4001	2.89	14	5	ND	1	31	1	8	2	9	2.08	.026	3	8	.61	56	.01	2	.47	.01	.08	1	2
203126	4	116	11	213	.7	63	11	1345	2.57	2	5	ND	3	15	1	4	2	14	1.91	.085	9	63	.55	69	.01	4	.71	.01	.09	1	1
203127	4	167	31	133	1.9	65	10	1355	3.50	2	5	ND	4	16	1	2	2	23	1.08	.076	11	90	.81	59	.01	4	.96	.01	.09	1	1
203128	1	75	14	88	1.1	29	9	1062	2.02	10	5	ND	4	35	1	2	2	21	1.91	.059	19	41	.77	98	.01	7	.88	.01	.09	1	1
203129	6	55	3	199	1.2	59	4	639	1.40	6	5	ND	4	39	1	2	2	13	3.81	.291	35	91	.62	176	.01	7	.78	.01	.13	1	1

APPENDIX V

Analytical Procedures

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

222 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone: 252-3153

GEOCHEMICAL LABORATORY METHODOLOGY - 1984

Sample Preparation

1. Soil samples are dried at 60°C and sieved to -20 mesh.
2. Rock samples are pulverized to -100 mesh.

Geochemical Analysis (AA and ICP)

0.5 gram samples are digested in hot dilute aqua regia in a boiling water bath and diluted to 10 ml with demineralized water. Extracted metals are determined by :

A. Atomic Absorption (AA)

Ag*, Bi*, Cd*, Co, Cu, Fe, Ga, In, Mn, Mo, Ni, Pb, Sb*, Ti, V, Zn
(* denotes with background correction.)

B. Inductively Coupled Argon Plasma (ICP)

Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cu, Cr, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, U, V, W, Zn.

Geochemical Analysis for Au*

10.0 gram samples that have been ignited overnight at 600°C are digested with hot dilute aqua regia, and the clear solution obtained is extracted with Methyl Isobutyl Ketone.

Au is determined in the MIBK extract by Atomic Absorption using background correction (Detection Limit = 5 ppb direct AA and 1 ppb graphite AA.)

Geochemical Analysis for Au**, Pd, Pt, Rh

10.0 - 30.0 gram samples are subjected to Fire Assay/preconcentration techniques to produce silver beads.

The silver beads are dissolved and Au, Pd, Pt and Rh are determined in the solution by graphite furnace Atomic Absorption.

Geochemical Analysis for As

0.5 gram samples are digested with hot dilute aqua regia and diluted to 10 ml. As is determined in the solution by Graphite Furnace Atomic Absorption (AA) or by Inductively Coupled Argon Plasma (ICP).

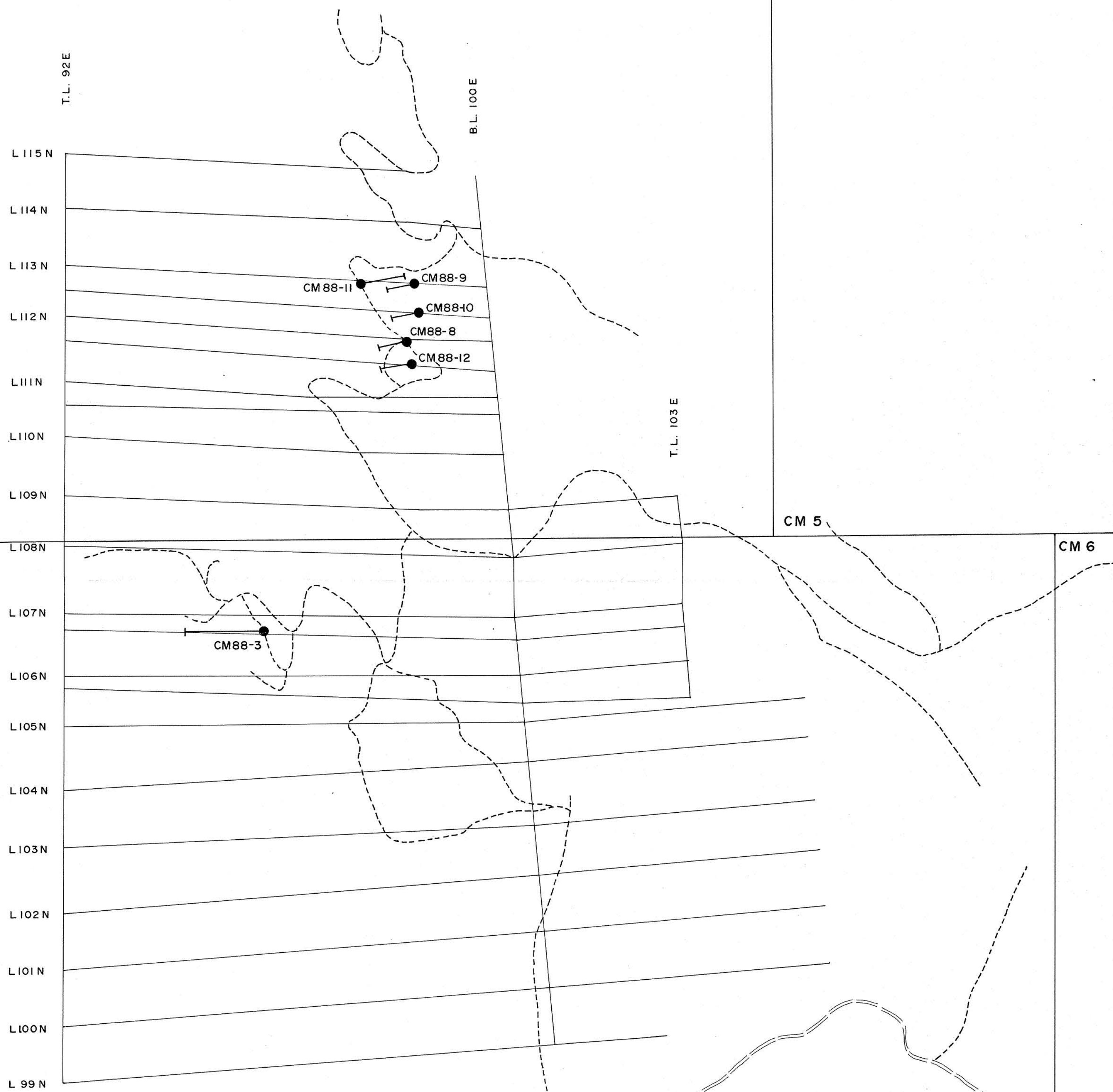
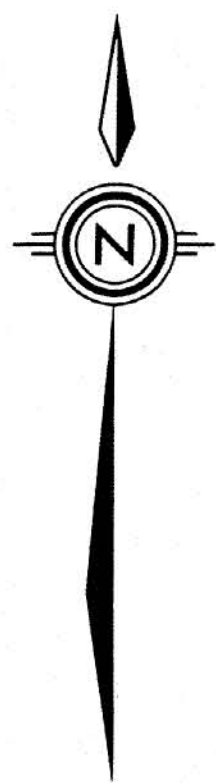
Geochemical Analysis for Barium

0.1 gram samples are digested with hot NaOH and EDTA solution, and diluted to 10 ml.

Ba is determined in the solution by Atomic Absorption or ICP.

Geochemical Analysis for Tungsten

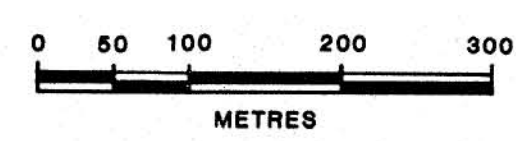
1.0 gram samples are fused with KCl, KNO₃ and Na₂CO₃ flux in a test tube, and the fusions are leached with 20 ml water. W in the solution determined by ICP with a detection of 1 ppm.




GEOLOGICAL BRANCH
ASSESSMENT REPORT

18-039

CM 4 CM 1



 BP Resources Canada Limited	
MINING DIVISION	
BARRIER LAKES PROJECT	
CM CLAIMS	
DRILL HOLE LOCATIONS	
SCALE: 1:5000	DRAWN BY: R. FARMER
DATE NOV. 88	REV.: DRAFTED BY: CHONG
N.T.S. 92P/8E	PROJ.: 10112 REPORT: BPVR 88-10

98+00E

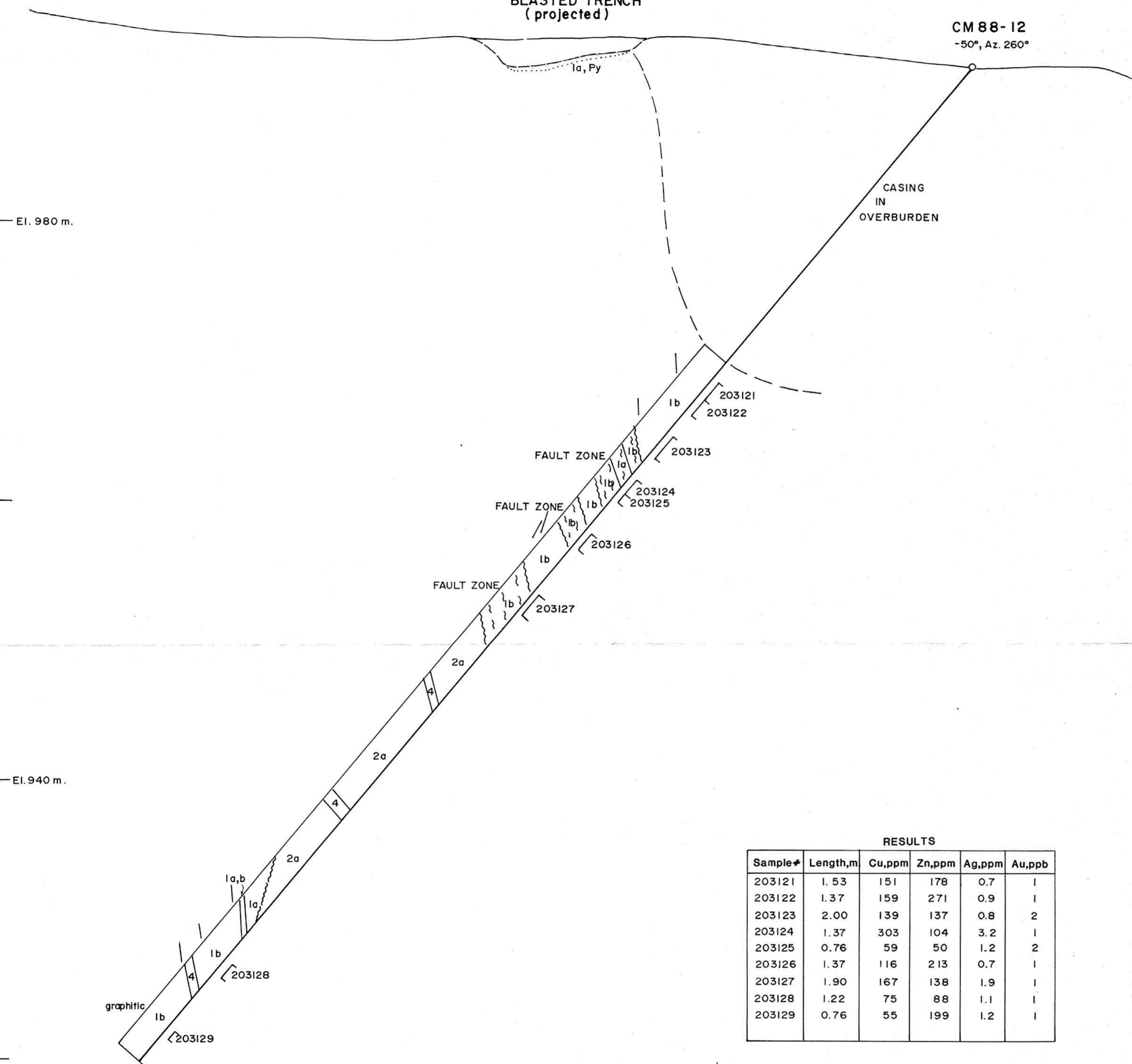
BLASTED TRENCH
(projected)

CM 88-12
-50°, Az. 260°

El. 980 m.

El. 940 m.

92.68 m.
E.Q.H.



RESULTS

Sample #	Length, m	Cu, ppm	Zn, ppm	Ag, ppm	Au, ppb
203121	1.53	151	178	0.7	1
203122	1.37	159	271	0.9	1
203123	2.00	139	137	0.8	2
203124	1.37	303	104	3.2	1
203125	0.76	59	50	1.2	2
203126	1.37	116	213	0.7	1
203127	1.90	167	138	1.9	1
203128	1.22	75	88	1.1	1
203129	0.76	55	199	1.2	1

LEGEND

CRETACEOUS

- B BALDY BATHOLITH
-Granodiorite, quartz monzonite
- A HORNBLENDE DIORITE / GABBRO
-age uncertain

FENNELLS FORMATION
PERMIAN ?

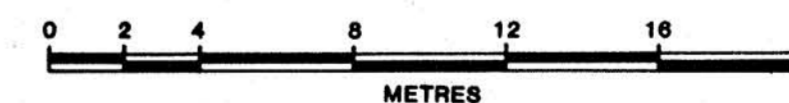
- 5 Mafic dykes and sills, locally hornblende-feldspar porphyritic
age uncertain, may be related to A above
- 4 Massive sulphide (Py±Po±Cpy), and massive magnetite
- 3 Intense quartz carbonate veining and brecciation
a) discrete quartz and/or carbonate vein
- 2 MAFIC VOLCANICS
a) flows-massive, locally pillowed, variolitic or amygdaloidal
b) tuffs to breccias, may in part be brecciated
c) quenched flow breccia, in part may be quenched tuffs?
d) diabase - synvolcanic? dykes and sills
- 1 SEDIMENTS
a) chert, cherty tuff?
b) argillite, minor shale, greywacke, mudstone

SYMBOLS

- Geological contact
- Fault: core angle measured, core angle unknown
- 203051 Sample location & number
- Foliation direction } relative to core axis
- Bedding direction } relative to core axis
- Max/min conductor axis, surface position
- Surface trace of IP anomalous zone - definite
probable
possible
- Py Pyrite
- Cpy Chalcopyrite
- Sph Sphalerite

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18-039



BP BP Resources Canada Limited
MINING DIVISION

BARRIERE LAKES PROJECT
CM CLAIMS
DRILL SECTION
CM 88-12

SCALE: 1 : 200	DRAWN BY: R. FARMER	FIG.
DATE: Aug. '88	REV.:	DRAFTED BY: CHONG
N.T.S. 92P/8E	PROJ.: 10112	REPORT: BPVR 88- 10

97+50E

98+00E

El. 980m

CM 88-11

-50°, Az. 080°

OVERBURDEN

203103
203104
203105

2a
1a

Bands of Py + Cpy at 15-20° C.A.

No core - advance casing to 24.39m

2a

El. 940m.

2a

203106
203107
203108
203109
203110
203111
203112
203113

2-5% ff Py, tr. Cpy ?

1a

2% Py, Po tr Cpy

2-3% Py

1-2% Py

1-2% Py

* INTENSE CLAY / CARBONATE ALTERATION

203114
203115
203116
203117
203118
203119
203120

96.04 m
E.O.H.

RESULTS

Sample #	Length, m.	Cu, ppm	Zn, ppm	Ag, ppm	Au, ppb
203103	0.56	93	91	0.9	1
203104	0.56	666	754	1.1	13
203105	0.61	8242	2200	7.4	102
203106	0.70	952	398	4.0	325
203107	1.30	2761	1147	4.3	103
203108	1.89	791	426	1.4	19
203109	1.87	253	631	1.2	36
203110	0.56	1479	2596	3.5	50
203111	1.02	33	45	0.6	1
203112	1.83	23	20	0.7	1
203113	1.53	12	34	0.5	1
203114	1.67	160	87	0.7	1
203115	1.22	234	64	0.4	1
203116	1.58	9	17	0.4	1
203117	0.86	7	44	0.7	1
203118	1.00	7	48	0.8	2
203119	1.97	8	55	0.5	1
203120	1.15	32	91	0.3	1

El. 900m.

LEGEND

CRETACEOUS

B BALDY BATHOLITH
-Granodiorite, quartz monzonite

A HORNBLLENDE DIORITE / GABBRO
-age uncertain

FENNELL FORMATION
PERMIAN ?

5 Mafic dykes and sills, locally hornblende-feldspar porphyritic
age uncertain, may be related to A above

4 Massive sulphide (Py±Po±Cpy), and massive magnetite

3 Intense quartz carbonate veining and brecciation
a) discrete quartz and/or carbonate vein

2 MAFIC VOLCANICS
a) flows-massive, locally pillowed, variolitic or amygdaloidal
b) tuffs to breccias, may in part be brecciated
c) quenched flow breccia, in part may be quenched tuffs ?
d) diabase - synvolcanic ? dykes and sills

1 SEDIMENTS

a) chert, cherty tuff ?
b) argillite, minor shale, greywacke, mudstone

SYMBOLS

- Geological contact
- Fault: core angle measured, core angle unknown
- [203051] Sample location & number
- Foliation direction } relative to core axis
- Bedding direction }
- Max/min conductor axis, surface position
- Surface trace of IP anomalous zone - definite
- probable
- possible

Py Pyrite
Cpy Chalcopyrite
Sph Sphalerite

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,039



BP BP Resources Canada Limited
MINING DIVISION

BARRIER LAKES PROJECT
CM CLAIMS
DRILL SECTION
CM 88-11

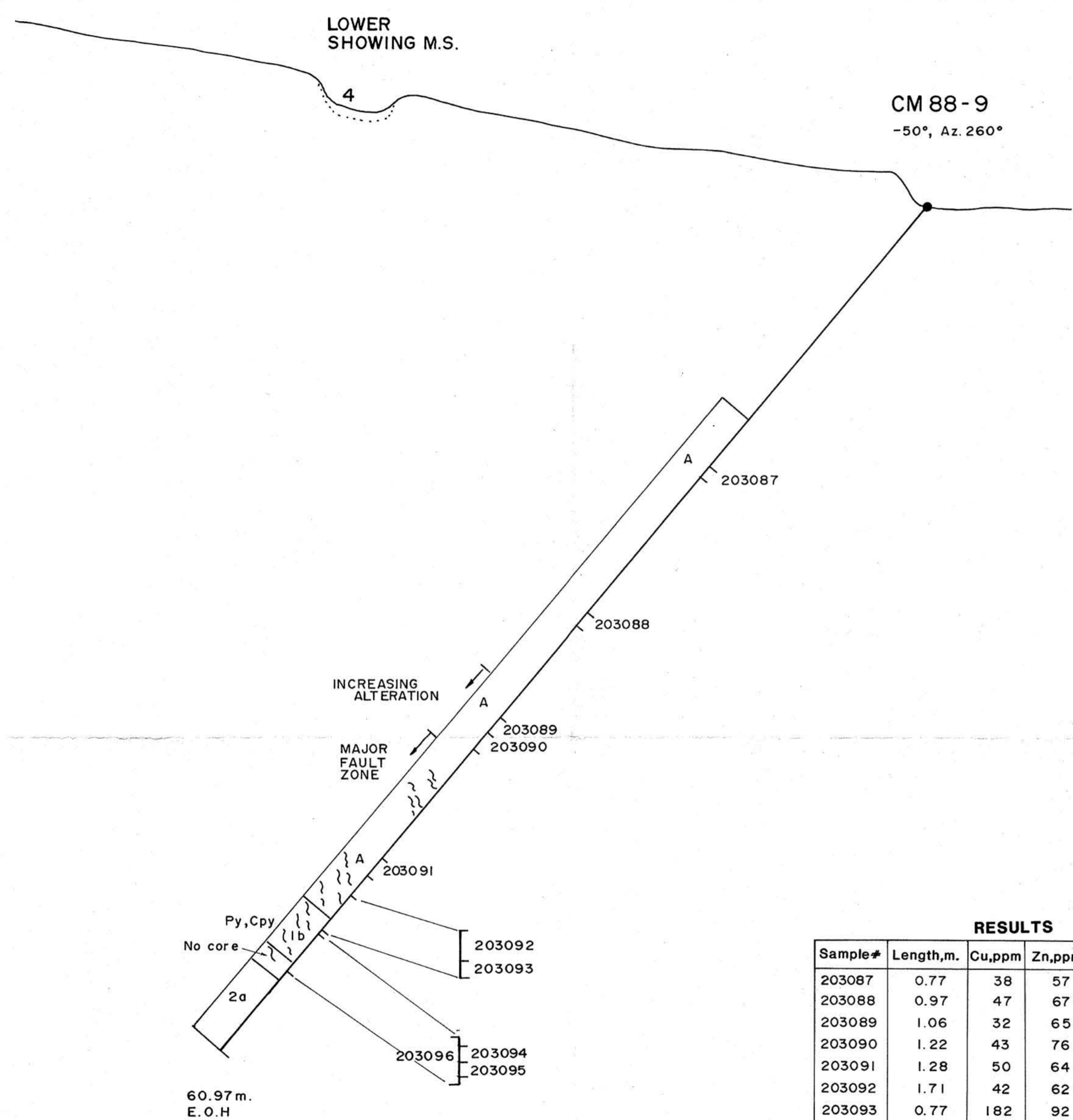
SCALE: 1 : 200	DRAWN BY: R. FARMER	FIG.
DATE: Aug. '88	REV.:	DRAFTED BY: CHONG 10
N.T.S. 92P/8E	PROJ.: 10112	REPORT: BPVR 88- 10

98+00E

98+50E

El. 960 m

El. 920 m



CM 88-9
-50°, Az. 260°

LOWER
SHOWING M.S.

4

A

203087

203088

203089

203090

A

203091

203092

203093

203096

203094

203095

No core

2a

60.97 m.
E.O.H.

RESULTS

Sample #	Length, m.	Cu, ppm	Zn, ppm	Ag, ppm	Au, ppb
203087	0.77	38	57	0.5	11
203088	0.97	47	67	0.7	8
203089	1.06	32	65	0.5	4
203090	1.22	43	76	0.6	1
203091	1.28	50	64	0.7	7
203092	1.71	42	62	0.8	21
203093	0.77	182	92	1.0	15
203094	0.99	423	48	1.0	20
203095	0.76	20692	1208	7.4	50
203096	3.05 sludge	2702	160	3.3	13

LEGEND

CRETACEOUS

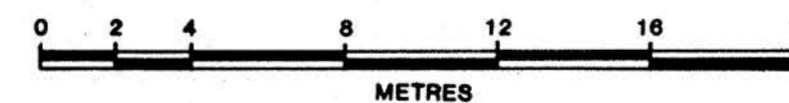
- B** BALDY BATHOLITH
-Granodiorite, quartz monzonite
- A** HORNBLENDE DIORITE / GABBRO
-age uncertain

**FENNELLS FORMATION
PERMIAN ?**

- 5** Mafic dykes and sills, locally hornblende-feldspar porphyritic
age uncertain, may be related to A above
- 4** Massive sulphide (Py±Po±Cpy), and massive magnetite
- 3** Intense quartz carbonate veining and brecciation
a) discrete quartz and/or carbonate vein
- 2** MAFIC VOLCANICS
a) flows-massive, locally pillowed, variolitic or amygdaloidal
b) tuffs to breccias, may in part be brecciated
c) quenched flow breccia, in part may be quenched tuffs?
d) diabase - synvolcanic? dykes and sills
- 1** SEDIMENTS
a) chert, cherty tuff?
b) argillite, minor shale, greywacke, mudstone

SYMBOLS

- Geological contact
- Fault: core angle measured, core angle unknown
- Sample location & number
- Foliation direction
- Bedding direction } relative to core axis
- Max/min conductor axis, surface position
- Surface trace of IP anomalous zone - definite, probable, possible
- Py** Pyrite
- Cpy** Chalcopyrite
- Sph** Sphalerite



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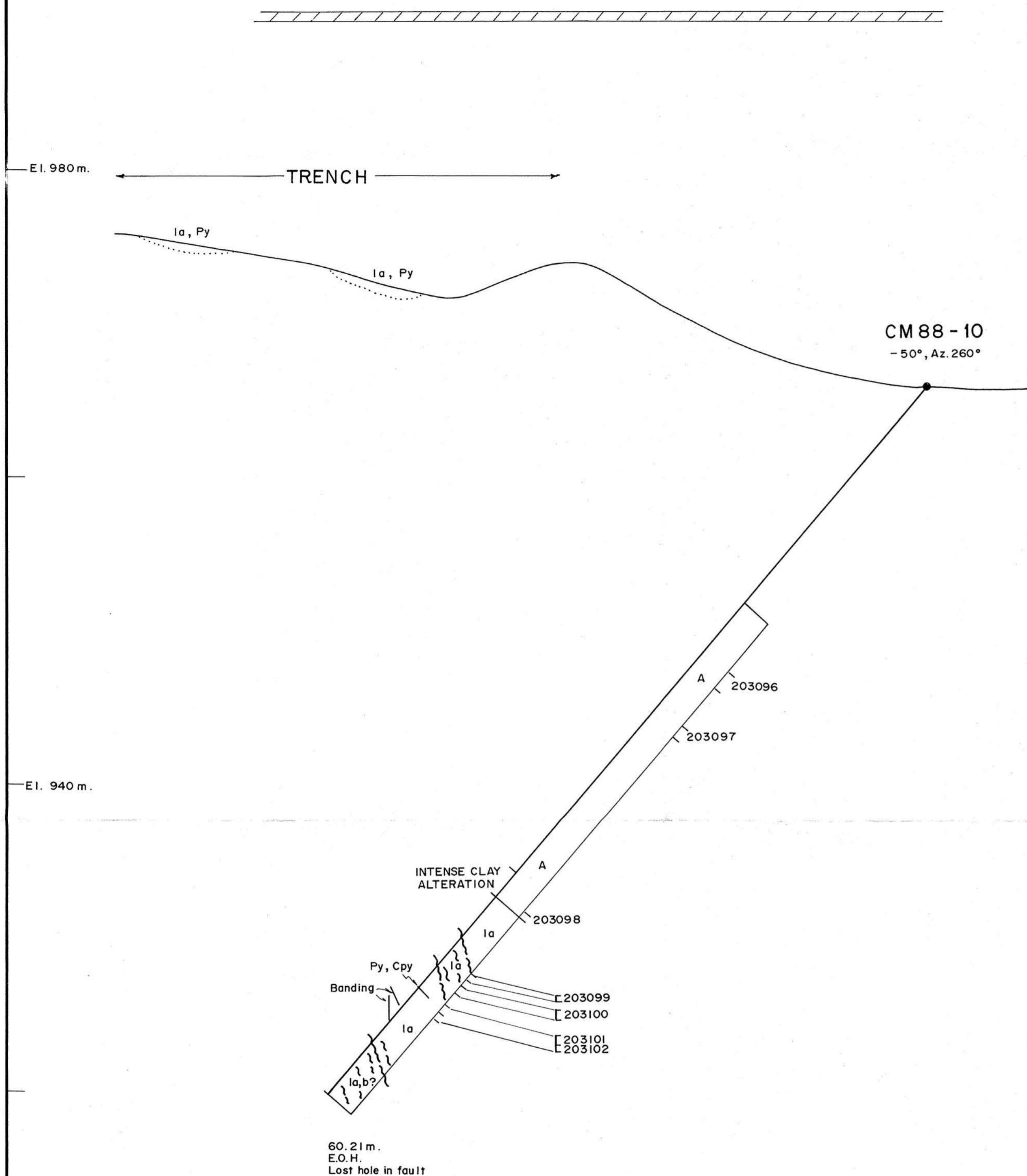
BARRIER LAKES PROJECT
CM CLAIMS
DRILL SECTION

CM 88-9

18,039

SCALE: 1 : 200 DRAWN BY: R. FARMER FIG. 8
 DATE: Aug. '88 REV.: DRAFTED BY: CHONG
 N.T.S. 92P/8E PROJ.: 10112 REPORT: BPVR 88-10

98+50 E



CM 88 - 10
- 50°, Az. 260°

LEGEND

CRETACEOUS

- B** BALDY BATHOLITH
-Granodiorite, quartz monzonite
- A** HORNBLENDE DIORITE / GABBRO
-age uncertain

**FENNEL FORMATION
PERMIAN ?**

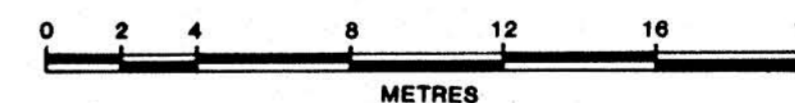
- 5** Mafic dykes and sills, locally hornblende-feldspar porphyritic
age uncertain, may be related to A above
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c) quenched flow breccia, in part may be quenched tuffs ?
d) diabase - synvolcanic ? dykes and sills
- 1** SEDIMENTS
a) chert, cherty tuff ?
b) argillite, minor shale, greywacke, mudstone

SYMBOLS

- Geological contact
- Fault: core angle measured, core angle unknown
- Sample location & number
- Foliation direction
- Bedding direction } relative to core axis
- Max/min conductor axis, surface position
- Surface trace of IP anomalous zone - definite, probable, possible
- Py** Pyrite
- Cpy** Chalcopyrite
- Sph** Sphalerite

GEOLOGICAL BRANCH
ASSESSMENT REPORT

18-039



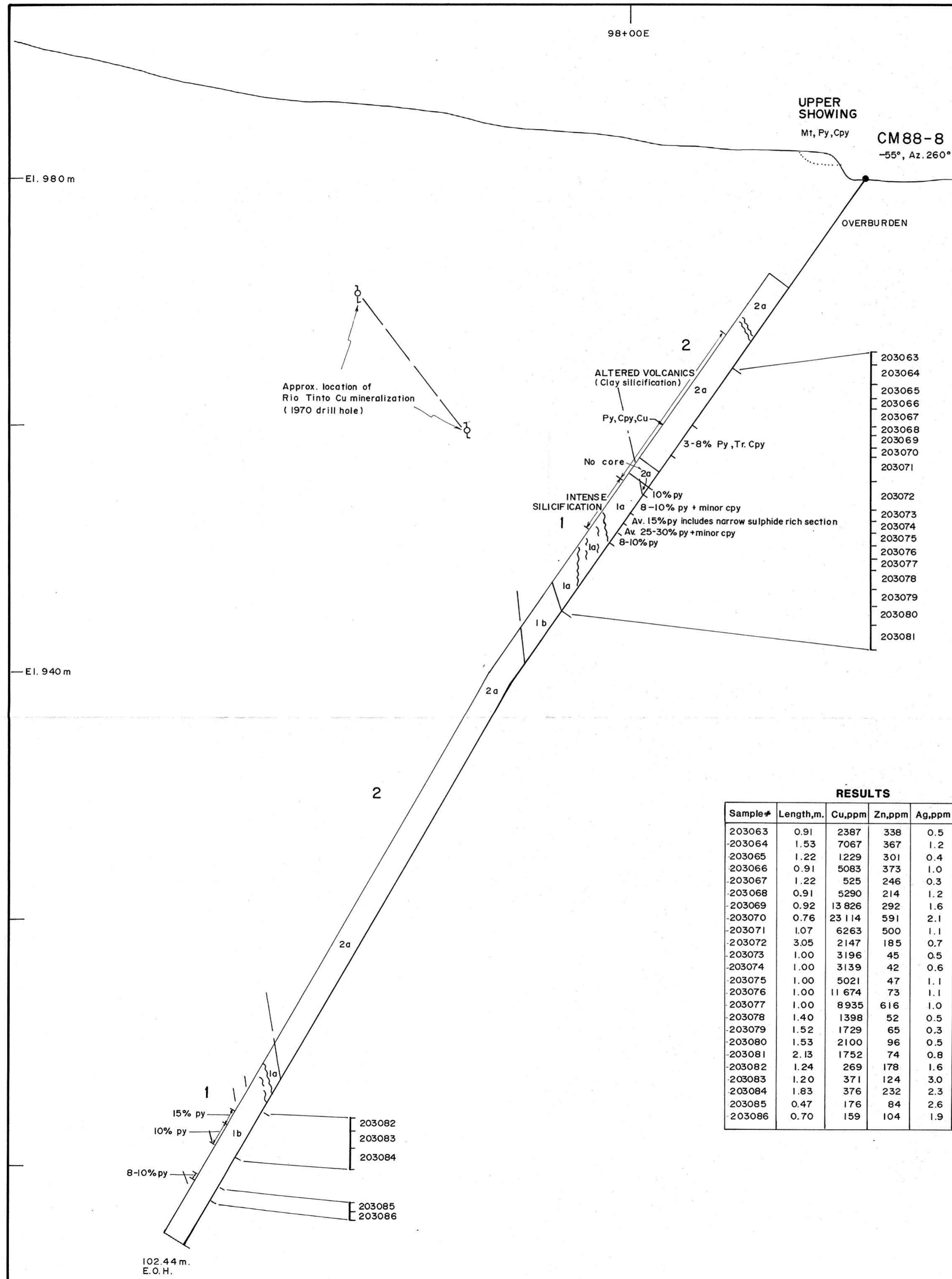
RESULTS

Sample #	Length, m.	Cu, ppm	Zn, ppm	Ag, ppm	Au, ppb
203096	1.30	24	48	0.9	1
203097	0.91	34	60	0.9	1
203098	0.50	20	58	0.9	1
203099	0.41	15	32	0.9	2
203100	0.67	83	43	0.8	1
203101	0.67	713	20	0.6	1
203102	0.50	225	64	0.8	1

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**BARRIER LAKES PROJECT
CM CLAIMS
DRILL SECTION
CM 88-10**

SCALE: 1 : 200	DRAWN BY: R. FARMER	FIG. 9
DATE: Aug. '88	REV.:	DRAFTED BY: CHONG
N.T.S. 92P/8E	PROJ.: 10112	REPORT: BPVR 88- 10



RESULTS

Sample#	Length,m.	Cu,ppm	Zn,ppm	Ag,ppm	Au,ppb
203063	0.91	2387	338	0.5	2
203064	1.53	7067	367	1.2	3
203065	1.22	1229	301	0.4	1
203066	0.91	5083	373	1.0	1
203067	1.22	525	246	0.3	2
203068	0.91	5290	214	1.2	14
203069	0.92	13826	292	1.6	12
203070	0.76	23114	591	2.1	10
203071	1.07	6263	500	1.1	5
203072	3.05	2147	185	0.7	1
203073	1.00	3196	45	0.5	4
203074	1.00	3139	42	0.6	9
203075	1.00	5021	47	1.1	8
203076	1.00	11674	73	1.1	21
203077	1.00	8935	616	1.0	14
203078	1.40	1398	52	0.5	1
203079	1.52	1729	65	0.3	2
203080	1.53	2100	96	0.5	1
203081	2.13	1752	74	0.8	3
203082	1.24	269	178	1.6	23
203083	1.20	371	124	3.0	21
203084	1.83	376	232	2.3	40
203085	0.47	176	84	2.6	36
203086	0.70	159	104	1.9	45

LEGEND

CRETACEOUS

- B** BALDY BATHOLITH
-Granodiorite, quartz monzonite
- A** HORNBLLENDE DIORITE / GABBRO
-age uncertain

**FENNEL FORMATION
PERMIAN ?**

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age uncertain, may be related to A above
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c) quenched flow breccia, in part may be quenched tuffs?
d) diabase - synvolcanic? dykes and sills
- 1** SEDIMENTS
a) chert, cherty tuff?
b) argillite, minor shale, greywacke, mudstone

SYMBOLS

- Geological contact
- Fault: core angle measured, core angle unknown
- 203051 Sample location & number
- Foliation direction } relative to core axis
- Bedding direction } relative to core axis
- Max/min conductor axis, surface position
- Surface trace of IP anomalous zone - definite
- probable
- possible

- Py Pyrite
- Cpy Chalcopyrite
- Sph Sphalerite
- Cu Native copper

GEOLOGICAL BRANCH
ASSESSMENT REPORT

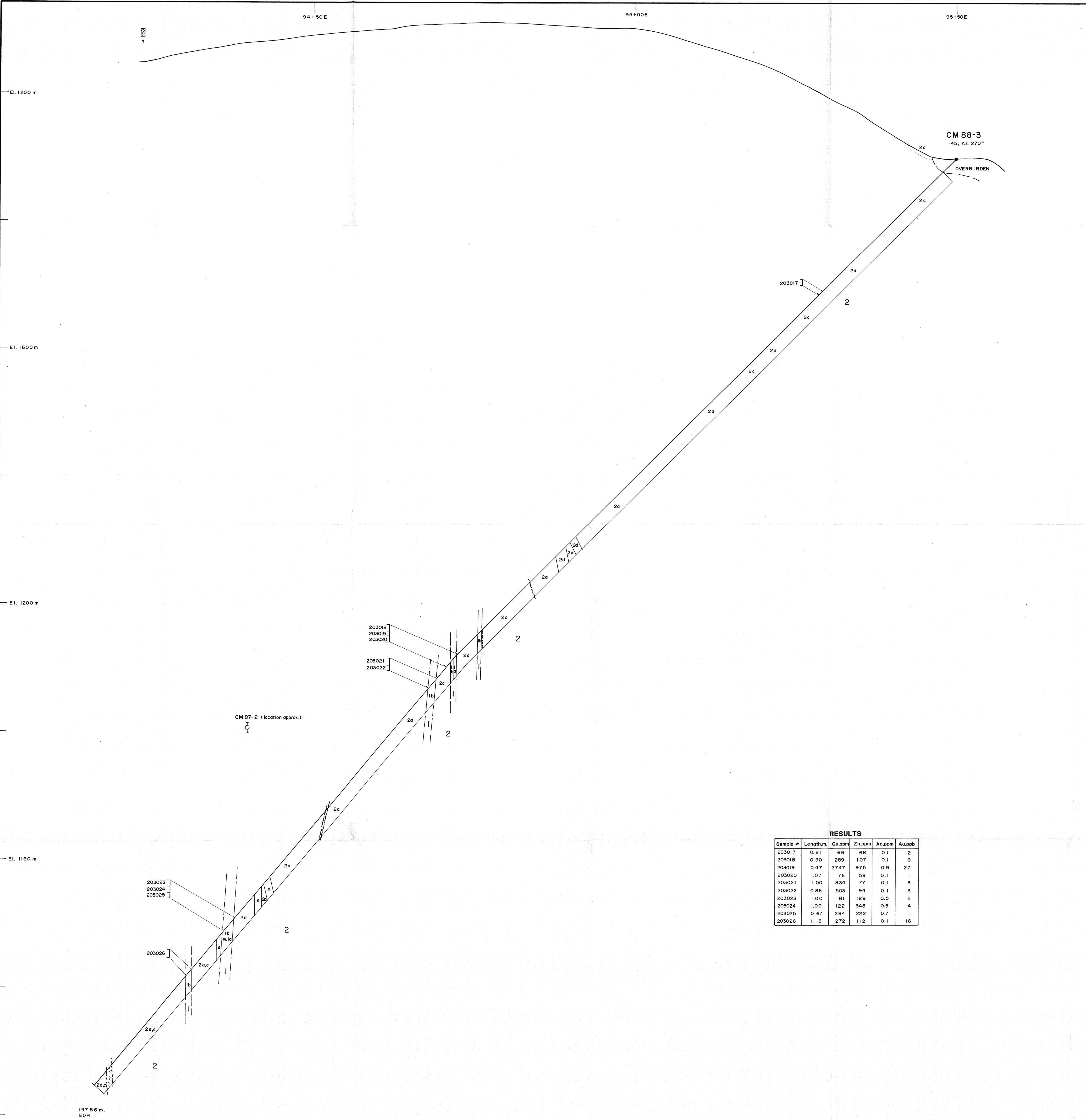
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**BARRIER LAKES PROJECT
CM CLAIMS
DRILL SECTION
CM 88-8**

SCALE: 1 : 200	DRAWN BY: R. FARMER	FIG. 7
DATE: Aug. '88	REV.:	DRAFTED BY: CHONG
N.T.S. 92P/8E	PROJ.: 10112	REPORT: BPVR 88-10



- LEGEND**
- CRETACEOUS**
- B BALDY BATHOLITH
-Granodiorite, quartz monzonite
 - A HORNBLENDE DIORITE /GABBRO
-age uncertain
- FENNEL FORMATION**
- PERMIAN ?**
- 5 Mafic dykes and sills, locally hornblende-feldspar porphyritic
age uncertain, may be related to A above
 - 4 Massive sulphide (Py:Po:Cpy), and massive magnetite
 - 3 Intense quartz carbonate veining and brecciation
a) discrete quartz and/or carbonate vein
 - 2 MAFIC VOLCANICS
a) flows-massive, locally pillowed, variolitic or amygdaloidal
b) tuffs to breccias, may in part be brecciated
c) quenched flow breccia, in part may be quenched tuffs
d) diabase - synvolcanic? dykes and sills
 - 1 SEDIMENTS
a) chert, cherty tuff?
b) argillite, minor shale, greywacke, mudstone

- SYMBOLS**
- Geological contact
 - Fault: core angle measured, core angle unknown
 - [203051] Sample location & number
 - Foliation direction } relative to core axis
 - Bedding direction } relative to core axis
 - Max/min conductor axis, surface position
 - Surface trace of IP anomalous zone - definite
probable
possible
- Py Pyrite
Cpy Chalcopyrite
Sph Sphalerite

RESULTS

Sample #	Length,m	Cu,ppm	Zn,ppm	Ag,ppm	Au,ppb
203017	0.81	66	66	0.1	2
203018	0.90	289	107	0.1	6
203019	0.47	2747	975	0.9	27
203020	1.07	76	59	0.1	1
203021	1.00	834	77	0.1	3
203022	0.86	503	94	0.1	3
203023	1.00	81	189	0.5	2
203024	1.00	122	348	0.5	4
203025	0.67	284	222	0.7	1
203026	1.18	272	112	0.1	16

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

18,039

0 2 4 8 12 16 18
METRES

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**BARRIER LAKES PROJECT
CM CLAIMS
DRILL SECTION
CM 88 -3**

SCALE: 1 : 200 DRAWN BY: R. FARMER FIG. 6
DATE: Aug. 88 REV.: DRAFTED BY: CHONG
N.T.S. 92P/8E PROJ.: 10112 REPORT: BPVR 88-10

197.86 m.
EOH