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DIAMOND DRILLING REPORT ON THE MASTODON PROPERTY

REVELSTOKE MINING DIVISION,
LA FORME CREEK AREA, BRITISH COLUMBIA

LOCATION

N.T.S.: 82M/1E & 8E
LATITUDE: 51° 14' 00"N.
LONGITUDE: 118° 06' 30"W.

OWNER

TECK CORPORATION
700-200 BURRARD STREET
VANCOUVER, B.C. V6C 3L9

PREPARED FOR

BANFF RESOURCES INC.
SUITE 200-545 CLYDE AVENUE
WEST VANCOUVER, B.C. V7T 1C5

PREPARED BY

Peter A. Christopher PhD., P.Eng
PETER CHRISTOPHER & ASSOCIATES INC.
3707 WEST 34TH AVENUE,
VANCOUVER, B.C. V6N 2K9



JULY 29, 1994

GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,456

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SUMMARY

The Mastodon Property, consisting of 22 Crown Granted claims, one reverted Crown Granted claim acquired by auction, and one 8 unit four-post claim, covers about 520 ha. (1285 acres), in the Revelstoke Mining Division about 26 kilometers north-northeast of Revelstoke, B.C. The claims form three groups with a main group covering the Mastodon Mine area, 5 crown grants covering the Lead Queen and Lead King prospects and the Hilda No. 1 and Hilda No. 2 crown grants covering the old mill site in La Forme Creek. The property is situated seven kilometers east of the Columbia River near the western boundary of the Selkirk Mountains. The Big Bend Highway (Highway 23) is about 6 kilometers to the west of the Mastodon Mine site. Old access roads up La Forme Creek to the mill site and from the mill site to the old mine workings are presently washed out and overgrown. Present access to the property is via helicopter with the nearest helicopters based at the Revelstoke airport.

The property is owned by Teck Corporation which last explored the property with geological, geochemical, and geophysical surveys and 684.9 meters of diamond drilling between 1989 and 1992. Banff Resources Inc. (previously Toby Creek Resources Ltd.) holds an option to earn a 50% working interest in the Mastodon Property.

The Mastodon Property contains the Mastodon Zinc Mine, and the Lead Queen and Lead King mineral occurrences. Lead and zinc mineralization occurs as structurally controlled replacement of Badshot Formation carbonates and Hamill Group phyllites of Lower Cambrian age. The favorable carbonate-phyllite contact area is repeated by structural deformation or interbedding of the units in the mine area. The favorable contact strikes northerly in the area of the old Mastodon Mine. Heavy snow and timber cover restricted testing of the favorable contact to lower elevations near the old Mastodon mine workings.

The writer and geologist Paul Roberts conducted an initial examination of the property on May 30, 1994 to select and start preparation of drill sites. The drill project started on June 5, 1994 and was completed and demobilized on June 15, 1994. Two 398 foot (121.3m) holes totalling 796 feet (242.6 m.). were completed with DDH 94-1 drilled to test a geochemical anomaly south of the old Mastodon Mine and DDH 94-2 drilled to test the northerly extension of the mineralized horizon toward the north showing. A total of 24 core samples were analyzed but only weakly anomalous values for copper (to 363ppm), lead (to

104ppm), arsenic (to 30ppm) and gold (to 21ppb) were obtained.

The writer recommended a success contingent staged exploration program with a stage 2 drill program contingent on the success of stage 1. The stage 1 drill results do not justify the funding of a stage 2 drill program by Banff Resources Inc..

INTRODUCTION

Banff Resources Inc. holds an option on the Mastodon Property, a past zinc and lead producer, situated in the Revelstoke Mining Division, British Columbia. The property is wholly owned by Teck Corporation and consists of 22 Crown Granted (CG) claims, 1 reverted CG claim and a 8 unit four-post claim. Peter Christopher & Associates Inc. was retained by the management of Banff Resources to conduct the recommended stage 1 drill program (Christopher, 1992). The writer and Teck Corporation geologist Paul Roberts conducted an initial property examination on May 30, 1994 to establish the site for drill hole 94-1, and possible site for hole 94-2. The drill program was mobilized on June 5, 1994 and demobilized on June 15, 1994.

This report summarizes the results of the 1994 drill program but does not recommend further expenditures by Banff Resources.

LOCATION AND ACCESS (FIGURES 1 & 2)

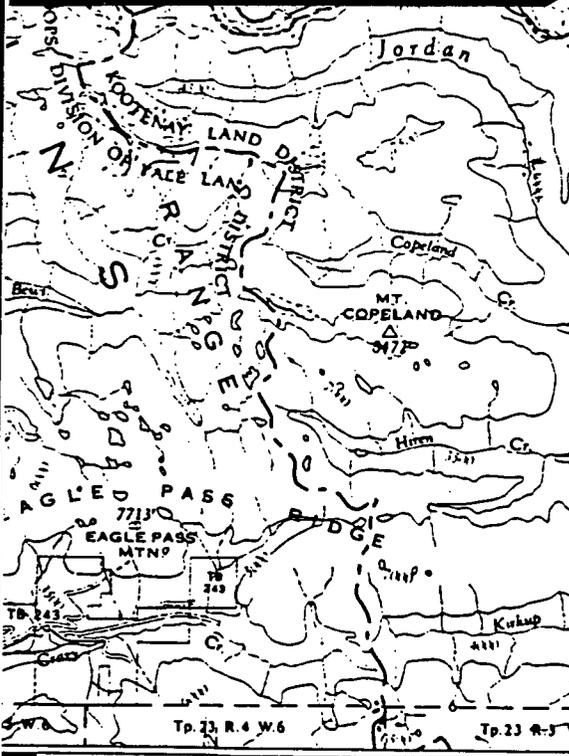
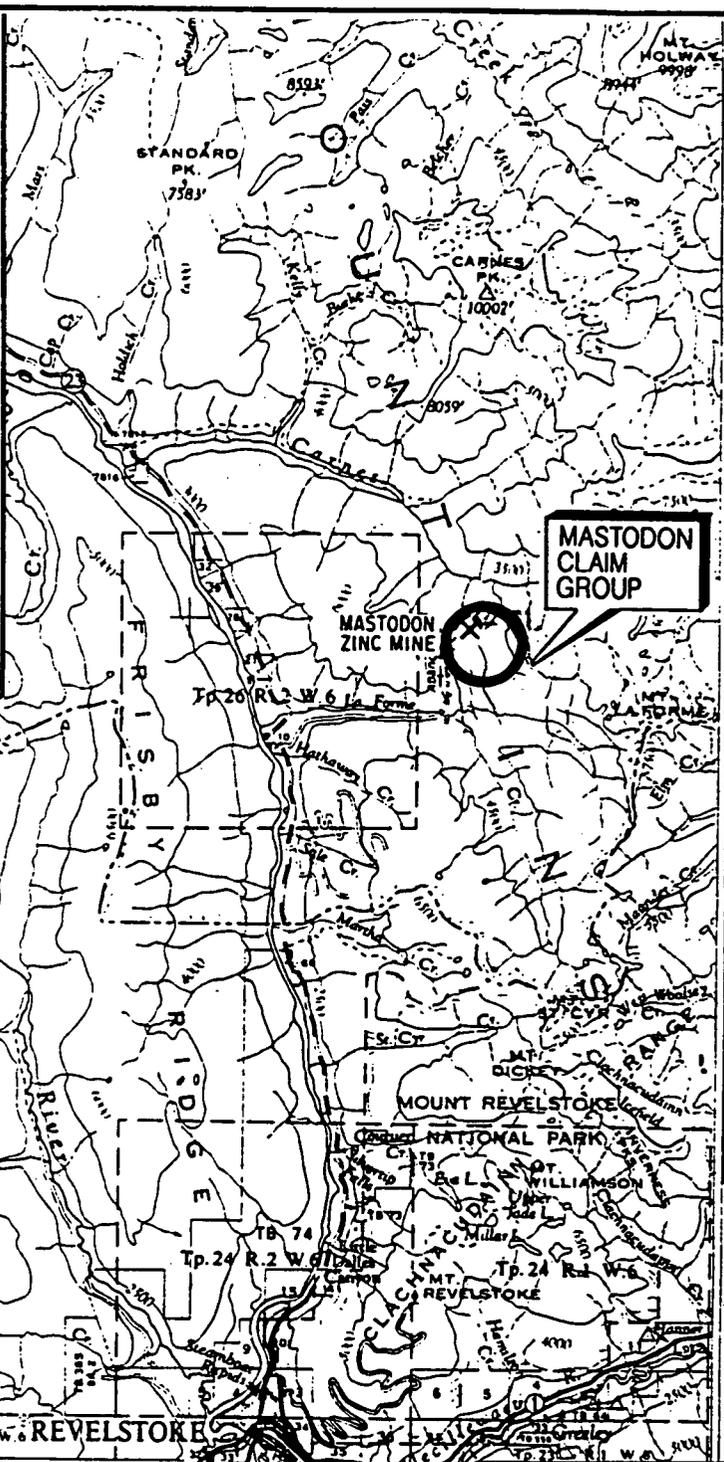
The Mastodon Property is situated in the Revelstoke Mining Division about 26 kilometers north-northeast of Revelstoke at geographic coordinates 51° 14' 00"N. latitude and 118° 06' 30" W. longitude in NTS map sheets 82M/1E and 82M/8E. The property is about 6 and 7 kilometers east of the Big Bend Highway (Highway 23) and Columbia River, respectively. The property extends northerly from La Forme Creek toward Carnes Creek and covers a total of about 520ha. (1285 acres).

Access is presently via helicopter with the nearest bases at the Revelstoke airport. Drill equipment and camp for management personnel were mobilized from a landing at about kilometer 12 on the Carnes Creek logging road. Drill crews were ferried daily from Revelstoke.

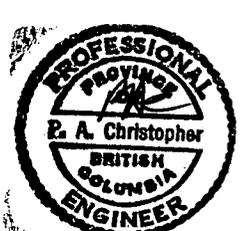
PHYSIOGRAPHY AND VEGETATION

The property is in the Selkirk Mountains with the Columbia River valley about 7 kilometers west of the Mastodon Mine site. Elevations on the property range from about 1060 meters in La Forme Creek to 2290 meters at the ridge line north of La Forme Creek. The property has rugged topography with a number of low cliffs.

Surface water is restricted to a small pond near the Mastodon Mine site and to periods of heavy rainfall and rapid snow melt. Snow is common on the property from September through May with about 30 cm. present at the lower workings on May 30, 1994.



30' To Sicamous—44 miles To Sicamous To Arrowhead—31 miles 118° 00'



BANFF RESOURCES INC.

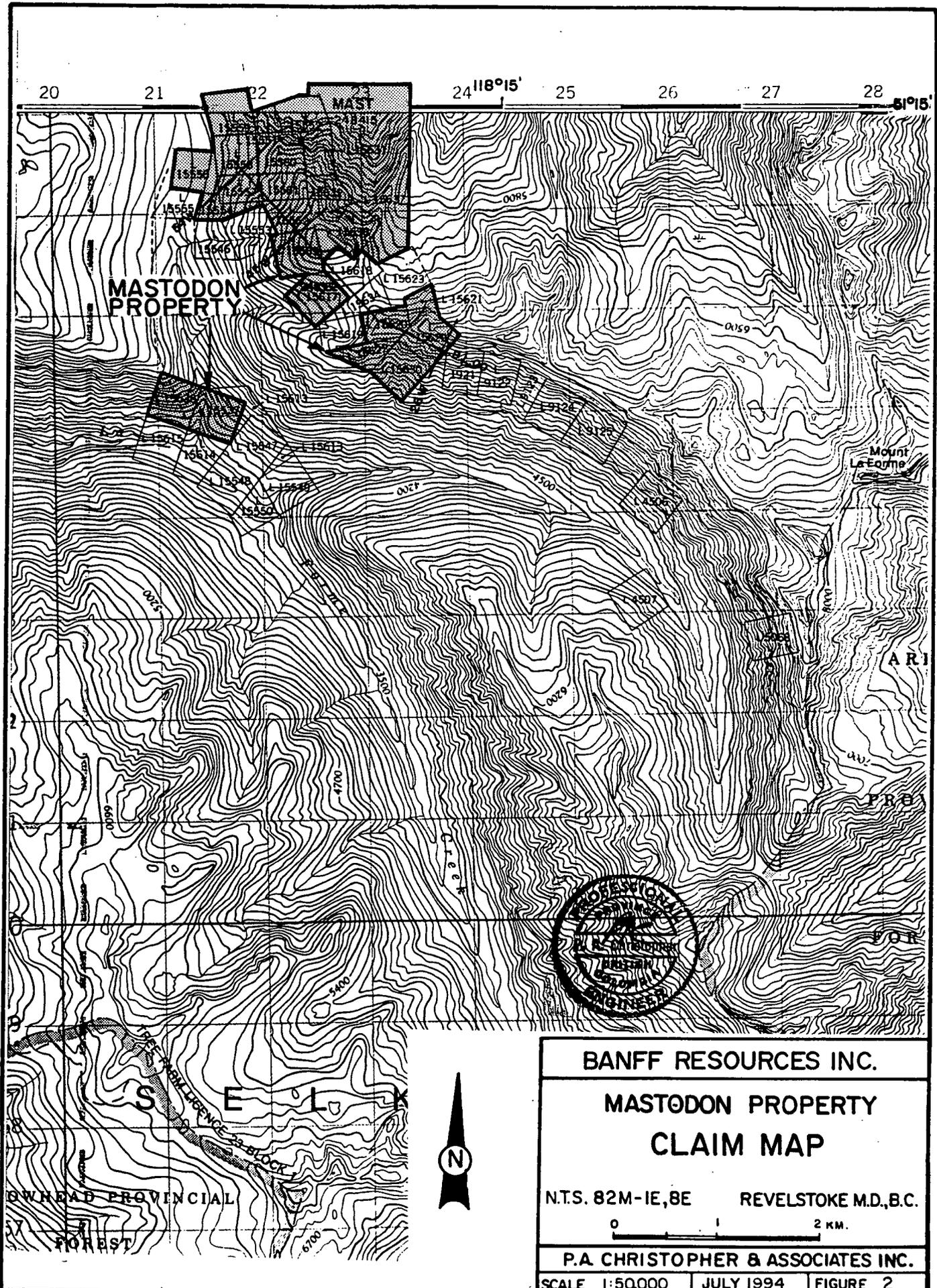
**MASTODON PROPERTY
LOCATION MAP**

N.T.S. 82M-1E, BE REVELSTOKE M.D., B.C.

0 5 10 KM.

P.A. CHRISTOPHER & ASSOCIATES INC.

SCALE 1:250,000	JULY 1994	FIGURE 1
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20 21 22 24 118°15' 25 26 27 28 51°15'

MASTODON PROPERTY

MAST

Mount Le Conte

AR 1

PRB 1

FOR

S E L K

OWHEAD PROVINCIAL

FOREST

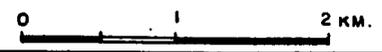


BANFF RESOURCES INC.

**MASTODON PROPERTY
CLAIM MAP**

N.T.S. 82M-1E,8E

REVELSTOKE M.D.,B.C.



P.A. CHRISTOPHER & ASSOCIATES INC.

SCALE 1:50,000

JULY 1994

FIGURE 2

The property is forested with cedar, hemlock and spruce below 1600 meters with slide alder found along creeks and gullies. Open grassy areas are found at higher elevations. Cutting is required for helicopter access below 1830 meters.

PROPERTY DEFINITION (Figure 2)

The Mastodon Property, consisting of 22 CG claims, one reverted CG claim acquired by auction, and one 8 unit four-post claim, covers about 520 ha. in the Revelstoke Mining Division. The claim area straddles the boundary of claim maps 82M/1E and 82M/8E. The claims are in three groups: a main group consisting of 17 CG claims, one reverted CG claim, and one 8 unit four-post claim; a group of 5 CG; and the Haida No. 1 and Haida No. 2 CG covering the old mill site. The claims are owned by Teck Corporation with Banff Resources Inc. presently holding an option to earn a 50% working interest in the property.

Pertinent Claim data for the property is summarized in Table 1 with claim location shown on Figures 1 and 2.

TABLE 1. PERTINENT CLAIM DATA FOR THE MASTODON PROPERTY.

NAME	# (LOT)	Hectares	Acres	Units	Expiry	Owner
ERIC NO.2	248332(15617)			1	15 MAR 2001	TECK
MAST	248415			8	13 AUG 2001	"
<u>CROWN GRANTED MINERAL CLAIMS</u>						
ROOSEVELT 1FR	3454(15554)	8.41	20.80	1	02 JULY 95	"
B NO.6	" (15556)	19.24	47.55	1	02 JULY 95	"
B NO.3	" (15557)	13.52	33.40	1	02 JULY 95	"
B.K. NO.7	" (15558)	18.96	46.85	1	02 JULY 95	"
K.B. NO.1	" (15559)	19.60	48.42	1	02 JULY 95	"
MASTODON #3	" (15560)	18.96	46.85	1	02 JULY 95	"
MASTODON #1	" (15561)	12.82	31.69	1	02 JULY 95	"
FRACTION #7	" (15562)	14.15	34.97	1	02 JULY 95	"
K.L. #5	" (15563)	20.90	51.65	1	02 JULY 95	"
RUBY #2	" (15636)	18.43	45.55	1	02 JULY 95	"
B.K. #5	" (15551)	8.13	20.09	1	02 JULY 95	"
B.K. #6	" (15552)	19.63	48.50	1	02 JULY 95	"
B. #1	" (15631)	13.63	33.68	1	02 JULY 95	"
FRACTION #2	" (15632)	9.10	22.49	1	02 JULY 95	"
RUBY #3FR	" (15637)	13.08	32.33	1	02 JULY 95	"
ERIC #5	3456(15620)	13.41	33.14	1	02 JULY 95	"
ERIC #6	" (15621)	8.27	20.43	1	02 JULY 95	"
ERIC #7FR	" (15622)	12.73	31.46	1	02 JULY 95	"
SILVER STAR #1	" (15629)	20.66	51.06	1	02 JULY 95	"
SILVER STAR #2	" (15630)	20.90	51.65	1	02 JULY 95	"
HILDA #1	3455(15537)	20.90	51.65	1	02 JULY 95	"
HILDA #2	" (15538)	20.90	51.65	1	02 JULY 95	"

HISTORY

Mineral exploration in the area dates back to the 1800's with the discovery of placer gold on Carnes and French Creeks. Interest in lode mining increased in the late 1800's and resulted in the discovery of the Mastodon showing in 1898. Several periods of development occurred before Mastodon Zinc Mines Limited started preparing the property for production in 1950. During two short periods of operation in 1952 and 1960, the Mastodon Mine produced a total of about 34,800 tons yielding approximately 10% zinc, 0.3% lead and 0.04% cadmium. The Mastodon Mine was developed on four main levels and several sub-levels with detailed descriptions of the mine given in Minister of Mines Reports for 1950 (pp. A159-166) and 1959 (pp. 106-177).

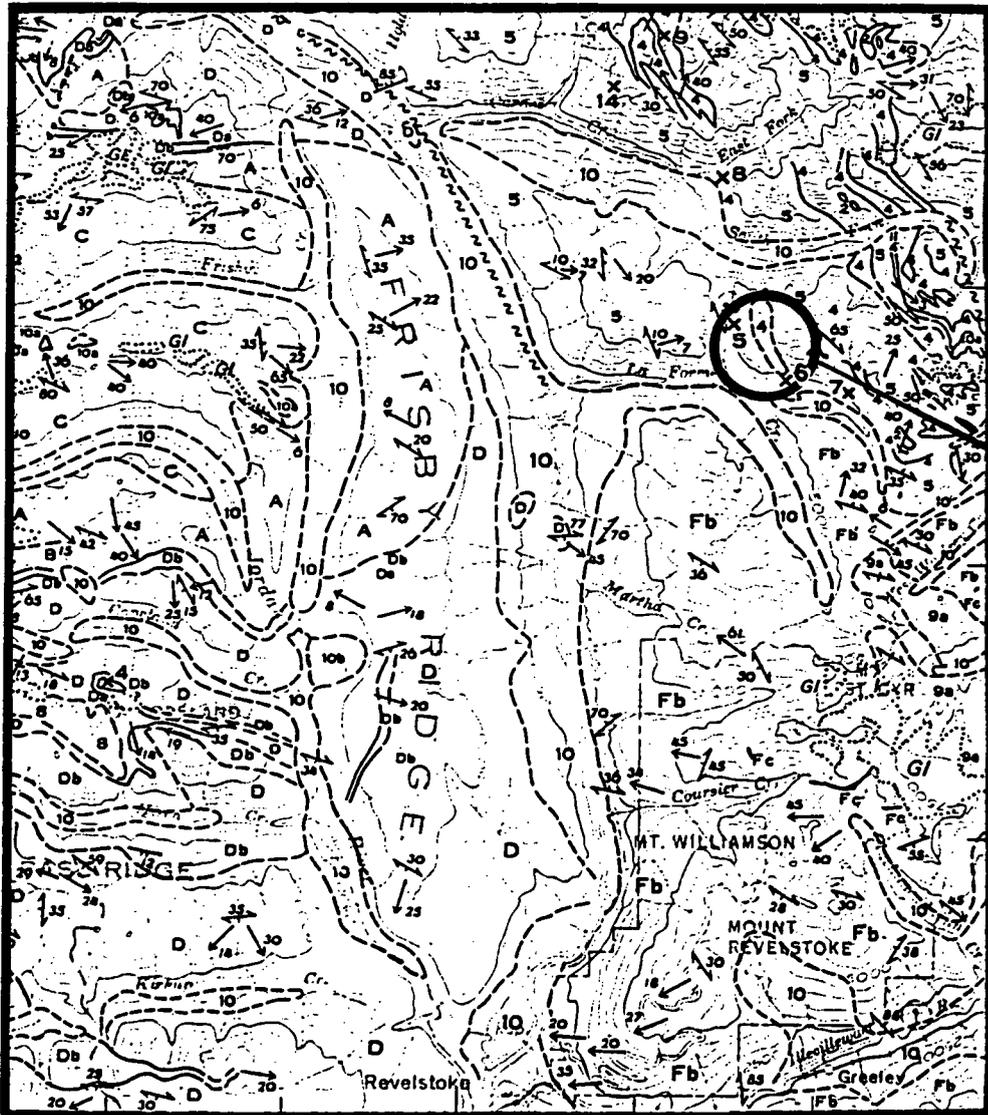
After the unsuccessful attempt to reopen the Mastodon Mine by Highland-Bell Limited in 1960, the property remained relatively idle until Teck Corporation consolidated claims in the area in 1989. Teck conducted geological and geochemical surveys in 1989 and 1990 before drilling 684.9 meters in seven holes during 1991. In 1992 Teck conducted geological mapping, soil sampling and a VLF-Em and self potential surveys (Roberts, 1992) before optioning the property to Toby Creek Resources (now Banff Resources Inc. The writer prepared a qualifying engineering report recommending 250 meters of diamond drilling (Christopher, 1992). This report summarizes the results of the drill program which was field supervised by the writer and geologist Paul Roberts of Teck Corporation.

REGIONAL GEOLOGY (Figure 3)

The regional geology of the area has been reported by J.O. Wheeler (GSC Paper 64-32, 1965. Figure 3 shows a section of Wheeler's map with a generalized legend and location for the Mastodon Property. The property is underlain by Lower Cambrian Lardeau Group phyllites and schists (unit 5) with interbedded Lower Cambrian Badshot limestones and dolomites (unit 4). The Lower Cambrian rocks occur within a highly metamorphosed basement sequence of rocks called the Shuswap metamorphic complex.

The Shuswap metamorphic complex (units A-H) was divided by Wheeler (1995) into seven varieties of gneiss and schist, and one ultramafic unit (unit H) consisting of dunite and biotite-hornblende pyroxenite.

The Badshot Formation (unit 4) consists of light grey and dark grey limestone, buff and grey dolomite, silvery brown phyllite, grey argillite and quartzite. Metamorphosed



**MASTODON
PROPERTY**

- 10 Glacial drift, silt, alluvium
- 9 Granitic rocks, undivided
- 8 Nepheline syenite-gneiss
- 5 Lardeau
- 4 Badshot Formation
- 2 Hamill Group
- 1 Horsethief Creek Group

A - H Shuswap metamorphic complex, undivided



MINERAL PROPERTIES

4	River Jordan	8	J & L
5	Mastodon	9	A & E
6	Lead King	14	Roseberry
7	Little Slide		

- Glacier gr.
- Limestone, marble in thin beds - - - - -
- Geological boundary (defined, approximate or assumed) - - - - -
- Bedding, tops known (horizontal, inclined, vertical, overturned) / / /
- Bedding, tops unknown (inclined, vertical) / / /
- Schistosity, cleavage, gneissosity (horizontal, inclined, vertical) + / /
- Lineation (horizontal, inclined, vertical) / / /
- Fault (defined, approximate or assumed) - - - - -
- Anticline (defined, approximate) - - - - -
- Syncline (defined, approximate) - - - - -
- Anticline and syncline (overturned, arrow indicates direction of plunge) - - - - -
- Isograds - - - - -
- Mineral property 5 x
- Placer property 20 x

After GSC Paper 64-32, Map 12-1964



BANFF RESOURCES INC.

**MASTODON PROPERTY
REGIONAL GEOLOGY**

N.T.S. 82M-1E,8E REVELSTOKE M.D., B.C.

0 5 10 KM.

P.A. CHRISTOPHER & ASSOCIATES INC.

SCALE 1:253,440 JULY 1994 FIGURE 3

sections of the Badshot Formation are converted to marble, amphibolite, and calc-silicate rocks.

The Lardeau Group (unit 5) consists of dark grey and black carbonaceous-siliceous slate, phyllite, siltstone, and quartzite; dark grey limy slate, rusty weathering buff slate; dark grey and rusty siliceous phyllite and quartz muscovite-chlorite-plagioclase schist; light and dark grey limestone; greenstone and chlorite schist. Strongly metamorphosed equivalents are converted to crystalline schist and gneiss.

PROPERTY GEOLOGY

No systematic mapping has been attempted on a property scale because of rugged topography, heavy underbrush, generally sparse outcrop, and during this program, an extensive shallow snow cover. Betmanis (1991) suggested that phyllites and schists weather recessively and limestones and dolomites are either poorly exposed or form low cliff escarpments. The snow slide chute, in which hole 94-2 was located, has a previously trenched area between recessive weathered phyllite and cliff forming carbonates.

Detailed mapping of the Mastodon Mine and immediate mine area has been conducted by W.H. White (1950) and J.T. Fyles (1959) for the B.C. Department of Mines. Mineralization was mainly found near the western side of a lenticular mass of limestone and dolomite which extends for about 3 miles (5 km) from La Forme Creek to Carnes Creek. The carbonate lens is enclosed by dark grey and less commonly green phyllites (Fyles, 1959).

Structure provides the main control for mineralization with foliation or banding recognized but bedding rarely identified. Foliation in the Mastodon Mine area strikes northwest and dips 20 to 70 degrees easterly and averages about 45 degrees easterly. In the area of the Lead King showing, the foliation strikes nearly east-west and dips gently to the north. A number of shear zones on the property have been referred to as strike faults. Shear zones are spatially related to known showings, but good ground preparation makes for difficult drilling.

MINERALIZATION

Mineralization, at the Mastodon Mine, consists mainly of replacements of limestone, dolomite and to lesser degree phyllite by sphalerite. Sphalerite is reported by Fyles (1959) to range in color from light yellowish-brown to dark brown with lighter colored sphalerite occurring mainly in limestone and dolomite and dark colored sphalerite found

mainly in phyllite and dark-colored limestone and dolomite. Galena and tetrahedrite are also ore minerals and cadmium was a by-product of previous production. Pyrite is notably absent but has been reported as an accessory mineral in some phyllites. Barite and fluorite have been reported from the "north showing" but have not been reported from the Mastodon Mine area. Fyles (1959) identified tourmaline in thin sections of phyllite.

Mineralization in DDH 94-1 is primarily associated with quartzites and includes pyrrhotite with traces of pyrite and chalcopyrite. The hole contained a maximum of 363 ppm copper from 7 to 10 meters. Weakly anomalous values of 30 ppm arsenic and 21 ppb gold were also obtained from hole 94-1. Hole DDH 94-2 is essentially unmineralized with rare hematite pseudomorphing 1.0 mm pyrite cubes along fractures. Minor manganese oxide occurs along open fracture surfaces.

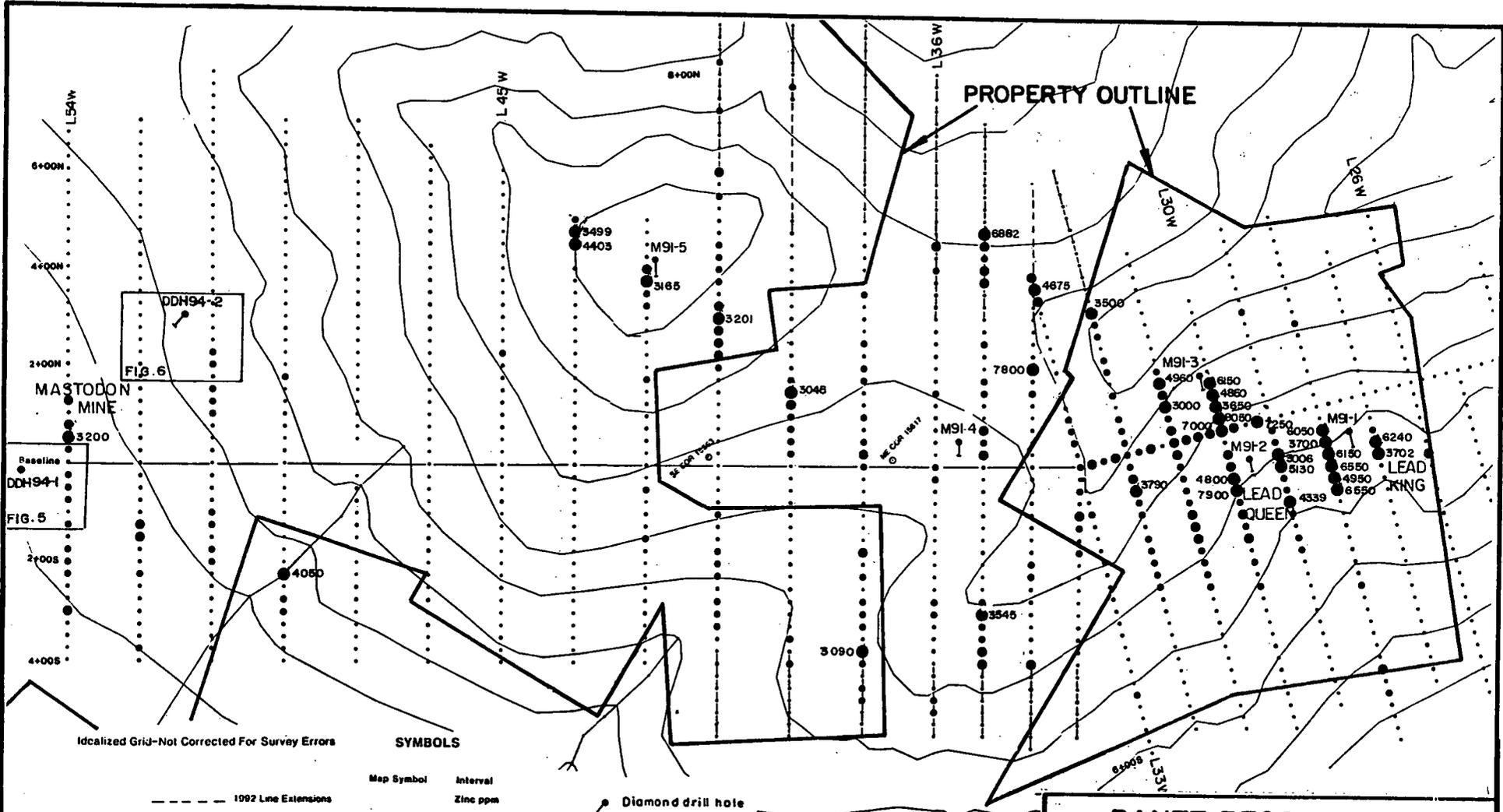
1994 DRILL PROGRAM

Two diamond drill holes were completed between June 6 and June 13, 1994 by Advanced Drilling Ltd. of Surrey, B.C. A Bell 206 portable Longyear Hydracore 28 dill which drills BTW (42 mm) core was employed to drill two 398 foot (121.31 meter) holes totalling 796 feet (242.6 meters). Pertinent drill hole data is summarized in Table 2 with drill hole locations shown on Figures 4 to 6. Certificates of analyses are presented in Appendix A with core logs by project geologist Paul S. Roberts, B.Sc., P.Geo. presented in Appendix B. A cost statement for the drill program is presented in Appendix C.

Core recoveries were good for most of DDH 94-1, and good for the upper half of DDH 94-2, but poor for the lower half of hole 94-2. Twenty three samples were taken from the upper portion of DDH 94-1, mostly as 3m long samples. All sample locations are noted in the core logs and also flagged and labelled in the core boxes. Only one 0.5 meter sample was collected between 90.87 and 91.37 meters in DDH 94-2. All core was logged, photographed and stacked for storage near the site of DDH 94-1 (see Fig. 5).

DDH 94-1, a vertical hole, was drilled between June 8th and 10th, 1994. The hole was drilled at an elevation of about 5100 feet at 1990 grid coordinates L55+00W 0+20S and consisted mainly of strongly foliated Lardeau Group(?) schists composed of chlorite, carbonate, quartz, epidote, biotite, and siderite. The core is colour-banded 60-70 degrees to the core axis, in greens, greys, and yellows, but true bedding is not evident. Carbonate rich zones may represent sheared dirty limestone. Weak secondary pink garnet alteration occurs from approximately 26 meters to 31

CHONG



PROPERTY OUTLINE

MASTODON MINE

DDH94-2
FIG. 6

Baseline
DDH94-1
FIG. 5

Idealized Grid-Not Corrected For Survey Errors

SYMBOLS

--- 1992 Line Extensions

Contour Interval 250 Feet

Map Symbol	Interval Zinc ppm
•	0-499
•	500-999
•	1000-1999
•	2000-3000
•	>3000

• Diamond drill hole



AFTER TECK CORP., 11/92

BANFF RESOURCES INC.

MASTODON PROPERTY

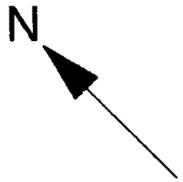
SOIL GEOCHEMISTRY- ZINC

N.T.S. 82M-1E, BE REVELSTOKE M.D., B.C.

0 300 600 METRES

P.A. CHRISTOPHER & ASSOCIATES INC.

SCALE AS SHOWN	JULY 1994	FIGURE 4
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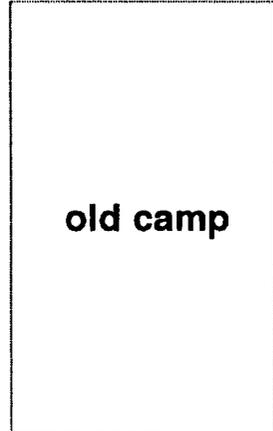
BANFF RESOURCES INC.
Mastodon Property

JULY 1994

DDH - 94 - 1 core
DDH - 94 - 2 core

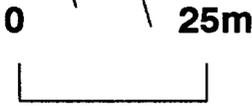


DDH - 94 - 1
vertical hole
depth 121.39 m
elevation 5100 ft.

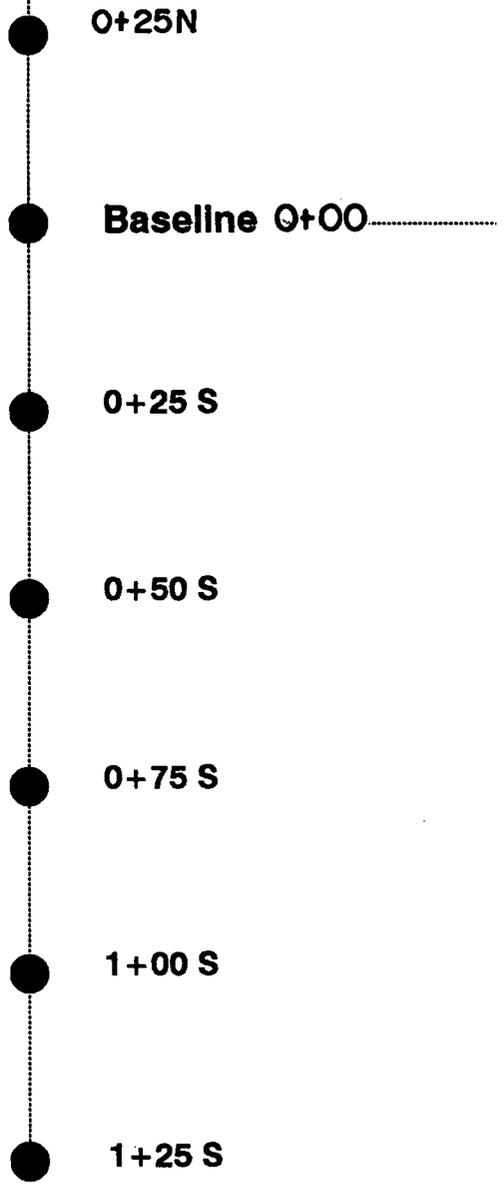


old camp

overgrown access road



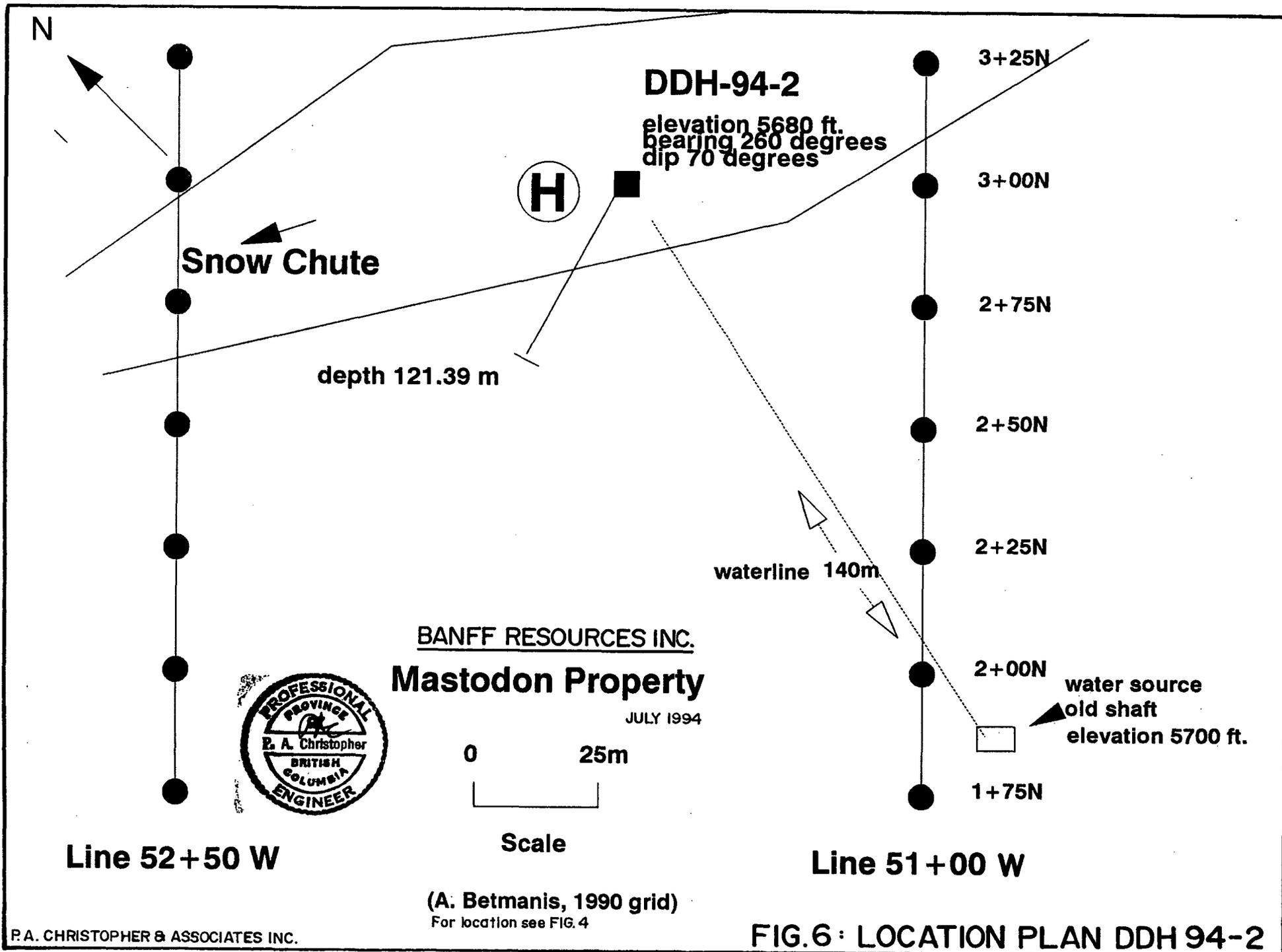
Scale



(A. Betmanis, 1990 grid)
For location see FIG. 4

Line 54+00 W

**FIG. 5: LOCATION PLAN DDH 94 - 1
and CORE STORAGE**



meters. The garnet bearing zone is in the footwall to a 20 centimeter wide graphitic fault zone.

Mineralization in DDH 94-1 is primarily associated with quartzites and consists of pyrrhotite with traces of pyrite and chalcopyrite. Similar mineralization is reported to occur at the J and L deposit situated along strike to the north. The following table summarizes samples taken from DDH-94-1 by project geologist Paul Roberts:

<u>Sample #'s</u>	<u>Interval</u>	<u>Interval Width</u>	<u>Comments</u>
138001-015	7.0-48.0m.	41.0m	Mostly as 3.0m long samples
138016-020	54.29-64.45m.	10.16m	Cal, bio, ep. schist, silicified with tr. Po, Cpy
138021	80.99-82.99m	2.0m	@ 81.70m, 2.0cm, mass. Po tr. Cpy.
138022-023	86.0-91.9	2.1m	Phyll/schist local sil. tr. Po. Cpy

=====
The samples contained maximum values of 363ppm copper, 49ppm lead, 118ppm zinc, 30ppm arsenic and 21ppb gold. The maximum gold, arsenic and copper values are weakly anomalous but no anomalous lead or zinc values were detected.

DDH-94-2, drilled at -70 degrees at a bearing of 260 degrees (Figure 6), was started on June 11th and finished June 13th, 1994. The hole was drilled at an elevation of about 5680 feet at grid coordinates L51+60W 3+00N. Various carbonate rock units were recognized: 1. Massive fine-grained white dolomite, usually highly fractured with early fractures partially healed with calcite and siderite occurring as disseminations or as 1-2 cm massive clots; 2. Grey, banded dolomite, slightly darker in color than (1), and banded on a 0.5-2.0 cm scale. This unit is also blue-grey in color with increased carbonaceous material. Fractures may be healed with calcite and have bleached selvages; 3. Grey banded limestone, similar to (2) but calcite is the dominant rock mineral.

Core recovery in the upper 52.0m of dolomite was good but both dolomite and limestone from 52.0m. to 121.39m., was badly fractured and had poor recovery. Two 5 foot sections had no core recovery with a muddy fault at 92.42m. located next to the upper lost interval.

Rarely, along fractures, hematite pseudomorphs 1.0mm pyrite cubes and minor manganese oxide occurs along open fracture surfaces. No other mineralization was recognized. Sample 138024 from 90.87-91.37m was collected to test for

secondary zinc mineralization but contained only 78 ppm zinc and 104 ppm lead. No other intervals were considered worthy of analysis.

CONCLUSIONS AND RECOMMENDATIONS

The Stage 1 diamond drilling program recommended by the writer (Christopher, 1993) for the Mastodon Property has been completed with a 398 foot diamond drill hole used to test a geochemical anomaly south of the Mastodon Mine working and a second 398 foot diamond drill hole used to test the favorable contact between the Mastodon Mine workings and the "North Showing". The low zinc and lead values obtained from DDH 94-1 suggest that the anomaly may have been transported down slope from the old mine workings. Hole 94-2 did not intersect significant mineralization but probably didn't cross the favorable stratigraphic contact between carbonates (Badshot Formation) and schists (Lardeau Group).

The writer recommended a success contingent staged exploration program with a stage 2 drill program contingent on the success of stage 1. The stage 1 drill results do not justify the funding of a stage 2 drill program by Banff Resources Inc.

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G.S.C. Paper 64-32.

White, W.H., 1950 Mastodon. in MAR 1950, pp. A159-A166.

CERTIFICATE

I, Peter A. Christopher, with business address at 3707 West 34th Avenue, Vancouver, British Columbia, do hereby certify that:

1) I am a consulting geological engineer registered with the Association of Professional Engineers of British Columbia since 1976.

2) I am a Fellow of the Geological Association of Canada and a member of the Society of Economic Geologists.

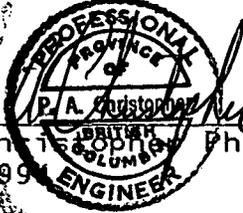
3) I hold a B.Sc. (1966) from the State University of New York at Fredonia, a M.. (1968) from Dartmouth College and a Ph.D. (1973) from the University of British Columbia.

4) I have been practising my profession as a Geologist for over 25 years.

5) have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the property or securities of Banff Resources Ltd.

6) I have based this report on all available geological data on the property; upon personal examinations of the property on May 30, 1994 and from June 5, 1994 to June 8, 1994; and upon the drill results of the 1994 drill program conducted between June 5, 1994 and June 15, 1994..

7) I consent to the use of the report by Banff Resources Ltd for any Filing Statement and by Banff Resources Ltd and Teck Corporation for assessment filing.

 
Peter A. Christopher Ph.D., P.Eng.
July 29, 1994

APPENDIX A

CERTIFICATE OF ANALYSES



GEOCHEMICAL ANALYSIS CERTIFICATE



Peter A. Christopher File # 94-1715

3707 W. 34th Ave, Vancouver BC V6N 2C9 Submitted by: Paul Roberts

SAMPLE#	Mo 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	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
E 138001	1	363	33	118	.2	75	31	979	6.91	17	<5	<2	5	142	<.2	<2	<2	199	5.32	.038	8	132	4.52	36	.03	<2	4.00	.01	.08	<1	15
E 138002	2	159	45	109	.8	45	20	904	5.35	14	<5	<2	13	22	<.2	3	<2	19	.67	.042	32	30	1.27	70	.04	<2	2.42	.01	.21	<1	21
E 138003	1	42	7	86	<.1	39	15	791	4.55	<2	<5	<2	14	22	.2	<2	<2	15	.71	.030	43	25	1.15	40	.02	<2	1.86	.01	.18	<1	8
E 138004	<1	103	28	87	.3	32	13	1429	3.88	6	<5	<2	9	228	.6	<2	<2	16	11.03	.029	25	28	1.80	27	.01	<2	1.64	.01	.15	<1	13
E 138005	1	67	33	97	.5	39	19	921	4.84	19	<5	<2	12	65	<.2	<2	<2	16	1.91	.040	33	26	1.23	47	.03	<2	2.05	.01	.18	<1	8
E 138006	3	33	25	87	.2	38	10	576	3.36	3	<5	<2	8	614	.5	<2	<2	16	13.56	.035	13	20	1.42	52	<.01	<2	1.07	<.01	.16	<1	9
E 138007	1	103	4	66	<.1	16	4	1440	4.55	<2	<5	<2	12	56	.2	<2	<2	15	2.17	.025	16	14	1.65	74	.02	<2	2.16	<.01	.17	<1	7
E 138008	1	45	27	63	.4	29	9	1718	3.92	12	<5	<2	12	67	.3	<2	<2	13	2.50	.030	32	20	1.99	63	.03	<2	2.22	<.01	.19	<1	6
E 138009	1	51	5	57	<.1	53	20	1378	5.33	28	<5	<2	5	86	.9	<2	<2	93	4.75	.024	6	121	3.03	53	.07	<2	2.94	.01	.12	1	5
E 138010	1	251	19	53	.2	67	22	1267	7.49	17	<5	<2	5	68	<.2	<2	<2	106	4.41	.105	6	100	2.68	125	.09	<2	3.02	<.01	.41	<1	7
E 138011	<1	85	13	66	.2	101	31	1145	5.99	30	<5	<2	<2	122	.3	<2	<2	161	6.68	.023	<2	205	5.27	28	.09	4	3.90	.01	.05	<1	5
E 138012	1	34	15	76	.1	97	30	1268	6.69	12	<5	<2	<2	125	.9	<2	<2	137	7.53	.023	2	177	4.86	303	.06	<2	3.56	.01	.33	<1	8
E 138013	1	73	13	45	.3	83	24	798	4.64	7	<5	<2	<2	67	<.2	<2	<2	98	5.66	.016	<2	183	3.95	124	.17	<2	3.00	.01	.20	<1	6
E 138014	<1	42	17	62	.2	110	26	703	6.02	7	<5	<2	<2	45	.9	<2	<2	136	3.72	.016	<2	242	4.50	895	.24	<2	3.99	.02	1.72	<1	7
E 138015	<1	97	6	66	.1	80	29	1016	5.75	3	<5	<2	<2	60	.6	<2	<2	129	5.54	.026	<2	164	3.71	460	.19	<2	3.17	.01	.45	<1	3
RE E 138015	<1	102	10	63	<.1	82	32	1021	5.81	2	<5	<2	<2	61	<.2	<2	<2	130	5.55	.028	<2	165	3.75	483	.19	<2	3.23	.01	.46	<1	3
E 138016	<1	84	14	46	.3	80	27	1098	4.72	2	<5	<2	<2	83	.8	<2	<2	88	7.61	.022	<2	139	2.63	193	.28	<2	2.38	.02	1.86	<1	2
E 138017	<1	45	8	9	<.1	37	7	988	1.36	<2	<5	<2	<2	120	<.2	<2	<2	27	11.53	.010	<2	53	.80	140	.13	<2	.61	.02	1.10	2	2
E 138018	<1	93	12	58	.1	86	25	1078	5.29	<2	<5	<2	<2	59	.7	<2	<2	113	6.03	.022	<2	168	3.78	841	.23	<2	3.14	.01	.68	<1	4
E 138019	<1	279	49	18	.3	68	32	1539	4.28	<2	<5	<2	<2	130	.4	<2	<2	54	14.16	.016	<2	78	1.33	49	.16	<2	1.06	.01	.63	<1	2
E 138020	1	84	6	56	.1	64	28	1294	5.53	6	<5	<2	<2	86	.3	<2	<2	141	8.85	.030	<2	133	3.66	448	.19	<2	2.91	.01	.49	<1	3
E 138021	1	132	8	43	.3	54	34	780	5.49	4	<5	<2	4	162	1.1	<2	<2	53	6.36	.036	13	41	1.25	48	.04	2	1.29	.01	.20	<1	3
E 138022	1	108	18	55	.2	55	22	1036	4.67	<2	<5	<2	2	100	.6	<2	2	54	7.05	.028	2	59	2.17	281	.07	<2	1.98	.01	.12	<1	3
E 138023	2	302	8	23	.2	69	38	513	5.08	<2	<5	<2	<2	40	.2	<2	<2	31	3.39	.039	<2	27	.73	33	.07	<2	.89	.01	.13	2	2
E 138024	<1	18	104	78	.1	<1	<1	150	.34	9	<5	<2	<2	114	1.5	5	<2	<2	39.74	.025	7	2	.11	23	<.01	<2	.08	<.01	.04	1	2
STANDARD C/AU-R	19	58	41	128	6.7	68	30	1043	3.96	43	17	7	34	50	16.9	15	22	60	.50	.090	42	55	.90	185	.08	33	1.88	.06	.15	11	480

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. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: CORE AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUN 17 1994

DATE REPORT MAILED: *June 22/94*

SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

DRILL HOLE LOGS

PREPARED BY

PAUL S. ROBERTS B.SC., P.GEO.

* Note change of scale
from P 1

LITHOLOGY, ALTERATION, MISC.	Depth M	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL						BOX	
				Run	%	Sample	Interval to	width	Cu ppm	Pb ppm	Zn ppm		Ag ppm
17.43-19.10 Cal, chl, Ser schist (Ca 70% chl 20% Ser 10%) -Calcite grains 1mm with discont masses of chl/ser @ 18.88 and 18.97; 1cm blue-grey pure cal bands with 1% py	17.5		occ. trace minute sulph. flecks.	17.69	100	138004	16						
							↓						
	20		@ 18.88 & 18.97; 1% P ₉ py in bluish 1cm band	18.21	100	138005	19	3.0	67	33	97	.5	
19.10-20.84 Chl, Qtz, Ser, cal Schist Same as 10.0-17.43 (with low cal)				20.74									
20.84-21.0 Faulted graphite schist Upper contact sharp, chaotic swirls lower contact sharp, parallel foliation - weakly calcified	22.5	A A A	within fault; py smears parallel and X-cut folia trend.	22.27	98	138006	21	3.0	33	25	87	.2	(3)
21.0-21.68 chl, cal, schist			22.11-23.07 trace py in limestone schist.		99								
21.68-22.11 chl, graphite, cal, Qtz schist				23.79									
22.11-23.07 Blue-grey limy schist cal-100% 10% chl					98	138007	24	3.0	103	4	66	<.1	23.79
23.07-23.79 Chl, Qtz, cal, Ser schist	25	A A A	barren fault	25.31	100								
23.79-24.00 GRAPHITIC FAULT minor Qtz, chl													
24.0-30.78 Chl, cal, Qtz, Ser schist Same as above units with more cal than quartz. Cal Vnlets 1mm occasionally X-cut (1 per cm) - locally crenulated at top increasing down to 30.2 then not as apparent, foliation flattens somewhat	27.5		24.0 - minor Pb with traces of CPY @ 25.9m - (Calc) Bleb. - from 25.9 to 30.78 0.5-1.0 x 0.5cm blebs in crenulated schist. average 1 small bleb per 5cm - Fresh No apparent oxidation	26.84	100	138008	27	3.0	45	27	63	.4	(4)
				28.37	100								28.86
30.07-30.12 QUARTZITE - vn? bed?	30			29.89		138009	30	*	33.2	51	5	57	<.1
30.78-34.6 Chl, Qtz, Ser, cal schist - Same as unit 19.10-20.84 - slightly pale green than rock seen 24.0-30.78.			30.78-31.36 small garnet blebs .5x.5cm ave. 1 per 3cm	31.42	100								(5)
* 33.20-33.70 2% biotite / Pyrophyllite Speckled to concentrated in foliation planes - with cpy in trace quantity	32.5		33.20-33.70 2% Pb/biotite speckled with tr Cpy (Pb → phlogg?) Alteration?	32.94		138010	33.20	*	0.5	251	19	53	.2
34.6-41.88 Chl, Qtz, Cal, Ser Schist @ 34.6 several 1-2mm cal. Vnlets X-cut foliation; cal increasing gradually at expense of both chl and Qtz, still tr. biotite	35			34.47	100	138011	33-70	2.3	85	13	66	.2	1-76 1 DDH:

DIAMOND DRILL HOLE LOG

TECK CORPORATION



LEGEND	
_____	_____
_____	_____
_____	_____
_____	_____

SURVEY

Depth	Bearing	Inclination
_____	_____	_____
_____	_____	_____
_____	_____	_____

Property	MASTODON		Hole No.	DDH-94-2
Location	SNOW CHUTE BETWEEN OLD MINE + NORTH SHOW		Bearing at collar	200°
			Inclination at collar	70°
Coord. - Collar N	A 3+00N		Length	398 (121.39 m)
E	L 51+60W		Core Size	BTM
Elev. - Collar	2 5680' (1731m)		Date Started	June 11/94
Date Started	June 11/94		Date Completed	June 13/94 (early a.m.)
Date Completed	June 13/94 (early a.m.)		Logged By	Paul Roberts

LITHOLOGY, ALTERATION, MISC.	Depth	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL				BOX
				Run	%	Sample	Interval to	width		
Overburden to 1.25M.	0									
1.25-11.70 MASSIVE WHITE DOLOMITE massive very fine-grained dolomite. No banding, foliation evident. Unit is hard, brittle and well fractured with late salmon-coloured soft carbonate precipitate along open fractures. Early healed fractures common at all orientations - (May be a primary dolomite rather than dolomitized limestone?)	1.25		Manganese - pyrolusite? common as small dendritic blebs on some late-partially healed (i.e. tight) fracture surfaces	1.25	44%					
3.88-3.97 - 10% siderite along subparallel fract. planes - 80° to C.A.	2.5			2.75	94					
	5			3.97	93					
	7.5			4.58	71					
	10			5.49	59					①
	12.5			7.02	83					7.02
				8.52	82					②
				10.07	82					11.43
11.70-16.82 Banded Grey Dolomite -essentially identical in all respects to above unit but weakly banded with various greys on 0.5-2.0 cm scale. Well fractured in at least 2-3 generations				11.59	73					DDH: 94-2

LITHOLOGY, ALTERATION, MISC.	Depth	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL					BOX
				Run	%	Sample	Interval to	width			
- throughout unit - crackle by likely due to rock volume reduction associated with dolomitic alteration. Any voids resulting from this have been filled with secondary carbonate xllization	30										2382
	32.5			31.42	100						6
				32.94	100						33.35
34.31-40.57				34.47	88						
<u>Blue-Grey Banded Dolomite</u>	35			35.99	96						7
Very fine-grained to aphanitic distinctly banded unit on a scale 2-30mm from 35-65° C.A. ; fractured and locally crackle brecciated and rehealed. At upper contact, some fractures have 1-2mm pale grey selvages similar in colour and appearance to upper units. Minor orange carbonate and sericite along open fractures	37.5			37.52	99						
				39.04	99						39.04
<u>Grey dolomite</u> - ck, bxd	40			40.57	89						8
40.57-41.22 - with ... completely bleached and rellized to pale grey-buff calcite - (more reactive to HCl)				42.09	75						
@ 41.22 - 15cm of vestige blue-grey dolomite.	42.5			43.62	95						
41.37-42.29 - bleached calcite unit.				45.14	89						
@ 42.29 <u>FAULT BRECCIA</u> - 20-25 cm missing core.			No evidence of mineralization in breccias.	46.67	98						
43.22-44.64 <u>Blue-Grey Dol. Breccia</u> in late m.g. calcite matrix											
44.64-52.53 <u>Blue-Grey Dol.</u> - fractured (10cm)	45										
@ 44.64 late fracture with 1-2mm xls of hematite pseudomorphing pyrite cubes also soft white encrustation gypsum? also minor pyrolusite			hematite pseudomorph of py with gypsum?								
	47.5										47.57 94-2 DDH:

LITHOLOGY, ALTERATION, MISC.	Depth	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL				BOX
				Run	%	Sample	Interval to	width		
@ 47.5 10 cm pale grey coarse x-lite dolomite and possible minor barite (rock is somewhat heavy and some xls show curvature along c-axis)	47.5		possible minor barite	48.67	98					9
				48.19	100					
47.5-51.0 - appears to be coarse breccia - weakly banded medium grey angular fragments float in or are cut by sparry calcite/dolomite - these are often folded or deformed fracture fillings, but late sparry calcite also occurs along [65° CA.] fractures.	50			49.72	100					50.02
local finely brd zones 1-4 cm wide occasionally - may be healed or recent and friable.				51.24	100					10
52.53-54.09 Grey banded limestone	57.5		@ 54.09 - hole 10 cm?	52.77	87					
fg - calcite - laminated on 1-2 mm scale greys - partially altered to buff colour in last 40cm of unit - minor sericitic	55		@ 54.29 - coarse ground-up calcite - hole?	54.29	49					
54.09-54.29 - <u>foliated banded limestone</u>			54.09-54.29 - No evidence of x-cutting, veining or mineralization - Qtz crystals line walls of what were once discrete calcite bands, with later coarse-sparry calcite filling vugs.	55.82	49					55.92
- as like 52.53-54.09 quartz sparry vugs in vugs, along with pervasive sericitic	57.5			57.34	52					11
54.29-55.40 - ankeritic or sideritic alteration weak, followed by later cal vnlts. 1-2mm				58.87	99					
54.29 - <u>Blue-grey dolomite</u>	60			60.39	57					
as above - weakly banded / foliated 60° to CA - late x-cutting cal vnlts. core v broken - poor recovery. local minor sericite, chl and buff coloured alteration fronts. Occ. str fractured along folia planes with rounded vugs				61.92	61					
	62.5			63.44	63					
				64.97						

DDH: 94-2

LITHOLOGY, ALTERATION, MISC.	Depth	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL				BOX
				Run	%	Sample	Interval to	width		
From 60.29 - 66.00 - core very broken with poor recovery - a factor of intense fracturing and minor faulting. some fracture surfaces are filled with healed br. calcite. trace pt. minor Fe-carbonate with fragments of chl-ser - rich material. later fract. have pure white calcite.	65				72					61.72
				66.49	94					66.73
Banding becomes more pronounced about 66 m (arbitrary) 60-70° E.A. 1-2 mm scale, occasional 1-2 cm white calcite bands (like lenses). rock still displaying multiple fracturing. - chl, sericite still evident (5%)	67.5			68.02	82					68.02
	70		at 70 m begin to see traces pyrite. 5 mm cubes.	68.54	100					71.50
72-75.64 - buff colored 1-2mm alt. halos common around some late fract. - locally see 2-colours calcite - after frage supported by white indicating mult. - episodic brecciation/fracture - filling.	72.5			71.07	74					71.50
	75			72.59	79					75.64
75.64 - 90.89 Grey banded limestone finely laminated 1-3mm - various greys. - overall very monotonous, very regular banding orientation 55° CA. rare carbonate "eyes" to 1cm locally bend folia	77.5			74.12	89					77.5
	80		- calcite veins, veins 1-2 m 10° CA have cubic Fe-carbonate (2-3%) spots - likely after pyrite - late stage - straight ss, unf. formed fracture - fillings.	75.64	77					81.68
				77.17	98					81.68
				78.69	98					81.68
				80.22	100					81.68
			@ 81.68 4 cm band calcite, minor sericite, trace hematite pseudomorphing pyrite	81.74	100					81.74

DDH: 94-2

LITHOLOGY, ALTERATION, MISC.	Depth 100	GRAPHIC LOG	MINERALIZATION	RECOVERY		ANALYTICAL				BOX	
				Run	%	Sample	Interval to	width			
				100.04	77						
				101.57	44						
	102.5			103.09	42						
				104.62	42						
	105			106.74	68						
				107.67	86						
	107.50-121.39			109.19	38						
107.50-121.39 Pale grey Dolomite - has "cherty" appearance - - aphanitic, no evidence of banding - slightly more competent than above units. Most common fracture trend 10° to C.A.; these occasionally have minor amounts of sericite. Fract. density: 2-3 per 1 cm. - slightly visible pale calcite fracture selvages visible and coalesce locally making rock appear splotchy with grey patches	107.5			110.72	26						
	110			112.24	66						
@ 113 weak banding / foliation evident 70° to C.A.				113.77	44						
				115.29	63						
- Core very crumbly to 119.50m, then slightly less fractured to End of hole, but recovery dropped off.	115			116.82	63						
	117.3										

DDH:
94.2

APPENDIX C

COST STATEMENT

MOBILIZATION, PERMITTING & ESTABLISH CONTRACTS		\$ 2,000.00
FIELD PERSONNEL		
P.A. CHRISTOPHER 6 DAYS MAY 30/31; JUNE 5-8/94		2,700.00
PAUL S. ROBERTS 12 DAYS " ; JUNE 5-15/94		3,300.00
G. HAYNE 11 DAYS "		2,750.00
ROOM & BOARD 29 MAN DAYS @ \$60EA.		1,740.00
TRANSPORTATION		
4X4 TRUCKS 3,800KM @0.32/KM		1,216.00
HELICOPTER 19.9 HOURS		13,599.66
TOLLS		60.00
SHIPPING		80.40
BUS		36.65
TELEPHONE		63.15
GEOCHEMICAL CHARGES		369.60
RENTALS		
RADIOS 12 DAYS @ 20/DAY		240.00
CHAIN SAWS 18 SAW DAYS @ \$30/DAY		540.00
EXPENDABLES		397.50
REPORTING & DRAFTING		<u>2,500.00</u>
	Sub Total	31,592.96
GST 7%		2,211.51
Diamond Drilling (GST Included)		<u>30,217.98</u>
	Sub Total	\$ 64,022.45
Recording Cost		<u>540.00</u>
	Sub Total	\$ 64,562.45
Management @ 6%		3,873.75
GST on Management		<u>271.16</u>
	Total Program Cost	\$ 68,707.36
		=====




 Peter A. Christopher P. Eng.

Peter Christopher & Associates Inc.
GEOLOGICAL & EXPLORATION SERVICES
3707 West 34th Ave., Vancouver, B.C. V6N 2K9

Office/Res: 263-6152

Banff Resources Inc.
Suite 200-545 Clyde Avenue
West Vancouver, B.C. V7T 1C5

Dear Sirs:

I Peter A, Christopher, Ph.D., P.Eng., hereby consent to the use of my report dated July 29, 1994 on the Mastodon Property, Revelstoke Mining Division, British Columbia, in any Statement of Material Facts, filing statement or for filing assessment.

DATED, at Vancouver, British Columbia, this 29th day of July, 1994.



Peter A. Christopher, Ph.D., P.Eng.