

LOG NO: 0824	RD.
ACTION:	
FILE NO:	

ASSESSMENT REPORT ON COREY CLAIM GROUP
STEWART, BRITISH COLUMBIA
SKEENA MINING DIVISION
NTS 104B 8W
LATITUDE 56° 27'
LONGITUDE 103° 25'

BY

K.J. KONKIN, B.Sc.

FILMED

PREPARED FOR: BIGHORN DEVELOPMENT CORPORATION
#400, 255 - 17 Avenue S.W.
Calgary, Alberta
T2S 2T8

PREPARED BY: E.R. KRUCHKOWSKI CONSULTING LTD.
23 Templeside Bay N.E.
Calgary, Alberta
T1Y 3L6

CALGARY, ALBERTA
AUGUST, 1989

OUR FILE: 2COREYFEB89

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

18,996

TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY	1
INTRODUCTION	4
Location and Access	4
Physiography and Topography	4
Property Ownership	5
Personnel and Operations	6
Previous Work	7
GEOLOGY	10
Regional Geology	10
Local Geology	11
Economic Geology	13
GEOCHEMICAL SURVEYS	15
Rock Geochemistry	15
Silt Geochemistry	16
TRENCHING	17
DIAMOND DRILLING	18
CONCLUSIONS	21
RECOMMENDATIONS	23
STATEMENT OF EXPENDITURES	24
STATEMENT OF COSTS TO BE APPLIED TO CLAIM GROUPINGS . .	25
REFERENCES	
CERTIFICATE	

LIST OF FIGURES

Figure 1:	Location Map	after page 4
Figure 2:	Claim Map	after page 5
Figure 3:	Regional Geology	after page 10
Figure 4:	Corey Claims Rock and Silt Geochemical Sample Location Map - Sheet 1	back pocket
Figure 5:	Corey Claims Rock and Silt Geochemical Sample Location Map - Sheet 2	back pocket
Figure 6:	Corey Claims Rock and Silt Geochemical Sample Location Map - Sheet 3	back pocket
Figure 7:	Devils Club Creek Showing Trench #1	back pocket
Figure 8:	Devils Club Creek Showing Trench #2	back pocket
Figure 9:	Geology of Showing C-10	back pocket
Figure 10:	Geology of Showing C-25	after page 12
Figure 11:	Geology of Showing C-28	after page 12
Figure 12:	Geological Section of DDH-88-01	back pocket
Figure 13:	Geological Section of DDH-88-02 and DDH-88-03	back pocket
Figure 14:	Geological Section of DDH-88-04 and DDH-88-05	back pocket
Figure 15:	Geological Section of DDH-88-06	back pocket
Figure 16:	Assay section of DDH-88-01	back pocket
Figure 17:	Assay Section of DDH-88-02 and DDH-88-03	back pocket
Figure 18:	Assay Section of DDH-88-04 and DDH-88-05	back pocket
Figure 19:	Assay Section of DDH-88-06	back pocket

LIST OF APPENDICES

APPENDIX I	ANALYTICAL INFORMATION
APPENDIX II	GEOCHEMICAL ANALYSIS
APPENDIX III	STATISTICAL ANALYSIS
APPENDIX IV	SAMPLE DESCRIPTIONS
APPENDIX V	DIAMOND DRILL LOGS

SUMMARY

The Corey Claim Group, owned by Catear Resources Ltd. and optioned to Bighorn Development Corporation, is located approximately 70 km northwest Stewart, B.C. near Brucejack Lake at the mouth of Sulphurets Creek, a tributary of the Unuk River. The claims cover an area of volcanic tuffs, sandstones and conglomerates of the Unuk River Formation variably altered to sericite schists and intruded by a variety of plugs related to the Coast Range Batholith.

Approximately 11 km to the north of the Corey Claim Group boundary, lies a newly discovered gold occurrence jointly owned by Consolidated Stikine Silver and Calpine Resource Ltd. Due west and adjacent to the Corey Claims are the bonanza gold-silver discoveries at Brucejack Lake by both the Newcana Joint Venture and Catear Resources Ltd. The Newcana Joint Venture has announced the following results:

<u>ZONE</u>	<u>CATEGORY</u>	<u>TONS</u>	<u>AU</u> <u>OPT</u>	<u>AG</u> <u>OPT</u>
West	Proven	300,151	0.516	28.28
	Probable	324,500	0.496	12.67
	Inferred	<u>879,837</u>	<u>0.506</u>	<u>20.17</u>
Total West Zone		1,504,488	0.506	20.17
Shore Gossan Hill	Inferred	539,776	0.263	27.23
	Inferred	27,639	1.940	3.51

Catear conducted diamond drilling on its Goldwedge property within the Newcana block and has drill indicated and inferred 357,000 tons of 0.782 opt Au and 1.12 opt Ag.

The above Brucejack Lake gold-silver discoveries are structurally controlled, epithermal-mesothermal veins occurring in areas of syenodiorite intrusions and associated with areas of intense sericite (quartz-pyrite) alteration.

From June to September 1988, Bighorn Development Corporation conducted an exploration program consisting of rock geochemistry, prospecting, trenching and silt sampling on the Corey Claims using E.R. Kruchkowski Consulting Ltd. equipment and personnel. Rock samples were analyzed for gold and silver values. A total of 97 rock samples and 533 silt samples were collected. The program on the Corey 1-45 and Cumberland Claim Groups cost \$387,000. This cost includes assessment work completed on the Corey 10-45 claims. This assessment report deals primarily with the Corey 1-8 claims. The cost for the geochemical sampling program pertaining to the Corey 10-45 and Cumberland Claims is \$192,000, and the cost of \$194,980.23 is applied to the diamond drilling and geochemical program on the Corey 1-8 claims.

The geochemical program indicated anomalous gold and silver values in the rock and silt geochemical survey in several new areas and substantiated anomalous values encountered in the 1986 and 1987 work programs. Geochemical analysis returned values of up to 1.614 ounces per ton gold and 10.99 ounces per ton silver in rocks and 790 ppb gold and 8.9 ppm silver in stream silts. A total of 647.67 metres of BDBGM size diamond drilling was completed in six drill holes on the C-10 grid. Drilling indicated a highly faulted and sheared zone with narrow sections of anomalous gold up to 1000 ppb.

The 1987 program identified a long alteration zone consisting of a quartz + calcite injected sericite schist with abundant disseminated pyrite. The zone trends northwest for approximately 4 miles across the Corey Claims. Within this zone is the C-10 mineral showing; an area of sericite schist, pyrite and a weak quartz stockwork with associated sphalerite and chalcopryrite.

In addition, flat lying siderite, pyrite, sphalerite, galena and arsenopyrite veins, lenses, pods and stringers are found along the east edge of the above alteration zone. These veins contain native gold evident from a float boulder discovered below the veins.

The presence of favourable geology, geochemistry and gold discoveries on the adjacent ground to the east and north make the Corey Claims an excellent exploration area. An exploration program involving prospecting, geological mapping, trenching and drilling are recommended for the property. This program is estimated to cost \$1,000,000.

INTRODUCTION

From June to September 1988, Bighorn Development Corporation conducted a rock and silt geochemical survey and prospecting over the Corey Claims utilizing E.R. Kruchkowski Consulting Ltd. equipment and personnel.

This report was prepared on data accumulated during the 1988 field season as well as information from the Newcana Joint Venture and Catear Resources Ltd.'s activities to the east on the Goldwedge claim.

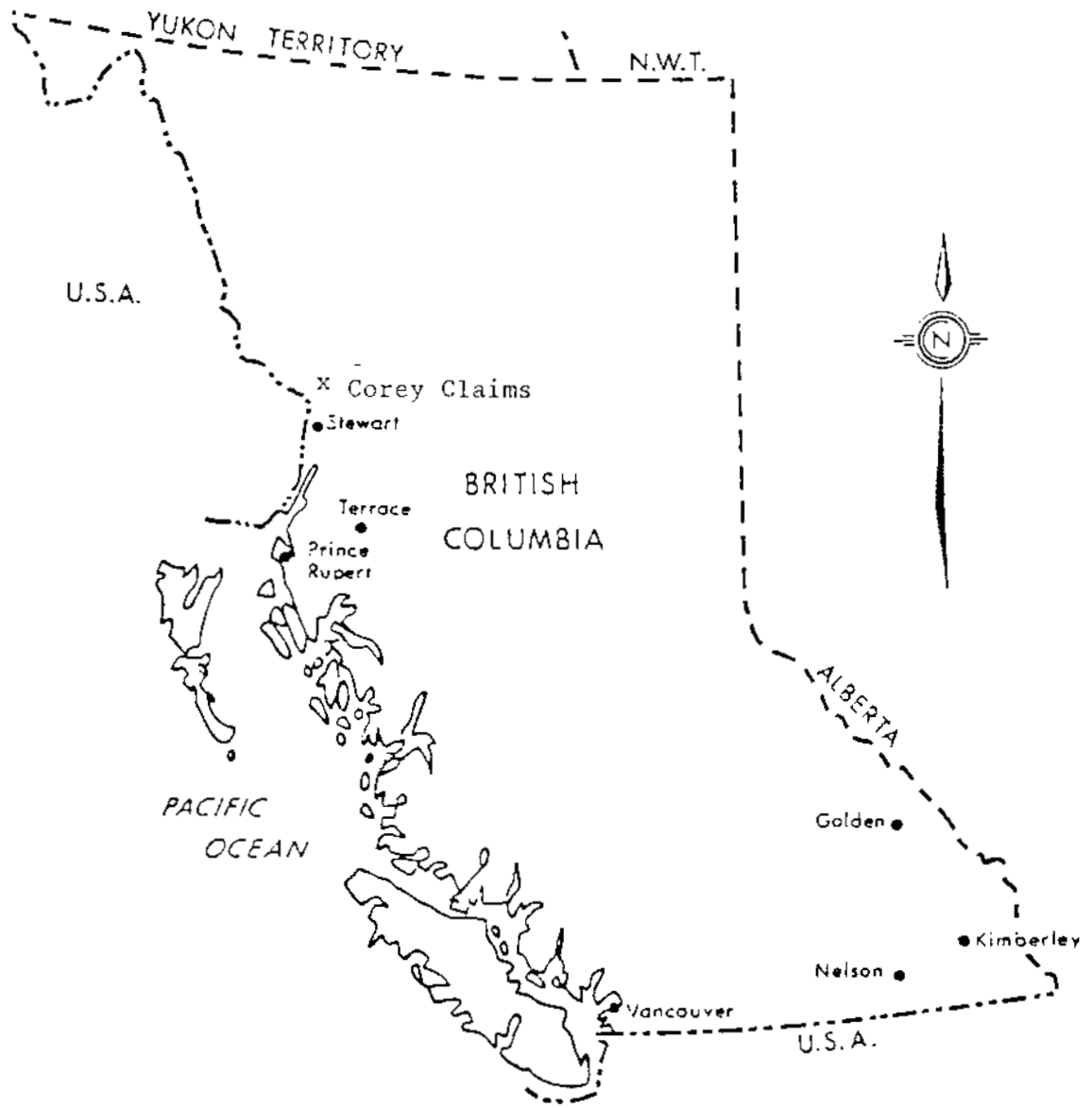
All analyses were performed by Loring Laboratories of Calgary, Alberta, and the camp was supported by helicopter service from Vancouver Island Helicopters stationed in Stewart and the Catear's Goldwedge Camp.

Location and Access

The property is located on Mount Madge, 16 km west of Brucejack Lake and approximately 70 km north-northwest of Stewart, B.C. The Mount Madge area is 56° 27' north latitude, 130° 25' west longitude on NTS sheet 104B/8 and 104B/9 West. Mobilization to the property is usually gained by helicopter service from the Tide Lake airstrip. From there, it is approximately a 20 minute trip into the Mount Madge area. The Catear camp, 19 km east, was used as a base for much of the materials being mobilized to the job site via Bell 206 Jet Ranger helicopters. Figure 1 shows the property location.

Physiography and Topography

The area of the Corey Claim Group encompasses steep mountain slopes typical of the Coast Range region of British Columbia. Ice caps and small glaciers occupy high mountain valleys, tributary to the main valleys.



100 0 100 200 300 400 km.

1: 10,000,000

BIGHORN DEVELOPMENT CORPORATION

PROPERTY
INDEX MAP

Figure #1

Elevations within the property range from 213 meters (700 feet) along Sulphurets Creek and South Unuk River to 2362 meters (7750 feet) on Unuk Finger Mountain.

Most of the ground is outcrop or talus cover with little vegetation cover. Permanent snow occupies depressions and gullies while small streams are numerous. Glaciers occupy the immediate slopes and valleys around Unuk Finger Mountain. Lower elevations are densely timbered with spruce. Thick undergrowths of devils club and alders are common along the lower valley floors.

Property Ownership

The property consists of 630 units within 42 separate claim blocks divided into eight groupings. Five reverted Crown grants are also contained within the grouping. (Figure 2)

<u>NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>DATE OF RECORDING</u>
Corey 1	5405	20	June 25, 1986
Corey 2	5406	20	"
Corey 3	5407	20	"
Corey 4	5408	20	"
Corey 5	5409	20	"
Corey 6	5410	20	"
Corey 7	5411	20	"
Corey 8	5412	20	June 25, 1986
Corey 10	5875	12	February 11, 1987
Corey 11	5876	4	"
Corey 12	5877	4	"
Corey 14	5879	12	"
Corey 15	5880	16	"
Corey 16	5881	18	"
Corey 18	5883	20	"
Corey 19	5884	20	"
Corey 20	5885	16	"
Corey 21	5886	4	"
Corey 22	5887	4	"
Corey 23	5888	16	"
Corey 24	5889	16	"
Corey 25	5890	4	"
Corey 26	5891	4	"
Corey 27	5892	16	"
Corey 28	5893	16	February 11, 1987



REDUCED FROM
1:50000

BIGHORN DEVELOPMENT CORPORATION
COREY CLAIMS

CLAIM MAP

SKEENA MINING DIVISION NTS 104B/8 & 9

FIGURE 2

<u>NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>DATE OF RECORDING</u>
Corey 29	5894	8	February 11, 1987
Corey 30	5895	8	"
Corey 31	5896	16	"
Corey 32	5897	20	"
Corey 33	5898	20	"
Corey 34	5899	20	"
Corey 35	5900	20	"
Corey 36	5901	14	"
Corey 37	5902	14	"
Corey 38	5903	12	"
Corey 39	5904	12	"
Corey 40	5905	12	"
Corey 41	5906	12	"
Corey 42	5907	20	"
Corey 43	5908	20	"
Corey 44	5909	20	"
Corey 45	5910	20	February 11, 1987

Cumberland Group (reverted Crown grants)

Cumberland L265	5473	1	August 1, 1986
Silver Pine L266	5474	1	"
Middlesex L267	5475	1	"
Ziphis L268	5476	1	"
Ougma L269	5477	1	"

The Corey and Cumberland Group is jointly optioned by Bighorn Development Corporation (30%), Wydmar Development Corporation (30%), Brucejack Gold Ltd. (20%) and Catear Resources Ltd. (20%). All companies are located in Calgary, Alberta and trade on the Vancouver Stock Exchange with the exception of Brucejack Gold which is, at present, a private company.

Personnel and Operations

E.R. Kruchkowski Consulting Ltd. personnel involved with the 1988 exploration program between June and September were as follows:

K. Konkin	Project Geologist	34 days
B. Krutow	Project Geologist	50 days
D. Lund	Geologist Assistant	41 days

A. Heinrichs	Geological Assistant	13 days
T. Bonenfante	Geological Assistant	47 days
D. Funk	Geological Assistant	46 days
A. Reimer	Geological Assistant	44 days
A. Engstrom	Geological Assistant	29 days
T. McIndoe	Geological Assistant	27 days
J. Paquette	Geological Assistant	27 days
A. Hoffman	Geological Assistant	36 days
B. Heinrichs	Carpenter	8 days
C. Moehling	Apprentice Carpenter	6 days
S. Edwards	Geological Assistant	5 days
M. Brown	Camp Cook	8 days
J. Wyder	Exploration Manager	32 days
E. Kruchkowski	Senior Geologist	14 days
M. Jaeger	Geological Assistant	1 day

For the duration of the diamond drilling phase of the exploration program conducted on the Corey 1-8 claims, a camp cook was supplied by D.W. Coates Enterprises from July 16 - August 10.

Personnel involved in the project were accommodated in a wooden framed tent camp located on the Corey 32 claim block and at Catear's Goldwedge property. A Vancouver Island Bell 206 Jet Ranger was utilized for transportation to and from the project area. Supplies for the program were purchased in Stewart and Terrace, British Columbia.

Previous Work

The first discovery of minerals in the Unuk River area is credited to a prospector named O'Hara who is said to have come out of the Unuk River in 1893 with placer gold. A chronology of the precious metals exploration in the Mount Madge Unuk River area is as follows:

1898 - H.W. Ketchum staked an area situated on the Mount Madge ridge - slope to the south side of Sulphurets Creek about 2 miles from its mouth.

1900 - H.W. Ketchum sold his claims to the Unuk River Mining and Dredging Company who then carried out some development work, including driving two short adits. Attempts to transport machinery failed and operations ceased.

- 1932 - a prospecting expedition into the Ketchum Creek area, was undertaken by T.S. MacKay, A.H. Melville, and W.A. Prout representing a syndicate of Premier, British Columbia interests. This resulted in the discovery of a wide area of mineralization in which gold values occur.
- 1933 - further exploration of these discoveries was undertaken by
1935 the MacKay Syndicate and by the Premier Gold Mining Company.
- 1935 - a representative sample taken from a dump of about 15 tons at the portal of the Mount Madge adit assayed: gold 0.26 oz/ton; silver 2.4 oz/ton; copper 0.3 percent; lead 3 percent; zinc 10 percent.
- 1980 - Dupont undertook regional geochemical work in the Mount Madge area. Geochemical samples taken from the area draining west were anomalous in gold.
- 1980 - E & B Explorations Ltd. conducted some prospecting on its Sulphurets claims. Nothing of value was found.
- 1983 - the E & B Explorations Ltd. claims were optioned out to Teuton Resources Corp.
- 1986 - Teuton Resources Corp. allowed these claims to lapse. The Issuer in joint venture with a private Calgary company staked 8 claims totalling 9,880 acres (4,000 hectares) in the Mount Madge area and 10 claims totalling 12,350 acres (5,000 hectares) in the Treaty Creek area.

In the area to the south of Mount Madge, near the South Unuk River, Silver Princess Resources Inc. and Magna Ventures Ltd. commenced a drilling program. Results document two significant intersections: One drill hole intersects 17.7 feet of 0.728 oz/ton gold and another intersects 14.6 feet of 0.701 oz/ton gold. As a result of this drilling, a very strong structure over a strike length of 1,200 feet and to depths of 440 feet was identified. Based on these excellent results, Silver Princess and Magna Ventures announced an underground program.

- 1986 - Catear Resources Ltd. undertook a silt sampling, prospecting and rock geochemistry program on the Mount Madge project area. At this time Gordon Sinden located the area of mineralization now known as the C-10.
- 1987 - a program of silt sampling, prospecting, trenching and detailed rock geochemistry was conducted on the Corey Claims during June - August by E.R. Kruckowski personnel on behalf of Bighorn Development Corporation.

During this year, high silver values were reported on the

Cumberland Group Crown Grants. Diamond drilling on the Cumberland Group revealed anomalous gold and silver zones. The summer was high-lighted when Ken Konkin and Gordon Sinden discovered a siderite boulder bearing spectacular, coarse-grained, visible gold to the east of Mandy Glacier. The source was located but no more visible gold was found despite numerous gold assays well over one and two ounces per ton taken across the veins.

GEOLOGICAL SURVEYS

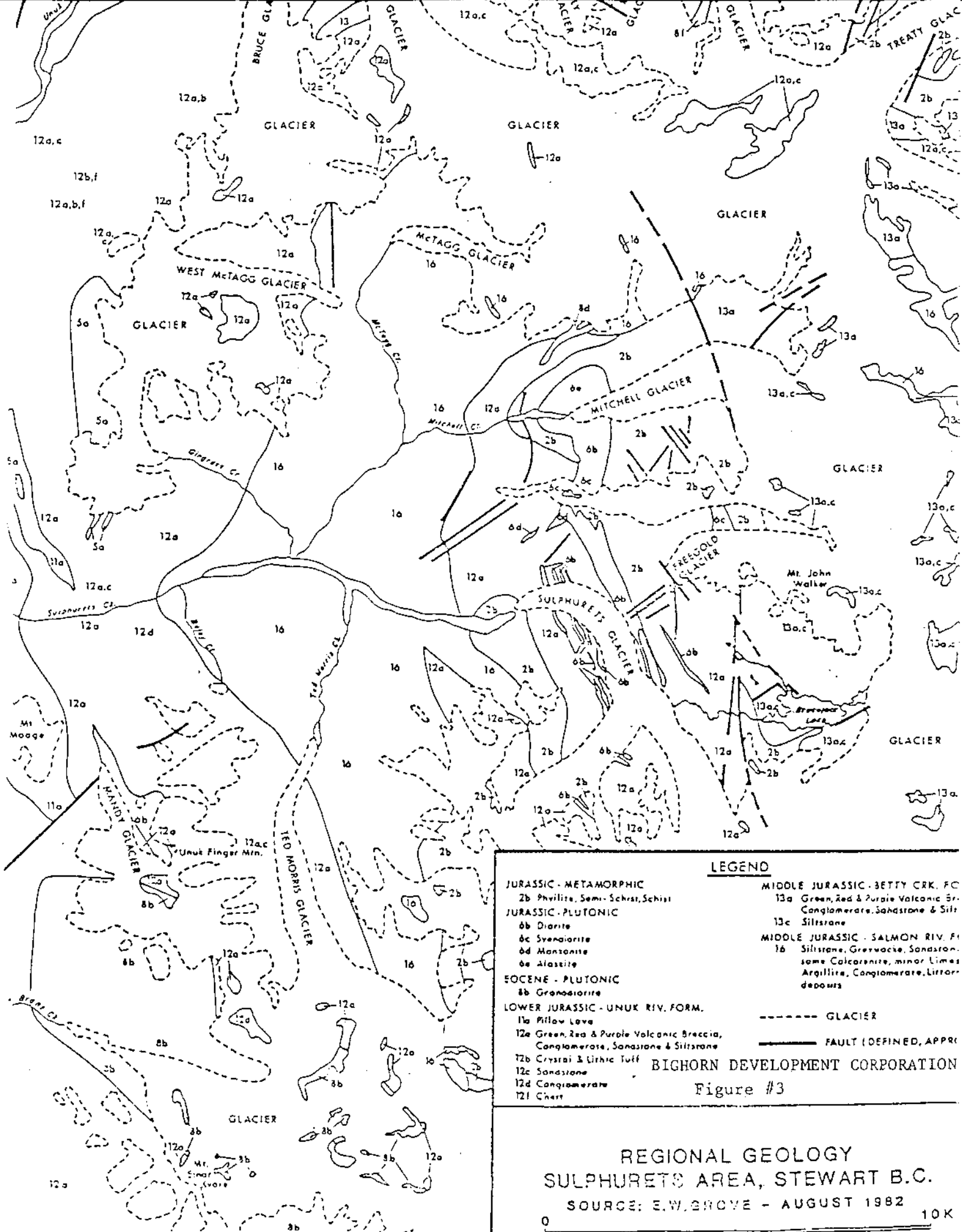
Regional Geology

The Corey Claims lie in the Stewart area along the eastern edge of the Coast Crystalline Complex and near the western boundary of the Bowser Basin. Rocks in the area belong to the Mesozoic Hazelton Group and have been intruded by plugs of both Cenozoic and Mesozoic age. (Figure 3)

At the base of the Hazelton Group is the Lower Jurassic marine (submergent) and non-marine (emergent) volcanoclastic Unuk River Formation. This is overlain at steep discordant angles by a second, lithologically very similar, Betty Creek Formation of Middle Jurassic age. The predominately volcanic Unuk River and Betty Creek Formations are both in turn overlain by Middle Jurassic and Upper Jurassic non-marine and marine sediments with minor volcanics of the Salmon River and Nass Formations.

The oldest rocks in the area belong to the Lower Jurassic Unuk River Formation which forms a north-northwesterly trending belt extending from Alice Arm to the Iskut River. It consists of green, red and purple volcanic breccia, volcanic conglomerate, sandstone and siltstone with minor crystal and lithic tuff, limestone, chert and coal. Also included in the sequence are pillow lavas and volcanic flows.

In the property area the Unuk River Formation is unconformably overlain by Lower Middle and Middle Jurassic rocks from the Betty Creek and Salmon River Formations, respectively. The Betty Creek Formation is another cycle of trough-filling submarine pillow lavas, broken pillow breccias, andesitic and basaltic flows, green, red, purple and black volcanic breccias, with self erosional conglomerate, sandstone and siltstone, and minor crystal and lithic tuffs, chert, limestone and lava. The overlying Salmon River Formation is a late to post volcanic episode of banded, predominantly dark coloured, siltstone, greywacke, sandstone, intercalated calcarenite, minor limestone, argillite, conglomerate, littoral deposits, volcanic sediments and minor flows.



LEGEND

- | | |
|---|---|
| JURASSIC - METAMORPHIC | MIDDLE JURASSIC - BETTY CRK. FC |
| 2b Phyllite, Semi-Schist, Schist | 13a Green, Red & Purple Volcanic Br. Conglomerate, Sandstone & Silt |
| JURASSIC - PLUTONIC | 13c Siltstone |
| 6b Diorite | MIDDLE JURASSIC - SALMON RIV. F. |
| 6c Syeniorite | 16 Siltstone, Greenwacke, Sandstone, some Calcarenite, minor Limestones, Argillite, Conglomerate, Littoral deposits |
| 6d Monzonite | |
| 6e Alasite | |
| EOCENE - PLUTONIC | |
| 8b Granodiorite | |
| LOWER JURASSIC - UNUK RIV. FORM. | |
| 11a Pillow Lava | |
| 12a Green, Red & Purple Volcanic Breccia, Conglomerate, Sandstone & Siltstone | |
| 12b Crystals & Lithic Tuff | |
| 12c Sandstone | |
| 12d Conglomerate | |
| 12i Chert | |
| | ----- GLACIER |
| | ———— FAULT (DEFINED, APPROXIMATE) |

BIGHORN DEVELOPMENT CORPORATION

Figure #3

**REGIONAL GEOLOGY
SULPHURETS AREA, STEWART B.C.**

SOURCE: E.W. GROVE - AUGUST 1982

According to E.W. Grove, the majority of the rocks from the Hazelton Group were derived from the erosion of andesitic volcanoes subsequently deposited as overlapping lenticular beds varying laterally in grain size from breccia to siltstone.

There are various intrusives in the area. The granodiorites of the Coast Plutonic Complex largely engulf the Mesozoic volcanic terrain to the west. East of these (in the property area), smaller intrusive plugs range from quartz monzonite to diorite including granite, granodiorite and feldspar porphyry, some are likely related late phase offshoots of the Coast plutonism, others are synvolcanic or tertiary.

Double plunging, northwesterly-trending synclinal folds of the Salmon River and underlying Betty Creek Formations dominate the structural setting of the area. These folds are locally disrupted by small east-overthrusts (Tippy Lake, Knipple Lake) on strikes parallel to the major fold axis, cross-axis steep wrench faults, selective tectonization of tuff units, and major northwest faults.

Local Geology

The Corey Claims are underlain by rocks of the Hazelton Group. Volcanic sediments, volcanic flows and sedimentary units of the Unuk River and Salmon River formations are encountered on the property. Field evidence supports and generally complies with maps by E.W. Groves entitled Geology of Unuk River-Salmon River-Anyox Area. The majority of the property overlies the Unuk River Formation. The Formation is composed of green, red and purple volcanic breccia, conglomerate, sandstone, siltstone, limestone and pillow lava. The limestone is confined to small lenses in the southwest section of the property. Pillow lava occurs over an area extending north from Mount Madge to John Peaks. An outcropping of "diorite" occurs within the pillow lava sequence near Mount Madge. A linear syenodiorite intrusive is centered on Unuk Finger Mountain, a thick south-easterly trending sequence of granodiorite related to the Coast Range Batholith from Unuk Finger Mountain to the Frankmackie Icefield.

Reconnaissance mapping by the field crew indicated that the area of the Corey 6 and 8 claims were underlain by green clastic volcanics variably altered to sericite and chlorite schists in a few locations. These schists are present along the east slopes of Mount Madge and along the lower west slopes of a ridge immediately east of Mount Madge. The schists are pale grey to green and contain abundant pyrite with local areas containing up to 30% quartz veinlets. These zones appear as bright yellow to dull orange gossan zones.

On the C-10, C-25 and C-28 rock geochemical grids, (Figures 12, 13 and 14) a tuffaceous volcanic has been highly altered to a sericite schist containing up to 30% quartz veinlets with occasional thicker quartz lenses. Abundant pyrite forms up to 10% of the rock with minor fine sphalerite. A small creek in the area contains coarse float boulders coated with possibly hydrozincite and/or copper carbonates. The area of the C-10 showings is part of a pyritic sericite schist alteration zone extending up to 4 miles in length in a northwest-southeast direction. The zone varies from onehalf to one mile in width. It consists primarily of pyrite-sericite schist where exposed at mountain or ridge tops. As the zone is followed downhill or exposed at lower elevations, a definite increase in silica is encountered. The zone becomes cherty along the lower slopes of Mount Madge flanking Unuk Finger Mountain. Eventually definite quartz veinlets and stockworks are exposed at the lowest exposures, such as the C-10 area.

Along the eastern edge of the above alteration zone and extending up to 800 meters away, numerous flat-lying siderite, chalcopyrite, pyrite, sphalerite, galena and arsenopyrite bearing veins, stringers, and lenses were discovered. These zones extended up to several hundred feet in strike length and varied from a few inches up to several feet in thickness.

In the area of the Corey 6 claim, a coarse-grained black gabbro plug has been identified. This intrusive corresponds with the one identified by E.W. Grove as a syenodiorite plug. The gabbro contains 2.5% coarse pyrite and pyrrhotite with occasional fine chalcopyrite.

Massive pyrrhotite and chalcopyrite float boulders generally several inches in diameter have been found along the slopes of Mount Madge. These are probably related to the gabbro in the Unuk Finger Mountain area.

In the northeast corner of the Corey 8 claim, large quartz vein zones have been identified across widths of up to 10 meters. These veins are barren of sulphides and do not appear to be of significant economic importance. However, these are located in an area in which prospecting by Granduc crews in the 1960's reportedly located high gold values in quartz veins along a creek bed. These gold values may also be related to the numerous flat-lying sulphide bearing zones located.

In the Corey 7 a siderite-massive pyrite rich float boulder 5 inches in diameter with visible gold was found in a creek bed along the west slope of Unuk Finger Mountain.

Prospecting revealed at higher elevations, to the east of the gold boulder, several quartz-carbonate veins that may be the source. They are siderite rich with minor pyrite, chalcopyrite, arsenopyrite and trace tetrahedrite with gold values up to 3.534 ounces per ton gold.

Economic Geology

In the Sulphurets area, gold mineralization appears to be of the epithermal vein-type, structurally controlled and usually in volcanic rocks. The veins consist of quartz and carbonate, with up to 20 percent sulphides. They range from simple to complex vein zones and stockwork. Pyrite, sphalerite, galena tetrahedrite, arsenopyrite, electrum, pyrargyrite, barite and siderite have been identified in these vein systems.

The mineralization appears along early fault zones which trend northwesterly and are cut by the later north trending fault zones.

The Newcana Joint Venture has announced ore reserves for their property as follows:

<u>ZONE</u>	<u>CATEGORY</u>	<u>TONS</u>	<u>AU OPT</u>	<u>AU OPT</u>
West	Proven	300,151	0.516	28.28
	Probable	324,500	0.496	12.67
	Inferred	<u>879,837</u>	<u>0.506</u>	<u>20.17</u>
Total West Zone		1,504,488	0.506	20.17
Shore Gossan Hill	Inferred	539,776	0.263	27.23
	Inferred	27,639	1.940	3.51

Catear Resources Ltd. has announced ore reserves for their Goldwedge Property.

The reserves are based on 1986, 1987 and 1988 diamond drilling programs.

<u>ZONE</u>	<u>CATEGORY</u>	<u>TONS</u>	<u>AU OPT</u>	<u>AU OPT</u>
Golden Rocket	drill indicated and inferred	319,149	0.80	1.12
Discovery	drill indicated and inferred	37,980	0.63	1.08
Total Golden Rocket and Discovery Zone		<u>357,000</u>	<u>0.782</u>	<u>1.12</u>
Goldridge	drill indicated and inferred	16,095	0.104	.06

GEOCHEMICAL SURVEYS

Rock Geochemistry

A total of 97 rock geochemical samples were collected from the Corey claims during June - September 1988. The samples obtained were generally 1.3 - 1.8 kg of unweathered material. They were selected on the basis of mineralization or alteration. A complete description of the samples collected are in Appendix IV.

The samples were shipped to Loring Laboratories Ltd. of Calgary, Alberta where they were crushed, split and ground to a -80 mesh. The samples were then analyzed using standard geochemical methods. All geochemical data is enclosed in Appendix II.

Results of the program indicate anomalous gold and silver values in the survey area. The sample sites are shown on Figures 4-6.

The samples were statistically treated and plotted on cumulative frequency graph paper. The normal distribution values which plot as a straight line were used to determine background and anomalous values. Based on the plots in Appendix III the anomalous and background values are as follows:

<u>Metal</u>	<u>Background</u>	<u>Threshold</u>
Gold	12 ppb	75 ppb
Silver	0.24 ppm	1.4 ppm

Using the above threshold number, weakly anomalous values were considered as 1-2 times threshold, moderately anomalous as 2-3 times threshold and strongly anomalous as greater than 3 times threshold. As a result, the rock geochemical program indicates numerous gold and silver anomalies with values as high as 1.614 opt gold and 10.99 opt silver. These claims are underlain by the large alteration zone with associated gold values.

Another area of numerous gold and silver anomalies are found on the Corey 32 and to a lesser degree Corey 35. The only other anomalous area is within Corey 3, 5, 6 and 36 claim blocks.

In comparison to the 1974 - 1976 Granduc Surveys on their Sulphurets property; the Bighorn results were similar in terms of background and anomalous values for gold and silver in rocks. The Granduc survey indicated that results over 1 ppm silver and 100 ppb gold were anomalous for 1265 samples compared to 1.4 ppm silver and 75 ppb gold for the Bighorn survey.

Silt Geochemistry

A total of 537 silt samples were collected during the course of the rock geochemical program. The silt was screened to a -1 mm mesh size in order to obtain a consistent sampling procedure. These samples were collected and placed in numbered Kraft Sample Bags and subsequently shipped to Loring Laboratories Ltd. of Calgary, Alberta. They were dried, crushed, split and ground to a -80 mesh. The samples were then analyzed using standard geochemical methods for Au and Ag. Several weak-strong anomalous gold and silver values were obtained and range as high as 790 ppb gold and 8.9 ppm silver.

All silt samples with corresponding gold and silver values are plotted on Figures 4-6. The results are plotted on cumulative frequency graph paper with the straight line plot considered the normal distribution (Appendix IV). Using these plots indicates the following background and threshold values:

<u>Metal</u>	<u>Background</u>	<u>Threshold</u>
Gold	2 ppb	37 ppb
Silver	0.25 ppm	0.58 ppm

Using the above threshold number, weakly anomalous values were considered as 1-2 times threshold, moderately anomalous as 2-3 times threshold and strongly anomalous as greater than 3 times threshold.

It is recommended that all areas of anomalous gold and silver in rocks and silts be investigated by further sampling.

TRENCHING

During August to September of 1988, trenching on the north flank of Mt Madge was completed, along the Devils Club Creek showing located on Crown Grant lot 266 (Figure 6). A total of three trenches were cut with 13 samples taken from them. Detailed drawings of Trench #1 and Trench #2 are Figures 6 and 7 located in the back pocket of this report.

The best results from the trenching effort was obtained from Trench #3 (Figure 6). Silver values as high as 27.30 opt and 11.40 opt were respectively obtained from selective grab and 0.61 m wide chip samples.

The silver mineralization is associated with quartz and carbonate (siderite?) stockwork containing 3-5% fine-grained to coarse-grained pyrite and 1-2% coarse-grained sphalerite. Minor fine-grained disseminated pyrrhotite is also associated with pyrite. The stockwork/vein system trends N007'E and dips 45° to the west. True width of the actual vein material varies from several centimeters to 20-30 centimeters but the actual zone including all quartz and carbonate stringers can extend over .75 meters in width.

The host rock is a variably altered crystal-lithic dacitic tuff. This occurs as a blocky to schistose chloritic pale green unit sheared to a limonitic sericite schist. Generally only disseminated pyrite is encountered in the host rock.

Further prospecting and possibly trenching is essential to determine if this stockwork system extends beyond the exposed outcrop.

DIAMOND DRILLING

A total of 647.67 meters of BDBGM size diamond drill core was cut from six drill holes using a modified JKS-300 diamond drill rig supplied by D.W. Coates Enterprises Ltd. during July and August 1988. Drilling took place on the Corey 8, C-10 grid concurrent to the Corey Claim group regional and detailed rock and silt geochemical program.

The drill was mobilized and demobilized to and from the Tide Lake Airstrip via truck and from Tide Lake the drill was transported by a Bell 205 helicopter to Mt. Madge. Engineering drill repairs and support was obtained from Catear's nearby Goldwedge Camp but general support was received from Stewart.

Drill core recovery was poor. Rarely was 90-95% of the core recovered. Commonly the core was intensely fractured, blocky and ground-up. General recovery was 65-80%. Four instances yielded no core recovery. Excessive muds and polymers were pumped down the holes in attempts to stabilize the hole walls and to increase core recovery, yet caving of the holes continued. The drillers averaged approximately 15 meters of drilling per 12 hour shift including down time due to repairs and maintenance.

The ground is very friable and schistose. Strong to intense shearing is evident throughout the entire oxidized sericite schist unit. It is conceivable that significantly anomalous zones may have been ground and washed out as intense oxidation and leaching of sulphides is pervasive and recovery of these zones would have been poor.

Drill hole locations are plotted on Figure 9 and the geological and assay sections are plotted on Figures 12-15 and 16-19 respectively. The following table gives diamond drill hole azimuth, dip and depth.

TABLE I

<u>DDH</u>	<u>Azimuth</u>	<u>Dip</u>	<u>Depth (m)</u>	<u>Drill Pad #</u>	<u>Panel #</u>
88-01	244°	-45°	106.06	I	1
88-02	243°	-45°	138.07	II	1
88-03	243°	-65°	99.97	II	1
88-04	222°	-45°	155.44	II	2
88-05	222°	-65°	48.16	II	2
88-06	356°	-45°	99.97	III	1

Drill hole 88-01 intersected a pale to medium grey-green dacitic tuff. This was drilled from the valley floor into the base of Mt. Madge. Subsequently the rock was intensely fractured and sheared. On two occasions no core was recovered near and at the bottom of the hole. No significantly anomalous gold or silver values were obtained as mineralized and alteration was very weak. The hole was shut down short of the target area due to severe caving and extreme shearing encountered at the 106 meter mark. The hole was intended to intersect the target at 152 meters.

The drill was moved to pad site II (Figure) and holes 88-02 and 88-03 were drilled along a 244° azimuth while holes 88-04 and 88-05 were drilled along a 222° azimuth.

It is apparent that DDH's 88-02 and 88-03 intersected two relatively flat lying quartz vein structures within 35 meters from the top of the holes and several steeply dipping narrower quartz veins and pods throughout the remaining portions. But further drilling of holes 88-04 and 88-05 indicate only very steeply near vertical quartz veins near the top of the geological section. With this in mind it is believed that the flatter lying quartz veins encountered in DDH-88-02 and DDH-88-03 were drilled along strike, or close to it. Generally the weakly pyritic quartz veins carried gold values of only .008 opt along one contact with silver values of .07 opt with the quartz vein. The best values obtained in this section were within sericite altered ash flow tuffs intersected in 88-02 yielding .032 opt gold with 1.1 ppm silver at 65.53 - 66.75 m and 0.050 opt gold with 1.1 ppm silver

at 94.03 - 94.73 m. Hole 88-03 had values of .011 opt gold with 0.4 opt silver at 64 - 65.22 m in a similar rock type.

As in the previous geological section DDH's 88-04 and 88-05 best results were obtained from the finely laminated, well sheared calcareous ash flow tuff units. Values of 0.24 opt gold with 0.10 opt silver were obtained from 88-04 at 15.70 - 16.92 m. In DDH-88-05, values of 0.32 opt gold with 1.0 ppm silver were encountered at 14.17 - 15.18 m along the upper contact to a silicified quartz stockwork zone yet the quartz zone yielded poorer gold and silver values. Also in the same hole at 19.20 - 19.81, 0.48 opt gold with 1.4 ppm silver were obtained.

The drill was moved to the third and final drill pad. Only one hole was drilled here. Along a 356° azimuth, DDH-88-06 was drilled at a -45° dip angle. As in DDH's 88-02 to 88-05 near vertical quartz veins were intersected near the top of the hole at 13.17 - 15.07 m. Values as high as 840 ppb gold and 1.7 ppm silver were obtained from the 40-45% quartz stockwork containing 1-2% pyrite and chalcopyrite. Significant malachite, azurite and hydrozincite were associated with an intense manganese oxide. No core was recovered at 69.49 - 70.41 m and 99.06 - 99.97 m. The hole was abandoned at 99.97 m.

CONCLUSIONS

1. The Corey Claims are underlain by the Unuk River Formation rocks consisting of andesitic volcanics and intruded by granitic rocks.
2. The area of the Corey Claims is due west and adjacent to the bonanza gold-silver discoveries at Brucejack Lake by both the Newcana Joint Venture and Catear Resources Ltd. The Newcana Joint Venture has announced the following results:

<u>ZONE</u>	<u>CATEGORY</u>	<u>TONS</u>	<u>AU OPT</u>	<u>AU OPT</u>
West	Proven	300,151	0.516	28.28
	Probable	324,500	0.496	12.67
	Inferred	<u>879,837</u>	<u>0.506</u>	<u>20.17</u>
Total West Zone		1,504,488	0.506	20.17
Shore Gossan Hill	Inferred	539,776	0.263	27.23
	Inferred	27,639	1.940	3.51

Catear conducted diamond drilling on its Goldwedge property within the Newcana block and has drill indicated and inferred 357,000 tons of .782 opt Au and 1.12 opt Ag.

The above gold-silver discoveries are structurally controlled, epithermal-mesothermal veins occurring in areas of syenodiorite intrusions and associated with areas of intense sericite (quartz-pyrite) alteration.

3. Approximately 11 Km to the north is the Consolidated Stikine Silver-Calpine gold discovery.
4. A rock and silt geochemical program has indicated anomalous gold and silver values on various areas of the claim block. Geochemical analysis returned values of up to 1.614 opt gold and 10.99 opt silver in rocks and 790 ppb gold and 8.9 ppm silver in silts.

5. Most of the geochemical anomalies are related to a pyrite sericite schist zone extending northwest-southeast across the Corey 32, 8 and 7 claims.
6. Drilling of six holes on the above zone indicated a highly sheared and faulted zone with narrow sections carrying up to 1000 ppb gold.
7. A further program of prospecting, gridding, geochemical surveys, geological mapping and drilling is recommended for the property.

RECOMMENDATIONS

Prospecting

All structural features on the property should be carefully prospected in order to evaluate the mineral potential. As well, all gossaned zones should be checked for all minerals associated with the gold in the Sulphurets area, particularly arsenopyrite, tetrahedrite, galena and sphalerite.

Geological Mapping

The property should be further evaluated in order to define potential host rocks for epithermal deposits. A grid is recommended over the sericite schist unit for survey and sample control.

Geochemical Surveys

Further rock geochemistry is recommended, particularly sericitic schist zones to the north of Unuk Finger Mountain. Tight spaced stream sediment sampling should be used to follow up on all newly discovered anomalous creeks and creeks left unsampled in the 1987 and 1988 programs.

Drilling

A diamond drill program of 2000 - 3000 feet should be conducted on the Corey 7 and 8 claims in order to define the extent of the flat lying, auriferous, siderite vein systems. A strong possibility exists that these flat lying veins are connected by a near vertical feeder vein.

Cost

Total cost for the 1989 diamond drilling, mapping, prospecting and sampling program on the Corey 1-45 group should be budgeted for approximately \$1,000,000.

STATEMENT OF EXPENDITURES

Personnel

K. Konkin	Project Geologist 23.5 days @ \$250/d	5,875.00
	July 12 - August 12	
B. Krutow	Project Geologist 3 days @ \$250/d	750.00
	August 12 - August 16	
D. Lund	Geological Assist. 14 days @ \$150/d	2,100.00
	July 18 - August 14	
J. Wyder	Exploration Manager 20 days @ \$450/d	9,000.00
	July 17 - August 16	
S. Lee	Camp Cook 25 days @ \$300/d	3,750.00
	July 16 - August 9	
Food - 200.5 mandays @ \$23/manday		4,611.50
(includes 115 diamond drill mandays)		
Lodging - 200.5 mandays @ \$25/manday		5,012.50
Diamond Drilling - D.W. Coates Enterprises		98,351.60
Transportation - (Bell 206 and Bell 204)		42,263.98
Freight		500.00
Lumber, Fuel, Explosives		1,500.00
Communications		150.00
Hardware Supplies		1,290.25
Expediting Cost - Limar Industries		1,250.00
Geochemical Analysis		11,075.40
Mob/Demob		2,500.00
Report Writing/Drafting/Administration (contractor change)		<u>5,000.00</u>
TOTAL		\$194,980.23

STATEMENT OF COSTS TO BE APPLIED TO CLAIM GROUPINGS

<u>Claim Group</u>	<u>Units</u>	<u>Amount of Work Applied %</u>	<u>Amount Spent</u>
Corey 1, 2, 3, 4	80	50.00	97,490.11
Corey 5, 6, 7, 8	<u>80</u>	<u>50.00</u>	<u>97,490.12</u>
	160	100%	\$194,980.23

REFERENCES

- Grove, E.W., 1971
Geology and Mineral Deposits of the Stewart Area, B.C.
British Columbia Dept. of Mines and Petroleum Resources,
Bulletin No. 58
- Grove, E.W., 1982
Geology of the Unuk River, Salmon River and Anyox Map Area
- Groves, W.D., 1976
Geological Report on the Tennyson Report
- Horne, E.J., 1987
Assessment Report on Reverted Crown Grants
Lots 265, 266, 267, 268, 269.
Sulphurets Creek, Skeena Mining Division
- Horne, E.J., 1988
Drill Report, Cumberland Group, Mt. Madge Project
Sulphurets Creek, Skeena Mining Division
- Kruchkowski, E.R., 1982
Assessment Report - Goldwedge Claim - Skeena Mining Division
- Kruchkowski, E.R., 1987
Report on the Corey Claim Group, Stewart, British Columbia
Skeena Mining Division
- Kruchkowski, E.R., and Sinden, G., 1988
Report on Corey Claim Group, Stewart, British Columbia
Skeena Mining Division
- Ostensoe, E.A., and Kruchkowski, E.R., 1976
Granduc Mines Ltd. Summary Report, Sulphurets Creek Project
- Ostensoe, E.A., and Kruchkowski, E.R., 1977
Granduc Mines Ltd. Report of Work - Red River Claim,
Unuk River, Skeena M.D., British Columbia
- Ostensoe, E.A., 1984
Report on the Goldwedge Property - Sulphurets Creek Area
Skeena Mining Division - Northwestern British Columbia
- Tribe, N.L. 1986
Progress Report - 1985 Field Season - Sulphurets Property -
Brucejack Lake Area - Skeena Mining Division
- Stockwatch News Releases - November 12, 1986
- Unpublished Drill Data - Catear Resources Ltd.

CERTIFICATE

I, KENNETH J. KONKIN, Geologist, residing at 4117 Burkridge Place, in the City of West Vancouver, in the Province of British Columbia, hereby certify that:

1. I received a Bachelor of Science degree in Geology from the University of British Columbia in 1984.
2. I have been practising my profession continuously since graduation.
3. I am a consulting geologist working on behalf of Bighorn Development Corporation.
4. This report is based on a review of reports, documents, maps and other technical data on the property area and on my experience and knowledge of the area obtained during programs in 1983 - 1988.

Aug 23/89
DATE


K.J. KONKIN, B.Sc.

APPENDIX I

ANALYTICAL INFORMATION

Laboratory: Loring Laboratories Ltd.
Calgary, Alberta

Mesh Size: -80/stream sediments
-80/rocks

Extraction: For Cu: $\text{HNO}_3/\text{HClO}_4$ to dryness taken up in HCl
For Pb/Zn: Nitric-perchloric dissolution to dryness,
taken up in HCl
For Au/Ag: Fire assay fusion, cupellation and acid
dissolution of precious metal beads.

Analysis: Atomic absorption

APPENDIX II

GEOCHEMICAL ANALYSIS

BIG HORN DEVELOPMENT CORP
 255 - 17th Avenue S.W.,
 Calgary, Alberta T2S 2T8
 T1: J. Wyder



File No. 31800
 Date October 3, 1988
 Samples Core
 MT. MADGE PROJECT

Certificate of Assay

LORING LABORATORIES LTD.

Page # 1

SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER	%	
"Core Samples"				
"Assay Analysis"				
42369	.048	-	-	63-65
KK-88-T1	-	11.40	-	
KK-88-T4	-	1.32	-	
KK-88-T5	-	27.30	-	
42396	-	-	.03	90-93.2
42399	-	-	.04	
42403	-	-	.04	
42404	-	-	.03	
42405	-	-	.05	
42406	-	-	.02	
42407	-	-	.02	
42408	-	-	.06	
42409	-	-	.20	
42410	-	-	.20	
42411	-	-	.16	
42412	-	-	.14	
42413	-	-	.23	
42414	-	-	.20	
42415	-	-	.38	
42416	-	-	.49	

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

objects retained one month.
 1 s retained one month
 1 s specific arrangements
 e made in advance.


 Assayer

To: BIG HORN DEVELOPMENT CORP.,
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

 ATTN: J. Wyder



File No. 31800
 Date October 3, 1988
 Samples Core
 MT. MADGE PROJECT

Certificate of Assay LORING LABORATORIES LTD.

Page # 2

3806

SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER	% Cu
42417	-	-	.03
42418	-	-	.03
42419	-	-	.01
42420	-	-	.02
42421	-	-	.01
42422	-	-	.03
42423	-	-	.04
42424	-	-	.02
42425	-	-	.02
42426	-	-	.01
42427	-	-	.01
42428	-	-	Trace
42429	-	-	.01
42430	-	-	Trace
42431	-	-	.01
42432	-	-	Trace
42439	-	-	Trace
42440	-	-	.01
42442	-	-	.01
42443	-	-	.01
42444	-	-	.01
42446	-	-	.01
42447	-	-	.01

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
 Pulp retained one month
 unless specific arrangements
 are made in advance.


 Assayer

To: BIG HORN DEVELOPMENT RP.,
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

File No. 31800
Date October 3, 1988
Samples Core
MT. MADGE PROJECT



ATTN: J. Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER	% Cu
42448	-	-	.01
<i>2206</i> 42449	-	-	.01

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Rejects retained one month.
Pulpe retained one month
unless specific arrangements
are made in advance..


Assayer

To: BIG HORN DEVELOPMENT CORP.,
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

 ATTN: J. Wyder

File No. 31800
 Date October 3, 1988
 Samples Core
 MT. MADGE PROJECT



Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.	PPB Au	PPM Ag
Core Samples		
Geochemical Analysis		
2804 42194	55	0.7
42195	180	0.6
42197	650	0.9
42200	30	0.6
42201	155	1.2
42202	60	1.1
42203	30	1.2
42204	100	2.0
42205	10	1.0
42206	40	0.7
42216	NIL	0.3
42217	NIL	0.2
42218	NIL	0.1
42219	NIL	0.2
42220	5	0.2
42221	NIL	0.1
42222	NIL	0.2
42223	NIL	NIL
42224	NIL	0.2
42225	NIL	0.2
42226	NIL	0.3
42227	NIL	0.3
42228	NIL	0.3
42229	NIL	0.3
42230	NIL	0.3
42231	NIL	0.3
42232	NIL	0.3
42233	NIL	0.3
42234	20	0.3
42235	20	0.3

173.5 - 178
 181 - 183.5

I Hereby Certify that the above results are those
 assays made by me upon the herein described samples....

Rejects retained one month.
 Pulps retained one month
 unless specific arrangements
 are made in advance.

[Signature]
 Assayer

To: BIG HORN DEVELOPMENT CORP.,

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

ATTN: J. Wyder

File No. 31800

Date October 3, 1988

Samples Core

MT. MADGE PROJECT



Certificate of Assay

LORING LABORATORIES LTD.

Page # 5

SAMPLE NO.	PPB Au	PPM Ag
42237	10	0.3
42238	15	0.3
42246	20	0.3
42248	10	0.3
42249	20	0.3
3804 42250	25	0.3
42251	30	0.3
8801 42252	30	0.3
42253	20	0.3
42254	15	NIL
42255	20	NIL
42256	20	0.1
42257	15	NIL
42258	10	NIL
42259	35	0.3
42260	20	0.2
42261	20	0.2
42262	15	0.3
42263	10	0.1
42264	20	0.4
42265	20	0.2
42266	20	0.3
42267	20	NIL
42268	15	0.2
42269	20	0.3
42270	20	0.2
42271	20	0.2
42272	10	0.3
42273	20	0.3
42274	15	0.2
42275	10	0.3
42276	20	0.3
42277	20	0.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

To: BIG HORN DEVELOPMENT (P.),
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

File No. 31800
Date October 3, 1988
Samples Core
MT. MADGE PROJECT



ATTN: J. Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 6

SAMPLE NO.	PPB AU	PPM Ag
42278	NIL	0.2
42279	NIL	NIL
42280	NIL	0.1
42281	NIL	0.2
42282	NIL	0.2
42283	5	0.3
42284	15	0.3
42285	10	0.3
42286	10	0.2
42287	40	0.2
42288	10	0.2
42289	10	0.2
42290	10	0.2
8801 42291	10	0.2 334-340.3
8802 42292	40	0.6
42293	30	0.5
42294	NIL	0.4
8804 42295	10	0.2 338-341.5
42296	5	0.3
42298	10	0.2
42299	5	0.4
42300	10	0.3
42301	10	0.3
42304	10	0.3
42305	NIL	0.2
42306	10	0.3
42307	10	0.2
42308	10	0.3
42309	5	0.4
42310	10	0.5
42311	5	0.3
42312	10	0.3
42313	5	0.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples.....

Rejects retained one month.
Pulpe retained one month
unless specific arrangements
are made in advance.


Assayer

To: BIG HORN DEVELOPMENT CORP.;
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

Fi No. 31800
Date October 3, 1988
Samples Core
MT. MADGE PROJECT



ATTN: J. Wyder

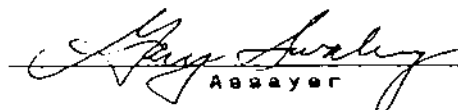
Certificate of Assay LORING LABORATORIES LTD.

Page # 7

SAMPLE NO.	PPB Au	PPM Ag
42314	NIL	0.3
42315	10	0.3
42316	10	0.3
42317	15	0.3
42318	5	0.3
42319	5	0.3
42320	NIL	0.3
42321	NIL	0.3
42323	15	0.3
8804 42324	5	0.4 423-426
42326	5	0.3
42327	NIL	0.4
42328	NIL	0.4
42330	5	0.4
42332	NIL	0.4
42333	NIL	0.4
42334	10	0.4
42335	10	0.4
42336	5	0.4
42338	5	0.5
42339	NIL	0.4
42342	10	0.4
42343	5	0.4
42344	NIL	0.4
42345	10	0.4
42346	10	0.3
42347	5	0.4
42348	10	0.4
42349	5	0.4
42350	15	0.4 500-502
42351	NIL	0.4
42352	5	0.6
42353	10	0.5 507.5-51

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

To: BIG HORN DEVELOPMENT CORP.,
400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

File No. 31800
 Date October 3, 1988
 Samples Core
 MT. MADGE PROJECT



ATTN: J. Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 8

SAMPLE NO.	PPB Au	PPM Ag		
8805 42354	60	0.6	5-11	
42355	25	0.7		
42356	15	0.6		
42357	20	0.6		
42358	15	1.5		
42359	20	2.0		
42360	415	0.9		29.32
42361	25	0.8		
42362	10	0.7		
42363	80	0.7		
42365	195	0.4		
42366	NIL	0.1		
42369	+1000	1.4	63-65	
42370	135	0.7		
42372	35	0.6		
42373	50	0.5		
42374	40	0.7		
42375	20	0.7		
42376	15	0.7		
42377	25	1.0		
42378	30	0.8		
42379	20	0.7		
42380	80	1.0		
42381	15	0.8		
42386	15	1.3		
42387	40	2.5		
42388	30	0.7		
42389	20	0.4		
8806 42396	NIL	0.3	40-43.2	
42399	15	0.7		
42403	20	0.6		
42404	10	0.4		
42405	25	0.6		

I Hereby Certify that the above results are those
 assays made by me upon the herein described samples....

Rejects retained one month.
 Pulps retained one month
 unless specific arrangements
 are made in advance.

J. Wyder
 Assayer

to: BIG HORN DEVELOPMENT CORP.,
400, 235 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8

File No. 31800
Date October 3, 1988
Samples Core
MT. MADGE PROJECT



ATTN: J. Wyder

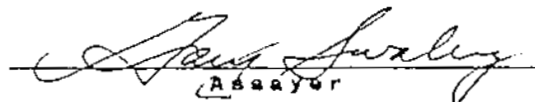
Certificate of Assay LORING LABORATORIES LTD.

Page # 9

SAMPLE NO.	PPB Au	PPM Ag
42406	45	0.5
42407	190	0.6
42408	105	1.2
42409	180	3.5
42410	240	7.0
42411	75	1.9
42412	60	1.6
42413	185	3.5
42414	420	2.6
42415	340	5.3
42416	225	6.1
42417	80	0.7
42418	60	0.8
42419	70	0.5
42420	95	0.3
42421	65	0.4
42422	80	0.5
42423	80	0.6
42424	55	0.2
42425	80	0.4
42426	60	0.2
42427	105	0.3
42428	60	0.4
42429	55	0.3
42430	145	0.6
42431	200	0.7
42432	150	0.7
42439	60	0.3
42440	70	0.3
42442	45	0.3
42443	55	0.5
42444	50	0.6
42446	110	1.1

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Objects retained one month.
Copies retained one month
unless specific arrangements
are made in advance.


Assayer

TO: BIG HORN DEVELOPMENT CO. P.,
 400, 255 - 17th Avenue S.W.,
 Calgary, Alberta T2S 2T8

File No. 31800
 Date October 3, 1988
 Samples Core
 MT. MADGE PROJECT



Certificate of Assay LORING LABORATORIES LTD.

Page # 10

SAMPLE NO.	PPB Au	PPM Ag
8006 42447	80	0.9
42448	55	4.8
42449	20	0.9
KK-88-T1	10	+30.0
T2	5	24.0
T3	10	16.1
T4	5	+30.0
T5	15	+30.0

323-325

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Subjects retained one month.
 Samples retained one month
 unless specific arrangements
 are made in advance.

Guy Feakins
 Assayer

APPENDIX III
DIAMOND DRILL LOGS

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge - C-10 Grid</u>		DATE <u>July 17, 1988</u>		AZIMUTH <u>244°</u>		LOGGED BY _____	
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
	0 - 5.18			Casing: glacial till; cave material			
	5.18 - 106.06			Crystal tuff, dacitic; extremely blocky core, generally only 5-8 cm long shattered & ground up; 75-80% total recovery; gouge zones are common 15-20 cm wide, 5-7% chloritized 1 mm dark green mafic phenocrysts in a v.f.g. ash matrix pale-medium grey, minor weak silicification & epidolazation with minor calcite sweats assoc., weak foliation 50 - 50° to C.A.; minute fine 1-2 mm wide quartz & calcite & epidote veinlets filling fractures are common; trace <1% f.g. diss. pyrite - gouge at 20.05 - 23.77			
42911		5.18 - 7.01	1.83	- weak-moderate epidote alteration	nil	0.1	
42912		7.01 - 8.53	1.52	- moderate epidote alteration + weak silicification	ni.	0.2	
42913		8.53 - 11.58	3.05	- only .67 m recovered in this section with moderate epidote alter.	nil	0.1	
42914		11.58 - 12.50	0.92	- strong epidote alteration with minor calcite sweats	5	.01	
42252		12.50 - 13.72	1.22	- approx 100% rec.; with minor calcite sweats	30	.03	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 17, 1988</u>	AZIMUTH <u>244°</u>	LOGGED BY _____		
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Aq (ppm)
42253		13.72 - 15.48	1.76	- approx 100% rec.; with minor calcite sweats	20	0.3
42915		15.48 - 16.46	0.98	Strong epidote alteration & silicification	10	0.1
42254		16.46 - 17.78	1.32	80% recovery & silicification	15	.01
42255		17.78 - 18.74	0.96	90% recovery - epidote alteration & silicification	20	nil
42916		18.74 - 19.81	1.07	Medium-strong epidote alteration with weak 1 mm quartz veinlets	10	nil
42917		19.81 - 20.73	0.92	Intense clay alteration with strong epidote alteration, 5-7% quartz & calcite sweats	10	0.1
42918		20.73 - 23.77	3.04	.97m recovery; moderate epidote alteration	20	0.1
42256		23.77 - 26.52	2.75	60% recovery; moderate silicification & epidote alteration	20	0.1
42919		26.52 - 28.19	1.67	Intense epidote alteration with 3-5% calcite sweats	10	0.1
42257		28.19 - 29.56	1.37	90% recovery with 3-5% calcite sweats	15	0.1

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY	
Mt. Madge C-10 Grid		July 17, 1988		244°			
DRILL HOLE		DEPTH		DIP		ASSAYS	
88-01		106.06 m		-45°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42258		29.56 - 31.08	1.52	90% recovery, with 3-5% calcite sweats	10	nil	
42259		31.08 - 32.92	1.84	" "	35	0.3	
42920		32.92 - 35.66	2.74	1.22 m core recovery	5	0.2	
42923		35.66 - 37.85	2.29	5-7% quartz & calcite veinlets	10	0.2	
42924		37.95 - 39.04	1.09	3-5% quartz & calcite veinlets & epidote veinlets	10	0.1	
42260		39.04 - 40.84	1.80	100% recovery; good silicification	20	0.2	
42933		30.84 - 42.06	1.22	strong epidote & silicification flooding, well silicified	10	0.1	
42934		42.06 - 43.13	1.07	Well silicified	10	0.1	
42261		43.13 - 44.59	1.46	90% recovery - good silicification with 2-3% calcite sweats	20	0.2	
42262		44.59 - 46.11	1.52	" " " " " "	15	0.3	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 17, 1988</u>		AZIMUTH <u>244°</u>		LOGGED BY _____	
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42921		46.11 - 48.03	1.92	7-10% quartz & calcite & epidote veinleting	10	0.2	
42263		48.03 - 49.56	1.53	100% recovery - 2-3% quartz & calcite & epidote veinleting	10	0.1	
42264		49.56 - 51.08	1.52	100% recovery - 3-5% " " " "	20	0.4	
42265		51.08 - 52.94	1.86	100% recovery - 1-2% " " " "	20	0.2	
42922		52.94 - 53.70	0.76	well silicified; strong epidote alteration	nil	nil	
42927		53.70 - 55.23	1.53	Moderate epidote alteration	10	0.1	
42925		55.23 - 57.03	1.80	7-10% quartz & calcite & epidote veinleting	10	nil	
42266		57.03 - 58.67	1.64	100% recovery - 1-2% quartz & calcite veinleting; good silicification	20	0.3	
42267		58.67 - 60.35	1.68	100% recovery - " " " " "	20	nil	
42926		60.35 - 61.81	1.46	7-10% quartz & calcite & epidote veinleting	10	nil	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>July 17, 1988</u>	AZIMUTH <u>244°</u>	LOGGED BY _____		
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42268		61.81 - 63.40	1.59	80% recovery - badly fractured	15	0.2
42269		63.40 - 64.77	1.37	100% recovery - fair to good silicification	20	0.3
42270		64.77 - 65.83	1.06	90% recovery - 2-3% quartz & calcite & epidote veinlets	20	0.2
42271		65.83 - 67.21	1.38	" " " " "	20	0.2
42272		67.21 - 68.27	1.06	100% recovery; approx 10-20% clay & gouge	10	0.3
42273		68.27 - 69.49	1.22	100% recovery; 2-5% epidote veinlets	20	0.3
42274		69.49 - 70.98	1.49	100% recovery - 2-3% quartz & calcite sweats	15	0.2
42275		70.98 - 72.60	1.62	" " " " "	10	0.3
42276		72.60 - 73.97	1.37	100% recovery - 4-5% epidote & quartz & calcite veinlets	20	0.3
42277		73.97 - 75.59	1.62	100% recovery; 2-3% calcite/quartz sweats	20	0.3

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 17, 1988</u>	AZIMUTH <u>244°</u>	LOGGED BY _____		
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42278		75.59 - 77.11	1.52	100% recovery - 4-6% quartz & calcite veinlets	nil	0.2
42279		77.11 - 78.63	1.52	100% recovery	nil	nil
42280		78.63 - 80.31	1.68	100% recovery; 2-3% & fine quartz & calcite & epidote veinlets	nil	0.1
42281		80.31 - 81.07	0.76	" " " " " "	nil	0.2
42282		81.07 - 82.75	1.68	" " " " " "	nil	0.2
42283		82.75 - 83.97	1.22	" " " " " "	5	0.3
42930		83.97 - 84.56	0.59	Brecciated crystal-lithic tuff; weakly foliated 65° to C.A.; 3-5% calcite sweats, weakly silicified with 2 cm quartz vein barren parallel to foliation	15	0.1
42284		84.56 - 86.41	1.85	Moderate silicification - 100% recovery	15	0.3
42285		86.41 - 87.78	1.37	50% recovery 86.86 - 87.78 m	10	0.3

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 17, 1988</u>		AZIMUTH <u>244°</u>		LOGGED BY _____	
DRILL HOLE <u>88-01</u>		DEPTH <u>106.06 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppb)	
42286		87.78 - 89.61	1.83	50% recovery 87.78 - 89.61 m	10	0.2	
				89.61 - 90.83 m no recovery - clay seam			
42931		90.83 - 92.81	1.98	Gouge @ 90.83 - 91.13, 91.74 - 92.81 m	10	0.3	
42932		92.81 - 93.87	1.06	25% recovery, much gouge	10	0.2	
42929		93.87 - 96.31	2.44	Fault gouge for 2.44 m with 3-5% calcite veinlets	10	0.1	
42287		96.31 - 97.84	1.53	Much fault gouge	40	0.2	
42288		97.84 - 99.51	1.67	2-3% quartz & calcite & epidote veinleting	10	0.2	
42289		99.51 - 100.73	1.22	" " " " "	10	0.2	
42290		100.73 - 101.80	1.07	Weakly silicified	10	0.2	
42291		101.80 - 103.72	1.92	60% recovery 101.80 - 102.71 m	10	0.2	
42928		103.72 - 105.46	1.74	Gouge from 102.73 - 104.24 m, 25% recovery from 104.24 - 105.46 m,	nil	0.1	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	July 25, 1988	AZIMUTH	243°	LOGGED BY		
DRILL HOLE		88-02		DEPTH	138.07 m	DIP	-45°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS					
					Au (ppb)	Ag (ppm)				
	0 - 2.44			Casing; overburden & fract. outcrop						
	7.44 - 12.80			Laminated lithic tuff; weakly lithic finely lamellae 1-3 mm layers of v.f.g. ash tuff matrix 40-50% to C.A., pale grey-green-dark green-black lamellae, strong chloritic alteration of mafic content, minor 2-3% weak 1-2 mm calcite veinletting; trace <1% fine-grained disseminated pyrite; 3-5% subangular 1-15mm alt. lithic frag's, weak-moderate silicification; blocky fracture core with strong lim. ox. along fract., generally 85-90% recovery overall						
42292		2.44 - 3.66	1.22	3-5% quartz & calcite veinlets; 100% recovery	40	0.6				
42293		3.66 - 4.88	1.22	4-6% quartz & calcite veinlets; 100% recovery	30	0.5				
42294		4.88 - 6.07	1.19	" " " " " "	nil	0.4				
42935		6.07 - 8.53	2.46	55% recovery, shear zone, strong lim. ox.	30	0.5				
42936		8.53 - 10.92	2.29	25% recovery @ 8.53 - 10.36 m shear zone, strong lim. ox.	60	0.6				

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>	AZIMUTH <u>243°</u>	LOGGED BY _____		
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppb)
42937		10.82 - 12.80	1.98	Moderate-strong silicification, strong lim. ox.	80	0.8
	12.80 - 16.15			Quartz vein (stockwork); dark grey-blue to milky white; quartz 55-60% of zone in tuffaceous host, minor 1-2% fg - cg diss py in quartz, limonite along fract. planes		
42938		12.80 - 14.63	1.83	45-50% quartz vein & stockwork and veinlets with <1% f.g. diss py	10	0.2
42939		14.63 - 16.15	1.52	55-50% quartz vein with 50% recovery at 14.63 - 15.54 m; 1-2% fg - cg diss py	50	0.3
	16.15 - 92.35			Laminated, weakly lithic ash flow tuff same description as 2.44 - 12.80 m, minor crystals 1-2 mm of white feldspar phenocrysts - crystal tuff		
42940		16.15 - 17.04	0.89	Weakly silicified, contact to quartz vein	855	1.
42941		17.04 - 19.20	2.16	55% recovery sheared limonitic	50	0.8
42942		19.20 - 20.73	1.53	90% recovery	390	0.8

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42943		20.73 - 22.25	1.52	90% recovery	55	0.6	
42944		22.25 - 23.77	1.52	" "	100	0.7	
42945		23.77 - 25.75	1.98	" " with minor quartz pebbles (cave) 2-5%	10	0.7	
42946		25.75 - 27.13	1.38	75% recovery, sheared limonitic	15	0.7	
41947		27.13 - 28.64	1.51	90% recovery	190	0.6	
42948		28.64 - 29.87	1.23	75% recovery foliated/laminated 45° to C.A.	80	0.8	
42949		29.87 - 32.00	2.13	85% recovery totally crushed core, fault/shear zone	215	0.8	
42950		32.00 - 34.14	2.14	" " " " " " " "	20	0.6	
42951		34.14 - 35.81	1.67	95% recovery, competent rock	75	0.7	
42952		35.81 - 36.79	0.98	3-5% 1-2 mm quartz & calcite veinlets	20	0.5	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY			
Mt Madge C-10 Grid		July 25, 1988		243°					
DRILL HOLE		DEPTH		DIP		ASSAYS			
88-02		138.07 m		-45°					
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppm)
42953		36.79 - 37.67	0.88	Crushed and blocky core 85% recovery, 35-40% quartz stockwork with				10	0.3
				~1% fine-grained diss. pyrite					
42954		37.67 - 39.56	1.89	weak 2-3% quartz & calcite veinlets				20	0.5
42955		39.56 - 42.06	2.50	85% recovery				20	0.5
42956		42.06 - 42.97	0.91	98% recovery				70	0.6
42957		42.97 - 44.80	1.83	" "				240	0.6
42958		44.80 - 46.33	1.53	" " , leached & silicified				130	0.7
42959		46.33 - 47.85	1.52	" " " "				250	0.8
42960		47.85 - 49.38	1.53	" " " " with strong epidote & calcite				415	1.0
				alt.					
42961		49.38 - 50.90	1.52	" " " " crushed core, fault zone 49.38-				50	0.6
				50.44					
42962		50.90 - 52.88	1.98	75% recovery, " " " " " " 50.90-				180	0.7

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42963		52.88 - 55.01	2.13	80% recovery, leached & silicified, crushed core	80	0.5	
42964		55.01 - 56.39	1.38	" " " " " " , fault zone	145	0.9	
42965		56.39 - 58.21	1.82	90% recovery , " "	65	1.0	
42966		58.21 - 59.89	1.68	95% recovery, " " " "	150	1.3	
42967		59.89 - 61.57	1.68	80% recovery, " " gouge at 60.35 - 60.65 m	60	1.1	
42968		61.57 - 64.00	2.43	50% recovery	110	1.0	
42969		64.00 - 65.53	1.53	" "	250	1.0	
42970		65.53 - 66.75	1.22	" "	*.032	1.7	
42971		66.75 - 67.51	0.76	95% recovery, moderately silicified with minor calcite sweats	80	0.9	
42972		67.51 - 68.58	1.07	95% recovery, dark green-black mafic diabase dyke 50° to C.A.	20	0.2	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42973		68.58 - 69.19	0.61	80% recovery, shattered core	nil	0.2	
42974		69.19 - 70.10	0.91	55% recovery; gouge/clay at 69.84 - 70.10 m	10	0.4	
42975		70.10 - 71.32	1.22	95% recovery, calcareous	70	0.8	
42001		71.32 - 72.08	0.76	75% recovery, sheared/fault gouge	80	1.0	
42002		72.08 - 72.69	0.61	90% recovery, well foliated 35° to C.A.	95	0.7	
42003		72.69 - 73.30	0.61	90% recovery, gouge at 73.30 - 73.42 m	95	1.0	
42004		73.30 - 73.76	0.76	90% recovery, strongly calcareous	25	1.0	
42005		73.76 - 74.37	0.61	95% recovery, " "	20	1.0	
42006		74.37 - 75.28	0.91	95% recovery, gouge at 75.04 - 75.10 m	15	0.6	
42007		75.28 - 75.89	0.61	50% recovery, shattered core with 5-8 cm quartz & calcite vein (barren)	5	0.2	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42008		75.89 - 76.81	0.92	95% recovery, 3-5% < 1 mm wide calcite veinlets	5	0.2	
42009		76.81 - 77.42	0.61	95% recovery, barren quartz & calcite vein at 76.99 - 77.11 m	15	0.5	
42010		77.42 - 78.63	1.21	95% recovery, 3-5% calcite veinlets, weakly silicified	85	0.7	
42011		78.63 - 79.24	0.61	" " " " " " " " " "	25	0.8	
42012		79.24 - 79.85	0.61	" " , sheared with 3-5% diss. coarse-grained pyrite	50	0.8	
42013		79.85 - 81.07	1.22	" " , 3-5% calcite veinlets, weakly silicified	45	0.7	
42014		81.07 - 81.99	0.92	" " " " " " " " " "	180	0.8	
42015		81.99 - 82.60	0.61	" " , shattered core, 30-35% quartz stockwork barren	480	0.8	
42016		82.60 - 83.51	0.91	65% recovery, shattered with 3-5% coarse-grained diss. pyrite	20	0.3	
42017		83.51 - 85.80	2.29	30% recovery, barren quartz & calcite vein parallel to C.A.	40	0.6	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42018		85.80 - 86.41	0.61	55% recovery; barren quartz & calcite vein parallel to C.A.	70	1.1	
420032		86.41 - 87.02	0.61	75% recovery; 2-3% coarse-grained diss. pyrite with 10-15% barren quartz & calcite vein	15	0.7	
42019		87.02 - 87.47	0.45	85% recovery, shattered core with 5-7% barren quartz & calcite vein	40	0.7	
42020		87.47 - 88.84	1.37	" " " " 2-3% coarse-grained pyrite	120	1.3	
42021		88.84 - 89.76	0.92	65% recovery, shattered core sheared with gouge	30	0.7	
42022		89.76 - 91.44	1.68	95% recovery, weakly silificied, calcareous	50	0.8	
42023		91.44 - 92.35	0.91	95% recovery, " " " , sheared	210	1.1	
	92.35 - 109.11			Sericite alt. tuff; pale-medium grey, intense sericite & carbonate alt. with weak-moderate silicification, pyritic: geneally 3-5% f.g. - c.g. diss. pyrite, minor barren quartz & calcite veinlets and veins, gouge zones are common			

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>	AZIMUTH <u>243°</u>	LOGGED BY _____		
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42024		92.35 - 93.26	0.91	95% recovery, intensely sheared & gouge	70	1.1
42025		93.26 - 94.03	0.77	" " " " "	225	1.0
42026		94.03 - 94.73	0.76	95% recovery, moderately silicified with strong carbonate alteration	*.050	1.1
42027		94.79 - 96.01	1.22	80% recovery, gouge at 94.85 - 94.94 m, 95.03 - 95.12 m	80	0.7
42028		96.01 - 91.92	0.91	50% recovery, shattered core	360	0.5
42029		96.92 - 97.84	0.92	65% recovery, shattered core, gouge @ 96.92 - 96.98, 97.07 - 97.23 m	460	1.0
42030		97.84 - 98.90	1.06	75% recovery, shattered core sheared 25° to C.A.	45	0.6
42031		98.90 - 99.82	0.92	75% recovery, 3-5% barren quartz & calcite vein & veinlets	nil	0.4
42033		99.82 - 101.04	1.22	90% recovery, well sheared	90	0.7
42034		101.04 - 101.65	0.61	90% recovery, 30-35% c.g. submassive diss. pyrite in sericite alt. host	160	1.6

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42035		101.65 - 102.72	1.07	90% recovery, sheared & foliated 30° to C.A.	555	1.0	
42036		102.27 - 103.32	0.60	90% recovery, gouge with 3-5% c.g. diss. pyrite	100	0.9	
42037		103.32 - 104.85	1.53	50% recovery, well sheared, moderately silicified 3-5% diss. pyrite	140	0.5	
42038		104.85 - 106.07	1.22	55% recovery, well sheared, 2-3% diss. pyrite	105	1.8	
42039		106.07 - 106.98	0.91	75% recovery, shattered, intensely alt., decomposed, 3-5% pyrite	65	3.6	
42040		106.98 - 109.11	2.13	15% recovery, shattered, f.g.-c.g. disseminated 1-2% pyrite	40	2.9	
	109.11 - 123.13			Altered schistose tuff, medium-dark green f.g., foliated			
42041		109.11 - 110.03	0.92	85% recovery, blocky, strong carbonate alt, 3-5% diss. pyrite	70	5.1	
42042		110.03 - 111.40	1.37	85% recovery, blocky, sheared 10° to C.A., barren 3 cm qtz & cal vein	90	2.9	
42043		111.40 - 112.77	1.37	85% recovery, blocky, sheared parallel to C.A., 1-2% f.g. pyrite	55	1.6	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>July 25, 1988</u>		AZIMUTH <u>243^o</u>		LOGGED BY _____	
DRILL HOLE <u>88-02</u>		DEPTH <u>138.07 m</u>		DIP <u>-45^o</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppb)	
42044		112.77 - 113.84	1.07	85% recovery, shattered, 1-2% f.g.-c.g. diss. pyrite barren 3 cm calcite vein	30	1.1	
42045		113.84 - 114.45	0.61	85% recovery, shattered, generally pieces of core are 1-2 cm dia.	nil	0.3	
42046		114.45 - 115.51	1.06	50% " " " "	25	0.7	
42047		115.51 - 116.58	1.07	85% recovery, blocky, sheared 5-10 ^o to C.A., strong carb. alt.	nil	0.2	
42048		116.58 - 117.34	0.76	85% recovery, blocky, sheared 20 ^o to C.A.	nil	0.2	
42049		117.34 - 118.10	0.76	" " " "	nil	0.3	
42050		118.10 - 119.17	1.07	25% recovery, shattered core	60	2.2	
42051		119.17 - 120.54	1.37	85% recovery, blocky core	70	1.5	
42052		120.54 - 121.30	0.76	75% recovery, blocky core, strong calcite alt.	nil	0.5	
42053		121.30 - 123.13	1.83	85% recovery, blocky core, strong chloritic alt.	nil	0.4	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	July 25, 1988	AZIMUTH	243°	LOGGED BY		
DRILL HOLE		88-02		DEPTH	138.07 m	DIP	-45°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				ASSAYS	Au (ppb)	Ag (ppm)
	123.13 - 138.07			Sericite alt. tuff as 92.35 - 109.11 m						
42054		123.13 - 124.05	0.92	75% recovery, gouge with 3-5% disseminated pyrite				160	1.8	
42055		124.05 - 126.18	2.13	10% recovery, caved material				115	3.2	
42056		126.18 - 127.40	1.22	25% recovery, blocky, sheared				195	2.0	
42057		127.40 - 128.01	0.61	70% recovery, gouge, sheared 25° to C.A., 3-5% pyrite				525	6.0	
42058		128.01 - 129.28	1.22	75% recovery, gouge, sheared 5-10° to C.A., 3-5% pyrite				545	4.0	
42059		129.23 - 130.14	0.91	50% recovery, intense sericite alt., sheared parallel to C.A., 3-5% diss. pyrite, gouge				90	1.3	
42060		130.14 - 131.06	0.92	10% recovery, blocky, 3-5% diss. pyrite, caved material				55	0.5	
42061		131.06 - 131.97	0.91	70% recovery, sheared parallel to C.A., gouge				85	0.8	
42062		131.97 - 132.58	0.61	" " , 3-5% diss. pyrite				720	1.0	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 1, 1988	AZIMUTH	243°	LOGGED BY	ASSAYS	
DRILL HOLE		88-03		DEPTH	99.97 m	DIP	-65°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppm)	
	0 - 3.66			Casing: outcrop very fractured & schistose						
	3.66 - 12.59			Lithic-crystal tuff; pale grey to dark green, 3-10 mm laminated layers of tuffaceous sediments and ash flows, minor lithic fragments with minor plagioclase & mafic (chl alt) crystals, laminated 50-55° to C.A., weakly silicified with weak-moderate sericite & chloritic alt. associated with calcite sweats, calcareous, trace - <1% f.g. disseminated pyrite						
42069		2.74 - 3.66	0.92	95% recovery				100	0.5	
42070		3.66 - 4.57	0.91	95% recovery				45	0.6	
42071		4.57 - 5.49	0.92	95% recovery				20	0.5	
42072		5.49 - 8.53	3.04	40% recovery, mismatch ground out core				30	0.5	
42073		8.53 - 11.58	3.05	10% " " " " "				25	0.4	
42074		11.58 - 12.59	1.01	85% recovery, sheared 15° to C.A.				40	0.4	

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 1, 1988	AZIMUTH	243°	LOGGED BY	ASSAYS	
DRILL HOLE		88-03		DEPTH	99.97 m	DIP	-65°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppm)	
	12.59 - 16.15			Quartz stockwork, silicified zone; contact 65° to C.A., milky white-dark grey blue barren quartz with silicified pale lime green zone						
42075		12.59 - 13.11	0.52	35-40% quartz stockwork intruding pale lime green silicified host, trace - <1% v.f.g. diss. pyrite				*.001	*.03	
42076		13.11 - 13.72	0.61	10-15% quartz stockwork intruding pale lime green silicified host				*.002	*trac	
42077		13.72 - 14.32	0.60	50% recovery, pale green silicified zone				*.002	*.07	
42078		14.32 - 16.15	1.83	25% recovery, pale green silicified zone				*.004	*.01	
	16.15 - 35.36			Lithic-crystal tuff as 2.74 - 12.59 m						
42079		16.15 - 17.68	1.53	15% recovery, contact with silicified zone				*.008	*.01	
42080		17.68 - 19.35	1.67	85% recovery				*.004	*.03	
42081		19.35 - 20.73	1.38	85% recovery				30	0.4	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 1, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-03</u>		DEPTH <u>99.97 m</u>		DIP <u>-65°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42082		20.73 - 22.55	1.82	30% recovery	180	0.5	
42083		22.55 - 24.99	2.44	25% recovery	810	0.8	
42084		24.99 - 26.82	1.83	75% recovery	30	0.5	
42085		26.82 - 28.95	2.13	55% recovery	50	0.7	
42086		28.95 - 31.08	2.13	65% recovery, well sheared at 28.95 - 29.26 m	50	0.6	
42087		31.08 - 32.31	1.23	75% recovery	40	0.6	
42088		32.31 - 32.92	0.61	85% recovery	110	0.7	
42089		32.92 - 34.75	1.83	45% recovery, 10-15% quartz stockwork with trace - 1% tetrahedrite mismatch @ 34.75 m	*.002	*.19	
42090		34.75 - 35.36	0.61	75% recovery, clay & gouge at 34.75 m	*.004	*.08	
	35.36 - 37.18			Quartz stockwork, silicified zone as 12.59 - 16.15			

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 1, 1988 AZIMUTH 243° LOGGED BY _____
 DRILL HOLE 88-03 DEPTH 99.97 m DIP -65°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppb)
42091		35.36 - 36.27	0.91	60% recovery, white-dark grey quartz stockwork (20-25%) in silicified pale lime green host, stockwork carries 1-2% magnetite & trace tetrahedrite with minor calcite	*.004	*.03
42092		36.27 - 37.18	0.91	95% recovery; 10-15% quartz stockwork in silicified host gouge at 36.82 - 36.94 m	*trace	*tra
	37.18 - 99.97			Lithic-crystal tuff as 2.74 - 12.59 m		
42093		37.18 - 37.79	0.61	75% recovery, gouge at 37.49 - 37.79 m	*.001	*.02
42094		37.79 - 38.71	0.92	85% recovery, gouge at 38.25 - 38.40 m	*trace	*.02
42095		38.71 - 39.93	1.22	85% recovery, gouge at 39.47 - 39.62 m	*.001	*0.8
42096		39.93 - 40.99	1.06	85% recovery, gouge at 40.84 - 40.99 m	*trace	*tra
42097		40.99 - 42.06	1.07	85% recovery	*trace	*tra
42098		42.06 - 43.58	1.52	85% recovery	60	0.5

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 1, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-03</u>		DEPTH <u>99.97 m</u>		DIP <u>-65°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42099		43.58 - 44.96	1.38	90% recovery, fault gouge @ 44.56 & 44.96	30	0.6	
42100		44.96 - 46.02	1.06	85% recovery, well sheared, calcareous, intense sericitic alt.	*.002	*.04	
42101		46.02 - 46.94	0.92	85% recovery, well sheared 35° to C.A., intense clay alt.	*.001	*.10	
42102		46.94 - 47.55	0.61	85% recovery, well sheared, intense clay (ser) alt.	*.001	*.02	
42103		47.55 - 48.46	0.91	85% recovery, moderate-strong clay alt. with calcite vein/veinlet	*.003	*trac	
42104		48.46 - 49.38	0.92	85% recovery, well silicified	*.002	*.03	
42105		49.38 - 50.75	1.37	85% recovery, well silicified, very calcareous, 3-5% f.g. pyrite	*.001	*trac	
42106		50.75 - 51.81	1.06	85% recovery, well sheared, gouge @ 51.54 - 51.81 m, 3-5% f.g. py.	*.002	*.03	
42107		51.81 - 53.03	1.22	85% recovery, intense clay alt., 10-15% f.g.-c.g. diss. pyrite	*.004	*trac	
42108		53.03 - 53.95	0.92	" " " "	260	0.5	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 1, 1988</u>	AZIMUTH <u>243°</u>	LOGGED BY _____		
DRILL HOLE <u>88-03</u>		DEPTH <u>99.97 m</u>	DIP <u>-65°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42109		53.95 - 54.86	0.91	50% recovery, crushed core, 30-35% barren quartz-calcite stockwork	*.003	*tra
42110		54.86 - 56.08	1.22	30% recovery, crushed core, 20-25% barren quartz-calcite stockwork	*.004	*.04
42111		56.08 - 56.69	0.61	80% recovery, gouge at 56.23 - 56.39 m, barren quartz stockwork with chlorite	*.005	*.03
42112		56.69 - 57.30	0.61	80% recovery well sheared, strong chloritic clay alt.	*.003	*.02
42113		57.30 - 58.21	0.91	85% recovery, very blocky core, 15-20% barren quartz & cal stockwork	*.004	*.01
42114		58.21 - 59.13	0.92	" " " "	*.002	*tra
42115		59.13 - 59.89	0.76	85% recovery, gouge at 59.13 - 59.74	*.001	*.04
42116		59.89 - 61.41	1.52	85% recovery, shear zone at 60.80 - 61.26 m	*trace	*0.3
42117		61.41 - 62.33	0.92	85% recovery, gouge at 61.72 - 62.08 m, sheared 30° to C.A.	*.003	*.03
42118		62.33 - 63.09	0.76	95% recovery, calcareous, weak clay alt	325	0.9

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 1, 1988	AZIMUTH	243°	LOGGED BY	ASSAYS	
DRILL HOLE		88-03		DEPTH	99.97 m	DIP	-65°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppb)	
42119		63.09 - 64.00	0.91	95% recovery, calcareous, weak clay alt., moderately silicified				*.003	*.05	
42120		64.00 - 65.22	1.22	" " " "				*.011	*0.4	
42121		65.22 - 66.75	1.53	90% recovery, extremely calcareous				100	1.0	
42122		66.75 - 68.27	1.52	" " , gouge @ 69.66 - 67.8 m				100	0.7	
42123		68.27 - 69.19	0.92	" " , layered 50-55° C.A.				45	0.8	
42124		69.19 - 70.41	1.22	" "				300	0.5	
42125		70.41 - 71.62	1.21	" " , gouge @ 71.17 - 71.62				70	0.9	
42126		71.62 - 73.00	1.38	" " , 5-7% barren quartz & cal veinlets				10	0.5	
42127		73.00 - 73.76	0.76	85% recovery, very blocky, shattered core				100	0.2	
42128		73.76 - 74.67	0.91	60% recovery, (no recovery at 73.76 - 74.06 m) clay seam, 10-15% quartz & calcite veinlets				20	0.5	

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 1, 1989</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-03</u>		DEPTH <u>99.97 m</u>		DIP <u>-65°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppb)	
42129		74.67 - 75.89	1.22	90% recovery, intense clay alt., well sheared	nil	0.5	
42130		75.89 - 76.81	0.92	90% recovery, calcareous	nil	0.3	
42131		76.81 - 78.02	1.21	90% recovery, calcareous	10	0.3	
42132		78.02 - 78.94	0.92	" " "	10	0.5	
42133		78.94 - 80.16	1.22	" " " , 20-25% quartz & calcite stockwork, trace c.g. diss. galena, strong clay alt.	*.001	*.02	
42134		80.16 - 80.77	0.61	90% recovery, extremely calcareous, strong clay alt.	10	0.5	
42135		80.77 - 81.83	1.06	90% recovery, well sheared with 15-20% quartz and calcite stockwork.	*trace	*.01	
42136		81.83 - 83.36	1.53	90% recovery, well sheared calcareous	70	0.5	
42137		83.36 - 84.43	1.07	" " "	65	0.5	
42138		84.43 - 85.64	1.21	" " " , 7-10% barren qtz & cal stwk	10	0.2	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 1, 1988</u>		AZIMUTH <u>243°</u>		LOGGED BY _____	
DRILL HOLE <u>88-03</u>		DEPTH <u>99.97 m</u>		DIP <u>-65°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42139		85.64 - 86.71	1.07	85% recovery, 7-10% barren quartz & calcite stockwork	*.003	*.02	
42140		86.71 - 87.78	1.07	- 85% recovery	*.001	*trac	
42141		87.78 - 89.15	1.37	90% recovery, intense clay (ser) alt., 10-15% quartz stockwork	*.001	*.15	
42142		89.15 - 90.83	1.68	90% recovery, intense clay (ser) alt., 3-5% qtz stringers, gouge @ 90.37 - 90.83 m	*.003	*trac	
42143		90.83 - 91.74	0.91	90% recovery, intense clay alt., gouge 90.83 - 91.74, 7-10% qtz stwk	*.008	*trac	
42144		91.74 - 92.65	0.91	90% recovery, shear/gouge zone, intense clay alt.	*.002	*.01	
42145		92.65 - 93.42	0.77	90% recovery, 10-15% quartz & calcite stockwork with 3-5% py veinlets	*.003	*trac	
42146		93.42 - 94.18	0.76	90% recovery, gouge/shear zone with 5-7% diss. pyrite	*.003	*trac	
42147		94.18 - 95.09	0.91	" " 2-3% diss. pyrite	*.003	*.04	
42148		95.09 - 95.85	0.76	90% recovery, " "	*.003	*.05	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 5, 1988 AZIMUTH 222° LOGGED BY _____
 DRILL HOLE 88-04 DEPTH 155.44 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
	0 - 3.35			Casing: fractured o/c, very schistose		
	3.35 - 155.44			Lithic-crystal tuff, pale grey to dark green 3-10 mm laminated layers of tuffaceous sediments and ash flows, minor lithic frag. with minor plagioclase & mafic (chloritic alt) crystals, laminated 30-40° to C.A., weakly silicified with weak-moderate sericite & chlorite (clay) alt. associated with calcite sweats (alteration), trace - <1% f.g. diss. pyrite, minor graphitic layers		
42152		3.35 - 4.57	1.22	- 50% recovery, schistose, friable, strong lim. ox	25	0.5
42153		4.57 - 5.64	1.07	85% recovery, 7-10% quartz & calcite (barren) vein 1-2 cm wide	*.002	*.01
42154		5.64 - 6.25	0.61	95% recovery	*.001	*.01
42155		6.25 - 6.86	0.61	95% recovery, 10-15% quartz & calcite (barren) stockwork	*.003	*.01
42156		6.68 - 8.08	1.22	50% recovery, gouge @ 6.95 - 8.08 m	10	0.4
42157		8.08 - 9.69	1.61	75% recovery, blocky	55	0.5

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Au (ppb)	Ag (ppm)	
42158		9.69 - 11.28	1.59	75% recovery, blocky, 10-15% barren quartz stockwork	10	0.4	
42159		11.28 - 12.19	0.91	75% recovery, blocky, 30-35% mottled quartz & calcite stockwork	*trace	*.14	
42160		12.19 - 12.95	0.76	85% recovery, shattered, schistose core	10	0.3	
42161		12.95 - 14.32	1.37	85% recovery, calcareous	30	0.5	
42162		14.32 - 15.70	1.38	85% recovery, calcareous	20	0.5	
42163		15.70 - 16.92	1.22	85% recovery, calcareous weakly-moderately silicified	*.024	*0.10	
42164		16.92 - 18.29	1.37	75% recovery, calcareous well silicified	*.006	*.04	
42165		18.29 - 19.66	1.37	75% recovery, blocky	270	0.6	
42166		19.66 - 20.12	0.46	75% recovery, blocky	30	0.6	
42167		20.12 - 21.03	0.91	50% recovery, blocky, silicified, 7-10% quartz stockwork	*.008	*.09	

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 5, 1988 AZIMUTH 222° LOGGED BY _____
 DRILL HOLE 88-04 DEPTH 155.44 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42168		21.03 - 22.55	1.52	85% recovery, blocky, calcareous	145	0.7
42169		22.55 - 24.38	1.83	85% recovery, blocky, calcareous	10	0.5
42170		24.38 - 25.91	1.53	" " "	45	0.6
42171		25.91 - 27.43	1.52	" " "	20	0.5
42172		27.43 - 28.19	0.76	65% recovery	20	0.6
42173		28.19 - 30.02	1.83	70% recovery	15	0.3
42174		30.02 - 30.48	0.46	85% recovery	10	0.4
42175		30.48 - 32.15	1.67	35% recovery, gouge @ 30.78 - 31.39 m, 10-15% barren qtz vein	120	0.7
42176		32.15 - 33.53	1.38	85% recovery, very calcareous, silicified	*.001	*.02
42177		33.53 - 34.44	0.91	75% recovery, gouge @ 33.53 - 33.68 m	20	0.3

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 5, 1988	AZIMUTH	222°	LOGGED BY		
DRILL HOLE		88-04		DEPTH	155.44 m	DIP	-45°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS					
					Au (ppb)	Ag (ppm)				
42178		34.44 - 35.81	1.37	90% recovery, graphitic, calcareous	10	0.2				
42179		35.81 - 37.03	1.22	95% recovery, gouge @ 36.12 m & 36.60 m	5	0.4				
42180		37.03 - 38.10	1.07	95% recovery	70	0.3				
42181		38.10 - 39.01	0.91	95% recovery, graphitic calcareous, 1-2 cm barren quartz veins	*.001	*.01				
42182		39.01 - 39.93	0.92	85% recovery, gouge @ 39.77 m	15	0.4				
42183		39.95 - 41.45	1.52	95% recovery, calcareous	70	0.5				
42184		41.45 - 42.21	0.76	95% recovery, calcareous, moderate-strong clay alter.	250	0.8				
42185		42.21 - 42.97	0.76	" " "	15	0.3				
42186		42.97 - 44.19	1.22	" " "	60	0.1				
42187		44.19 - 45.41	1.22	" " " , sheared	35	0.3				
				45 - 50° to C.A.						

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 5, 1988 AZIMUTH 222° LOGGED BY _____
 DRILL HOLE 88-04 DEPTH 155.44 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppb)
42188		45.51 - 46.78	1.37	- 85% recovery calcareous, gouge @ 46.48 - 46.63 m	100	0.4
42189		46.78 - 47.70	0.92	- 85% recovery calcareous, gouge @ 46.63 - 46.88 m	165	0.7
42190		47.70 - 48.92	1.22	- 85% recovery calcareous with 3-5% fine-grained disseminated py	*.001	*tr
42191		48.92 - 49.68	0.76	- 85% recovery 5-7% disseminated py	*.003	*tr
42192		49.68 - 50.44	0.76	- 75% recovery blocky, intense clay alt.	250	0.6
42193		50.44 - 51.97	1.53	- 85% recovery blocky, intense clay alt.	195	1.0
42194		51.97 - 52.88	0.91	- 95% recovery intense clay alt., gouge	55	0.7
42195		52.88 - 54.25	1.37	- 95% recovery calcareous + quartz sweats	180	0.6
42196		54.25 - 55.17	0.92	- 95% recovery calcareous and moderate silicified, laminated 60° to C.A.	175	0.6
42197		55.17 - 55.93	0.76	- 95% recovery calcareous gouge @ 55.68 m	650	0.9

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42198		55.93 - 56.99	1.06	- 85% recovery, gouge/sheared	610	1.0	
42199		56.99 - 58.06	1.07	- 85% recovery calcareous + quartz sweats	50	0.9	
42200		58.06 - 59.13	1.07	- 85% recovery calcareous	30	0.6	
42201		59.13 - 60.04	0.91	- 85% recovery calcareous	155	1.2	
42202		60.04 - 61.41	1.37	- 85% recovery calcareous, sheared	60	1.1	
42203		61.41 - 62.48	1.07	- 85% recovery calcareous, sheared	30	1.2	
42204		62.48 - 63.40	0.92	-85% recovery calcareous, sheared	100	2.0	
42205		63.40 - 64.77	1.37	- 85% recovery calcareous, sheared intense clay alt.	10	1.0	
42206		64.77 - 66.14	1.37	- 85% recovery graphitic (beginning at large fault zone)	40	0.7	
42207		66.14 - 67.05	0.91	- 65% recovery calc decomposed rock, extreme clay alt, 3-5% py	160	1.6	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 5, 1988		AZIMUTH	222°		LOGGED BY	
DRILL HOLE		88-04		DEPTH	155.44 m		DIP	-45°		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppb)		
42208		67.05 - 68.73	1.68	- 60% recovery calc decomposed rock, extreme clay alt, 3-5% py				60	1.1		
42209		68.73 - 69.34	0.61	- 75% recovery calc decomposed rock, extreme clay alt				15	0.3		
42210		69.34 - 69.95	0.61	- 85% recovery calc decomposed rock, extreme clay alt				10	0.3		
42211		69.95 - 71.32	1.37	- 85% recovery calc decomposed rock, extreme clay alt				10	0.4		
42212		71.32 - 71.93	0.61	- 85% recovery calc decomposed rock, extreme clay alt				10	0.5		
42213		71.93 - 72.69	0.76	- 85% recovery calc decomposed rock, extreme clay alt				10	0.5		
42214		72.69 - 73.45	0.76	- 85% recovery calc decomposed rock, extreme clay alt				10	0.8		
42215		73.45 - 74.67	1.22	- 85% recovery calc decomposed rock, extreme clay alt, very graphitic				nil	0.7		
42216		74.67 - 75.28	0.61	- 85% recovery calc decomposed rock (end of large fault zone), sheared 55° to C.A.				nil	0.3		
42217		75.28 - 75.89	0.61	- 90% recovery, strong-intense clay alt				nil	0.2		

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY	
Mt. Madge C-10 Grid		August 5, 1988		222°			
DRILL HOLE		DEPTH		DIP		ASSAYS	
88-04		155.44 m		-45°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppb)	
42218		75.89 - 76.81	0.92	- 90% recovery, strong-intense clay alt	nil	0.1	
42219		76.81 - 77.57	0.76	- 90% recovery, moderate clay alt, calcareous	nil	0.2	
42220		77.57 - 78.33	0.76	- 90% recovery, moderate clay alt, calcareous	5	0.2	
42221		78.33 - 79.09	0.76	- 90% recovery weak-moderate clay alt, calcareous	nil	0.1	
42222		79.09 - 79.85	0.76	- 90% recovery weak-moderate clay alt, calcareous	nil	0.2	
42223		79.85 - 80.62	0.77	- 90% recovery weak-moderate clay alt, calcareous	nil	nil	
42224		80.62 - 81.38	0.76	- 90% recovery weak-moderate clay alt, calcareous	nil	0.2	
42225		81.38 - 82.14	0.76	- 90% recovery weak-moderate clay alt, calcareous	nil	0.2	
42226		82.14 - 82.90	0.76	- 90% recovery weak-moderate clay alt, calcareous	nil	0.3	
42227		82.90 - 83.82	0.92	- 90% recovery weak-moderate clay alt, calcareous	nil	0.3	

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>	AZIMUTH <u>222°</u>	LOGGED BY _____		
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42228		83.82 - 84.73	0.91	- 90% recovery weak-moderate clay alt, calcareous	nil	0.3
42251		84.73 - 85.64	0.91	- 90% recovery weak-moderate clay alt, calcareous	30	0.3
42229		85.64 - 86.41	0.77	- 90% recovery weak-moderate clay alt, calcareous	nil	0.3
42230		86.41 - 87.17	0.76	- 90% recovery weak-moderate clay alt, very calcareous	nil	0.3
42231		87.17 - 87.93	0.76	- 90% recovery weak-moderate clay alt, very calcareous	nil	0.3
42232		87.93 - 88.69	0.76	- 90% recovery weak-moderate clay alt, very calcareous	nil	0.3
42233		88.69 - 89.61	0.92	- 90% recovery weak-moderate clay alt, very calcareous	nil	0.3
42234		89.61 - 90.52	0.91	- 90% recovery weak-moderate clay alt, very calcareous	20	0.3
42235		90.52 - 91.44	0.92	- 90% recovery weak-moderate clay alt, very calcareous	20	0.3
42236		91.43 - 92.20	0.77	- 90% recovery, well silicified, strong clay alt, very calcareous	nil	0.2

E.R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppb)	
42237		92.20 - 92.96	0.76	- 90% recovery, weakly silicified, strong clay alt, very calcareous	10	0.3	
42238		92.96 - 93.87	0.91	- 90% recovery, weakly silicified, strong clay alt, very calcareous	15	0.3	
42239		93.87 - 94.79	0.92	- 90% recovery, well silicified, strong clay alt, very calcareous	10	0.2	
42240		94.79 - 95.55	0.76	- 90% recovery, moderately silicified, strong clay alt, very calcareous	nil	0.2	
42241		95.55 - 96.46	0.91	- 90% recovery, well silicified + calcareous	5	0.2	
42242		96.46 - 96.92	0.46	- 90% recovery, well silicified + calcareous	nil	0.1	
42243		96.92 - 97.84	0.92	- 90% recovery, well silicified + calcareous	nil	0.1	
42244		97.84 - 98.75	0.91	- 90% recovery, well silicified + calcareous	nil	0.2	
42245		98.75 - 99.51	0.76	- 90% recovery, well silicified	10	0.2	
42246		99.51 - 100.27	0.76	- 90% recovery, blocky core	20	0.3	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>	AZIMUTH <u>222°</u>	LOGGED BY _____		
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>	DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42247		100.27 - 100.88	0.61	- 90% recovery, blocky core	nil	0.2
42248		100.88 - 101.49	0.61	- 90% recovery, gouge @ 100.88 - 101.13 m	10	0.3
42249		101.49 - 102.26	0.77	- 90% recovery, blocky core	20	0.3
42250		102.26 - 103.02	0.76	- 90% recovery, gouge @ 102.77 - 103.02 m	25	0.3
42295		103.02 - 104.08	1.06	- 90% recovery, weakly silicified calcareous	10	0.2
42296		104.08 - 105.15	1.07	- 90% recovery, weakly alt.	5	0.3
42297		105.15 - 106.06	0.91	-90% recovery, moderate-strong calcite + quartz stringers 10-15%	nil	0.2
42298		106.06 - 106.83	0.77	- 90% recovery, weak calcite + quartz stringers 3-5%	10	0.2
42299		106.83 - 107.59	0.76	- 90% recovery, weak calcite + quartz stringers 3-5%	5	0.4
42300		107.59 - 108.35	0.76	- 90% recovery, weakly-moderate silicified with 7-10% qtz + cal strgs	10	0.3

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppb)	
42301		108.35 - 109.11	0.76	- 90% recovery, weakly-moderate sil'ed with 7-10% qtz + cal stringers	10	0.3	
42302		109.11 - 110.18	1.07	- 90% recovery, strongly sil'ed 25-30% qtz cal stringers	nil	0.2	
42303		110.18 - 111.25	1.07	- 90% recovery, moderate-strongly sil'ed 15-20% qtz + cal stringers	10	0.2	
42304		111.25 - 112.16	0.91	- 90% recovery, strong clay alt, very calcareous	10	0.3	
42305		112.16 - 113.08	0.92	- 90% recovery, strong clay alt, very calcareous	nil	0.2	
42306		113.08 - 113.84	0.76	- 90% recovery, moderately sil'ed with 10-15% qtz + cal stringers	10	0.3	
42307		113.84 - 114.60	0.76	- 90% recovery, moderately sil'ed with 10-15% qtz + cal stringers	10	0.2	
42308		114.60 - 115.51	0.91	- 90% recovery, moderately sil'ed with 7-10% qtz + cal stringers	10	0.3	
42309		115.51 - 116.28	0.77	- 90% recovery, weakly silicified with 5-7% qtz + cal stringers	5	0.4	
42310		116.28 - 117.04	0.76	- 90% recovery, weakly silicified with 5-7% qtz + cal stringers	10	0.5	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS		
					Av (ppb)	Ag (ppm)	
42311		117.04 - 117.95	0.91	- 90% recovery, weakly silicified, well sheared minor gouge	5	0.3	
42312		117.95 - 119.02	1.07	- 90% recovery, weakly silicified, well sheared with gouge	10	0.3	
42313		119.02 - 120.09	1.07	- 90% recovery, weakly silicified, well sheared with gouge	5	0.3	
42314		120.09 - 121.30	1.21	- 90% recovery, weakly silicified, well sheared with gouge	nil	0.3	
42315		121.30 - 122.52	1.22	- 90% recovery, weakly silicified, well sheared with gouge	10	0.3	
42316		122.52 - 123.44	0.92	- 90% recovery, moderately silicified	10	0.3	
42317		123.44 - 124.35	0.91	- 90% recovery, weakly silicified	15	0.3	
42318		124.35 - 125.11	0.76	- 90% recovery, moderately-strongly silicified	5	0.3	
42319		125.11 - 125.88	0.77	- 90% recovery, gouge	5	0.3	
42320		125.88 - 126.64	0.76	- 90% recovery, sheared/foliated 40° to C.A.	nil	0.3	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42321		126.64 - 127.40	0.76	- 90% recovery, sheared, weakly silicified	nil	0.3	
42322		127.40 - 128.16	0.76	- 90% recovery, sheared, decomposed, intense clay alt	nil	0.2	
42323		128.16 - 128.92	0.76	- 90% recovery, sheared, decomposed, intense clay alt	15	0.3	
42324		128.92 - 129.84	0.92	- 90% recovery	5	0.4	
42325		129.84 - 130.75	0.91	- 90% recovery, sheared with 5-7% quartz stockwork	nil	0.2	
42326		130.75 - 131.67	0.92	- 90% recovery, weakly silicified, dacitic crystal ash flow tuff	5	0.3	
42327		131.67 - 132.58	0.91	- 90% recovery, weakly silicified, dacitic crystal ash flow tuff	nil	0.4	
42328		132.58 - 133.50	0.92	- 90% recovery, weakly silicified, dacitic crystal ash flow tuff	nil	0.4	
42329		133.50 - 134.25	0.75	- 90% recovery, 3-5% qtz + cal veinlets	nil	0.2	
42330		134.25 - 135.32	1.07	- 90% recovery, dacitic crystal ash flow tuff	5	0.4	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt Madge C-10 Grid</u>		DATE <u>August 5, 1988</u>		AZIMUTH <u>222°</u>		LOGGED BY _____	
DRILL HOLE <u>88-04</u>		DEPTH <u>155.44 m</u>		DIP <u>-45°</u>		ASSAYS	
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	Au (ppb)	Ag (ppm)	
42331		*135.32 - 136.24	0.92	- 90% recovery, 3-5% qtz + cal veinlets	5	0.3	
42332		136.24 - 137.15	0.91	- 90% recovery, sheared, gouge @ 136.73 - 136.91 m	nil	0.4	
42333		137.15 - 138.22	1.07	- 90% recovery, moderately-strong quartz + calcite + epidote alt	nil	0.4	
42334		138.22 - 139.13	0.91	- 90% recovery, moderate-strong quartz + calcite + epidote alt	10	0.4	
42335		139.13 - 140.51	1.38	- 90% recovery, intense quartz + calcite alt, well silicified	10	0.4	
42336		140.51 - 141.27	0.76	- 90% recovery, moderate quartz + calcite alt, shattered core	5	0.4	
42337		141.27 - 142.03	0.76	- 90% recovery, 8-10 cm barren qtz vein @ 141.57 - 141.63 m	nil	0.3	
42338		142.03 - 142.94	0.91	- 90% recovery, moderate calcite + quartz veinlets	5	0.5	
42339		142.94 - 143.86	0.92	- 90% recovery, weak calcite + quartz veinlets	nil	0.4	
42340		143.86 - 144.77	0.91	- 75% recovery, 5-7% barren quartz vein, well silicified	30	0.3	

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		Mt Madge C-10 Grid		DATE	August 5, 1988	AZIMUTH	222°	LOGGED BY	ASSAYS	
DRILL HOLE		88-04		DEPTH	155.44 m	DIP	-45°		Au (ppb)	Ag (ppm)
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppm)	
42341		144.77 - 145.38	0.61	- 90% recovery, 2-3% coarse-grained disseminated pyrite				30	0.4	
42342		145.38 - 146.30	0.92	- 85% recovery, intense chlorite alt, strong cal alt sil'ed fragments				10	0.4	
42343		146.30 - 147.21	0.83	- 85% recovery, intense chlorite alt, strong cal alt sil'ed fragments				5	0.4	
42344		147.21 - 148.28	1.07	- 85% recovery, intense chlorite alt, strong cal alt sil'ed fragments				nil	0.4	
42345		148.28 - 149.34	1.06	- 90% recovery, intense chlorite alt, strong cal alt sil'ed fragments				10	0.4	
42346		149.34 - 150.11	0.77	- 90% recovery, moderate chlorite alt, strong cal alt sil'ed fragments				10	0.3	
42347		150.11 - 150.87	0.76	- 90% recovery, intense epidote + quartz + calcite alt				5	0.4	
42348		150.87 - 151.63	0.76	- 90% recovery, weak quartz + calcite + epidote alt				10	0.4	
42349		151.63 - 152.39	0.76	- 90% recovery, strong epidote alt cal vein @ 152.24 - 152.39				5	0.4	
42350		152.39 - 153.15	0.76	- 90% recovery, strong calcite alt (sweats)				15	0.4	

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY	
Mt Madge C-10 Grid		August 12, 1988		222°			
DRILL HOLE		DEPTH		DIP		ASSAYS	
88-05		48.16 m		-65°		Au (ppb)	Ag (ppm)
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION			
	0 - 3.35			Casing; overburden and fractured o/c			
	1.52 - 15.18			Crystal-lithic ash flow tuff, pale-dark grey green, finely laminated 1-3 mm layers 35° to C.A., moderately calcareous 5-7°, weak lim. ox. along fracture planes, trace - 2% diss. f.g.-c.g. pyrite, weakly- moderately silicified			
42354		1.52 - 3.35	1.83	- 50% recovery		60	0.6
42355		3.35 - 4.42	1.07	- 90% recovery		25	0.7
42356		4.42 - 5.49	1.07	- 90% recovery		15	0.6
42357		5.49 - 6.40	0.91	- 85% recovery		20	0.6
42358		6.40 - 7.47	1.07	- 85% recovery		15	1.5
42359		7.47 - 8.84	1.37	- 60% recovery		20	2.0
42360		8.84 - 9.75	0.91	- 50% recovery well sheared, schistose		415	0.9

E. R. KRUCKOWSKI CONSULTING LTD.

PROPERTY		Mt. Madge C-10 Grid		DATE	August 12, 1988	AZIMUTH	222°	LOGGED BY	ASSAYS	
DRILL HOLE		88-05		DEPTH	48.16 m	DIP	-65°			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION				Au (ppb)	Ag (ppm)	
42361		9.75 - 10.97	1.22	- 30% recovery well sheared, schistose				25	0.8	
42362		10.97 - 12.19	1.22	- 30% recovery blocky				10	0.7	
42363		12.19 - 14.17	1.98	- 25% recovery blocky & schistose				80	0.7	
42364		14.17 - 15.18	1.01	25% recovery blocky & schistose, strong lim. ox.				*.032	1.0	
	15.18 - 17.37			Silicified quartz stockwork zone; pale lime green intensely silicified host with 15-20% quartz stockwork with trace - 1% diss. py, blocky						
42365		15.18 - 16.15	0.97	- 50% recovery				195	0.4	
42366		16.15 - 17.37	1.22	- 60% recovery				nil	0.1	
	17.37 - 32.92			Crystal-lithic, ash flow tuff as 5 - 49.8m						
42367		17.37 - 18.29	0.92	- 85% recovery, 3-5% layered f.g. pyrite				420	0.9	
42368		18.29 - 19.20	0.91	" " "				350	0.9	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY <u>Mt. Madge C-10 Grid</u>		DATE <u>August 12, 1988</u>	AZIMUTH <u>222°</u>	LOGGED BY _____		
DRILL HOLE <u>88-05</u>		DEPTH <u>48.16 m</u>	DIP <u>-65°</u>			
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42369		19.20 - 19.81	0.61	- 65% recovery	50.48	1.4
42370		19.81 - 20.73	0.92	55% recovery	135	0.7
42371		20.73 - 21.94	1.21	- 10% recovery, 3-5 cm wide barren quartz vein	105	0.6
42372		21.94 - 22.86	0.94	65% recovery	35	0.6
42373		22.86 - 23.77	0.91	- 30% recovery	50	0.5
42374		23.77 - 24.69	0.92	- 80% recovery	40	0.7
42375		24.69 - 25.45	0.76	- 80% recovery	20	0.7
42376		25.45 - 26.21	0.76	- 70% recovery	15	0.7
42377		26.21 - 26.82	0.61	- 80% recovery	25	1.0
42378		26.82 - 28.04	1.22	- 15% recovery	30	0.8

PROPERTY		Mt. Madge C-10 Grid		DATE	August 12, 1988	AZIMUTH	222°	LOGGED BY	ASSAYS	
DRILL HOLE		88-05		DEPTH	48.16 m	DIP	-65°		Au (ppb)	Ag (ppm)
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION						
42379		28.04 - 29.26	1.22	- 50% recovery					20	0.7
42380		29.26 - 30.78	1.52	- 70% recovery					80	1.0
42381		30.78 - 32.92	2.14	- 50% recovery					15	0.8
	32.92 - 35.65			Quartz stockwork zone; white quartz & minor smokey quartz predominate						
				barren with minor 3-5% chl., 35-40% stockwork in tuffaceous host,						
				fault gouge @ 34.82 - 34.75 m, 1-2% diss. pyrite						
42382		32.92 - 34.14	1.22	- 50% recovery					nil	0.4
42383		34.14 - 34.90	0.76	- 65% recovery					110	1.0
42384		34.90 - 35.66	0.76	- 50% recovery					nil	0.3
	35.66 - 48.16			Crystal-lithic, ash flow tuff as 1.52 - 15.18 m						
42385		35.66 - 36.42	0.76	- 65% recovery, sheared with strong clay alt.					10	0.7

E. R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY	
Mt. Madge C-10 Grid		August 12, 1988		222°			
DRILL HOLE		DEPTH		DIP		ASSAYS	
88-05		48.16 m		-65°		Au (ppb)	Ag (ppm)
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION			
42386		36.42 - 37.18	0.76	- 65% recovery, gouge @ 36.76 - 36.88 m	15	1.3	
42387		37.18 - 38.10	0.92	- 90% recovery, moderate-strong clay alt.	40	2.5	
42388		38.10 - 39.01	.91	- 85% recovery	30	0.7	
42389		39.01 - 40.23	1.22	- 90% recovery; gouge @ 39.77 - 39.84 m	20	0.4	
42390		40.23 - 41.45	1.22	- 90% recovery, well silicified	110	0.9	
42391		41.45 - 42.37	0.92	- 90% recovery, crushed, shear zone; 5-7% P ₀ , 3-5% pyrite, 10-15% quartz stockwork	570	5.9	
42392		42.37 - 43.58	1.21	- 50% recovery, minor 1-2 cm wide 3-5% barren quartz & cal. veinlet	60	1.0	
42393		43.58 - 44.65	1.07	- 85% recovery, 15-20% barren quartz & calcite stockwork, 2-3% diss. pyrite in intense clay alt. host	nil	0.3	
42394		44.65 - 46.78	2.13	- 15% recovery, sericite schist, 5-7% diss. pyrite	15	0.4	

E.R. KRUCHKOWSKI CONSULTING LTD.

PROPERTY		DATE		AZIMUTH		LOGGED BY	
Mt. Madge C-10 Grid		August 12, 1988		356°			
DRILL HOLE		DEPTH		DIP		ASSAYS	
88-06		99.97		-45°		Au (ppb)	Ag (ppb)
SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION			
	0 - 12.80			Casing; overburden and fractured o/c			
	12.19 - 13.17			Crystal tuff; medium-dark grey-green 7-10% chl. (alt. ox or hbl'd) + plagioclase, 1-2 mm phenocrysts in an andesitic matrix, 1-2% f.g. diss. pyrite			
42396		12.19 - 13.17	0.98	- 90% recovery	nil		0.3
	13.17 - 15.09			sericite schist Quartz stockwork in / host; 40-45% quartz stockwork with 1-2% pyrite + CP, minor mal + az + hydrozincite + intense Mn ox., weak-moderate lim. ox. well fractured, very vuggy quartz			
42397		13.17 - 14.63	1.46	- 20% recovery, shear zone	840		1.3
42398		14.63 - 15.09	0.46	- 85% recovery, shear zone	30		1.7
	15.09 - 25.91			Crystal tuff; as 12.19 - 13.17 m			
42399		15.09 - 17.22	2.13	- 10% recovery	15		0.7

L. K. CHIN, VSI, CONSULTANTS LTD.

PROPERTY Mt Madge C-10 Grid DATE August 12, 1988 AZIMUTH 356° LOGGED BY _____
 DRILL HOLE 88-06 DEPTH 99.97 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42400		17.22 - 17.68	0.46	- 80% recovery, strong Mn ox along fracture planes	45	1.4
42401		17.68 - 18.59	0.91	- 50% recovery, 30-35% quartz stockwork, 3-5% diss. py	30	0.5
42402		18.59 - 19.81	1.22	- 85% recovery	90	1.0
42403		19.81 - 21.33	1.52	- 75% recovery	20	0.6
42404		21.33 - 23.47	2.14	- 40% recovery	10	0.4
42405		23.47 - 25.91	2.44	- 50% recovery	25	0.6
	25.91 - 99.97			Sericite schist; pale grey, strong sericitic alt., schistosity 40-45° to C.A., 3 - 5% diss. pyrite, minor lim. ox. along fracture planes, weakly- moderately calcareous, weakly silicified		
42406		25.91 - 27.74	1.83	- 25% recovery	45	0.5
42407		27.74 - 28.95	1.21	- 90% recovery, fault @ 28.50 - 28.65 m	190	0.6

PROPERTY Mt Madge C-10 Grid DATE August 12, 1988 AZIMUTH 356° LOGGED BY _____
 DRILL HOLE 88-06 DEPTH 99.97 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42408		28.95 - 31.55	2.60	- 85% recovery	105	1.2
42409		31.55 - 33.22	1.67	- 90% recovery	180	3.5
42410		33.22 - 35.51	2.29	- 80% recovery	240	7.0
42411		35.51 - 36.88	1.37	- 90% recovery , weak sericite alt crystals + lithic tuff	75	1.9
42412		36.88 - 38.10	1.22	- 90% recovery , " "	60	1.6
42413		38.10 - 39.01	0.91	- 60% recovery, " "	185	3.5
42414		39.01 - 39.93	0.92	- 90% recovery, weak sericitic alt crystals + lithic tuff	420	2.6
42415		39.93 - 41.30	1.37	" " "	340	5.3
42416		41.30 - 42.21	0.91	- 80% recovery "	225	6.1
42417		42.21 - 43.89	1.68	- 80% recovery; fault gouge @ 43.58 - 43.89 m	80	0.7

PROPERTY Mt Madge C-10 Grid DATE August 12, 1988 AZIMUTH 356° LOGGED BY _____
 DRILL HOLE 88-06 DEPTH 99.97 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42418		43.89 - 46.02	2.13	- 80% recovery; fault gouge @ 43.89 - 44.19 m	60	0.8
42419		46.02 - 48.00	1.98	- 30% recovery; " @ 46.94 - 47.24 m	70	0.5
42420		48.00 - 48.77	0.77	- 85% recovery	95	0.3
42421		48.77 - 51.20	2.43	- 25% recovery	65	0.4
42422		51.20 - 52.12	0.92	- 50% recovery	80	0.5
42423		52.12 - 55.17	3.05	- 20% recovery, mismatch	80	0.6
42424		55.17 - 56.99	1.82	- 85% recovery	55	0.2
42425		56.99 - 58.21	1.22	- 85% recovery	80	0.4
42426		58.21 - 59.28	1.07	- 85% recovery	60	0.2
42427		59.28 - 61.26	1.98	- 90% recovery	105	0.3

E.R. KRUCHNOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 12, 1988 AZIMUTH 356° LOGGED BY _____
 DRILL HOLE 88-06 DEPTH 99.97 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42428		61.26 - 62.79	1.53	- 90% recovery	60	0.4
42429		62.79 - 64.61	1.82	- 70% recovery well sheared	55	0.3
42430		64.61 - 66.14	1.53	" "	145	0.6
42431		66.14 - 68.12	1.98	- 80% recovery	200	0.7
42432		68.12 - 69.49	1.37	- 85% recovery	150	0.7
				No recovery between 69.49 - 70.41 m		
42433		70.41 - 71.93	1.52	- 90% recovery, well silicified	200	1.0
42434		71.93 - 72.84	0.91	" "	70	0.5
42435		72.84 - 74.37	1.53	" "	75	0.3
42437		76.20 - 77.87	1.67	" "	85	0.3

E.R. KRUCHOWSKI CONSULTING LTD.

PROPERTY Mt Madge C-10 Grid DATE August 12, 1988 AZIMUTH 356° LOGGED BY _____
 DRILL HOLE 88-06 DEPTH 99.97 m DIP -45°

SAMPLE NUMBER	GEOLOGICAL INTERVAL	SAMPLE INTERVAL	WIDTH	DESCRIPTION	ASSAYS	
					Au (ppb)	Ag (ppm)
42438		77.87 - 79.24	1.37	- 90% recovery, well silicified	80	0.3
42439		79.24 - 80.62	1.38	- 60% recovery, well silicified	60	0.3
42440		80.62 - 82.90	2.28	" "	70	0.3
42441		82.90 - 84.73	1.83	- 90% recovery, well silicified, very calcareous	75	0.3
42442		84.73 - 85.95	1.22	- 90% recovery	45	0.3
42443		85.95 - 87.47	1.52	- 85% recovery, well sheared	55	0.5
42444		87.47 - 90.67	3.20	- 50% recovery	50	0.6
42445		90.67 - 93.11	2.44	- 50% recovery, 10-15% barren quartz stockwork	70	0.4
42446		93.11 - 94.64	1.53	- 85% recovery, weakly alt. lithic tuff	110	1.1
42447		94.64 - 96.31	1.67	" "	80	0.9

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Date October 12, 1988

Samples Rock

MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

SAMPLE NO.

PPB
Au

PPM
Ag

"Rock Samples"

Geochemical Analysis

BK-88-R-129	10	0.5
130	NIL	0.5
132	5	0.7
133	NIL	0.2
134	NIL	0.3
136	10	0.2

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Subjects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

Date September 25, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

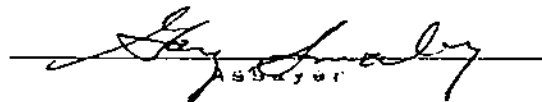
Certificate of Assay LORING LABORATORIES LTD.

Page # 1

SAMPLE NO.	PPB Au	PPM Ag
"Site Samples"		
Geochemical Analysis		
AE-88- 25	30*	0.1
43	25	0.1
49	30	0.2
50	55	1.7
51	50	0.1
53	30	0.2
54	25	0.2
55	30	0.2
57	20	0.1
59	30	0.2
60	20	0.2
66	15	0.2
69	20	0.3
AR-88- 56	20	0.2
58	10	0.1
61	10	0.4
63	15	0.1
65	10	0.3
66	10	0.6
68	100	0.4
69	30	0.3
70	35	0.4
71	30	0.3
73	35	0.3
81	60	0.2
82	50	0.2
DL-88-112	40	0.3
173	15	0.3
175	10	0.3
177	15	0.2

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
re made in advance.


Jack Wyder

255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date September 26, 1988

Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB Au	PPM Ag
DL-88-180	10	0.3
182	50	0.1
183	5	0.1
184	15	NIL
191	5	0.1
200	80	0.3
202	25	0.3
205	20	0.3
206	175	0.3
207	30	0.2
208	15	0.2
209	30	0.2
210	15	0.2
211	35	0.3
TB-88-08	NIL	0.1
11	5	NIL
42	5	NIL
43	5	0.1
44	20	NIL
45	NIL	0.1
46	65	0.2
47	25	0.1
48	430	0.4
50	80	0.3
54	65	0.2
55	55	0.3
56	60	0.3
57	70	0.2
58	25	0.3
59	40	0.2
60	40	0.2
61	NIL	0.2
84	20	0.1

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Reagents retained one month.
Pipets retained one month
Unless specific arrangements
are made in advance.


Analyst

255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

Date September 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	PPB Au	PPM Ag
TS-88- 87	20	0.2
TM-88- 01	5	0.1
04	10	0.4
09	NIL	0.3
11	NIL	0.1
12	NIL	0.1
13	15	0.3
14	NIL	0.1
17	NIL	0.1
18	25	0.2
19	10	0.3
23	20	0.4
24	40	0.1
25	30	0.1
26	25	0.1
30	NIL	0.2
31	10	0.2
32	10	0.2
33	10	0.2
34	30	0.1
35	35	0.2
TD-88- 66	10	0.1
74	NIL	NIL
77	NIL	0.1
80	5	NIL
81	NIL	NIL
JP-88- 83	20	0.1
96	10	NIL
116	NIL	0.1
118	NIL	NIL
128	NIL	NIL
129	NIL	0.1
130	NIL	NIL

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Subjects retained one month.
Culps retained one month
less specific arrangements
made in advance.


Jack Wyder

255 - 17th Avenue S.W.

gary, Alberta T2S 2T8

Date September 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.

PPB
Au

PPM
Ag

JP-88-132
134 i

NIL
NIL

0.1
0.2

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Subjects retained one month.
Culps retained one month
less specific arrangements
made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 1

SAMPLE NO.	PPB Au	PPM Ag
SITE Samples		
Geochemical Analysis		
AE-88- 01	NIL	0.4
02	NIL	0.2
03	NIL	0.4
04	NIL	0.2
05	NIL	0.2
06	50	0.5
07	NIL	0.4
08	NIL	0.4
09	NIL	0.2
13	5	0.6
14	NIL	0.6
15	NIL	0.6
16	NIL	0.5
17	NIL	0.5
18	15	0.6
23	15	0.5
26	NIL	0.6
28	NIL	0.6
29	NIL	0.5
30	NIL	0.5
31	NIL	0.4
32	NIL	0.2
33	NIL	0.2
34	NIL	0.5
35	NIL	0.4
40	NIL	0.4
41	NIL	0.2
42	25	0.2
71	NIL	0.5
AH-88- 01	10	0.6

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer



Jack Wyder

Certificate of Assay

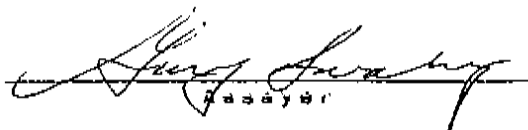
LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB Au	PPM Ag
AH-88- 02	NIL	0.8
03	NIL	0.8
04	NIL	0.6
05	NIL	0.7
06	NIL	0.6
07	NIL	0.6
08	NIL	0.6
10	NIL	0.7
11	NIL	0.7
12	NIL	0.8
13	NIL	0.6
14	45	0.7
15	20	0.5
16	10	0.4
17	20	0.5
18	10	0.5
19	15	0.5
20	5	0.4
21	5	0.5
22	5	0.7
23	NIL	0.5
29	NIL	0.9
AR-88- 50	NIL	0.1
51	NIL	0.6
52	NIL	0.2
53	NIL	0.2
54	NIL	0.3
55	NIL	0.3
57	NIL	0.3
60	NIL	0.6
62	NIL	0.1
64	NIL	0.1
74	160	0.6

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

is retained one month.
is retained one month
as specific arrangements
made in advance.


 Assayer

400, 265 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	PPB Au	PPM Ag
AR-88- 78	65	0.3
79	135	0.3
80	20	0.3
83	50	0.3
84	15	0.3
85	20	0.9
86	NIL	0.9
87	NIL	0.7
88	20	0.6
89	5	0.2
90	NIL	0.2
91	10	0.7
92	5	0.2
93	NIL	0.2
94	15	1.0
DL-88-192	NIL	0.2
193	NIL	0.1
197	NIL	0.4
198	60	0.4
199	20	0.4
201	NIL	0.4
203	10	0.3
204	10	0.4
224	NIL	0.1
225	NIL	0.2
226	NIL	0.2
227	NIL	0.2
228	10	0.2
229	20	0.2
230	5	0.2
231	5	0.1
232	5	0.1
233	20	0.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

Date August 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.	PPB Au	PPM Ag
DL-88-234	NIL	0.2
235	10	0.2
236	20	0.3
237	20	0.3
238	10	0.4
239	790	0.4
240	80	0.5
241	230	0.6
242	5	0.3
TB-88-001	10	0.1
002	NIL	0.1
003	5	NIL
004	NIL	NIL
005	NIL	NIL
006	NIL	0.1
007	NIL	0.2
008	NIL	NIL
012	NIL	0.2
014	NIL	0.1
015	NIL	0.1
016	NIL	0.3
019	NIL	0.2
020	NIL	0.1
021	NIL	NIL
082	NIL	0.2
083	NIL	NIL
085	NIL	0.3
086	NIL	0.1
088	NIL	NIL
089	NIL	0.1
TD-88-01	NIL	1.0
02	NIL	0.9
04	NIL	0.8

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Refracts retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date August 26, 1998
Samples Silt
MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 5

SAMPLE NO.	PPB Au	PPM Ag
TD-88- 05	NIL	0.4
06	NIL	0.7
07	NIL	0.6
08	15	0.6
09	NIL	0.6
10	NIL	0.6
12	NIL	0.2
13	NIL	0.2
14	NIL	0.2
15	NIL	0.3
16	NIL	0.1
17	NIL	0.3
18	NIL	0.1
19	NIL	0.1
20	NIL	0.2
21	NIL	0.1
22	NIL	0.2
23	15	0.1
24	50	NIL
25	40	NIL
26	NIL	0.1
27	60	0.1
28	45	NIL
29	40	0.1
30	NIL	NIL
31	NIL	0.1
32	NIL	0.1
33	NIL	0.2
35	10	0.1
36	NIL	0.1
37	NIL	0.1
39	NIL	0.2
40	NIL	0.1

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

Date August 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder


Certificate of Assay LORING LABORATORIES LTD.

Page # 6

SAMPLE NO.	PPB Au	PPM Ag
TD-88- 41	100	0.2
42	20	0.2
43	10	0.2
44	5	0.3
45	NIL	0.2
46	5	0.2
47	NIL	0.3
48	10	0.2
49	10	0.3
50	5	0.2
51	10	0.1
52	15	0.2
53	20	0.2
54	10	0.4
55	10	0.2
56	20	0.2
57	5	0.1
58	40	0.2
59	NIL	0.2
60	15	0.3
61	NIL	0.2
62	NIL	0.2
63	NIL	0.2
65	NIL	0.1
68	NIL	0.1
70	NIL	0.2
71	NIL	0.1
75	NIL	0.1
JP-88- 30	NIL	0.1
32	NIL	0.1
33	5	0.1
34	10	0.1
35	NIL	0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date August 26, 1988
Samples Silt
MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 7

SAMPLE NO.	PPB Au	PPM Au
JP-88- 38	5	0.3
39	NIL	0.2
41	NIL	0.2
43	NIL	0.2
45	10	0.2
46	10	0.4
47	NIL	0.3
48	15	0.2
49	10	0.4
50	10	0.3
51	15	0.2
52	NIL	0.2
53	10	0.2
54	10	0.1
55	20	0.2
56	10	0.1
57	10	0.1
58	15	0.2
59	20	0.3
67	20	0.3
71	20	0.3
72	15	0.2
74	30	0.2
75	50	0.2
76	10	0.2
77	20	0.1
79	20	0.3
80	20	0.2
81	20	0.2
82	15	0.2
88	10	0.4
89	5	0.3
90	25	0.2

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Date August 29, 1959

Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

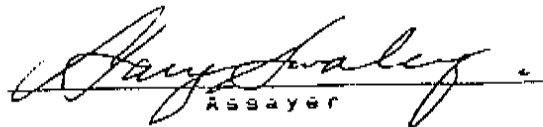
Certificate of Assay LORING LABORATORIES LTD.

Page # 8

SAMPLE NO.	PPB Au	PPM Ag
JP-88- 91	30	0.3
92	10	0.4
93	15	0.4
109	NIL	0.2
110	NIL	0.1
111	NIL	0.1
112	NIL	0.2
113	NIL	0.2
114	NIL	0.2
120	5	0.2
121	NIL	0.3
122	NIL	0.2
123	5	0.2
127	NIL	0.2
131	NIL	0.2

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date August 26, 1988
Samples Silt
MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay

LORING LABORATORIES LTD.

Page # 1

SAMPLE NO.	PPB Au	PPM Ag
"Silt Samples"		
Geochemical Analysis		
AE-88-10	15	0.5
11	15	0.6
12	10	0.4
19	10	0.3
20	20	0.4
21	20	0.3
22	20	0.4
24	10	0.4
27	10	0.4
48	10	0.5
52	20	0.9
56	15	0.6
58	10	0.7
61	60	0.7
62	15	0.6
63	20	0.6
64	15	0.6
65	10	0.7
67	20	0.6
70	5	0.6
72	10	0.4
73	15	0.3
74	5	0.3
75	15	0.6
76	10	0.3
77	5	0.3
AR-88-59	5	1.0
67	50	0.7
72	30	0.7
75	30	0.6

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

To: BIG HORN DEVELOPMENT CORP.,

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8

File No. 31599

Date August 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB	PPM
	AU	Ag
AR-88-76	50	0.7
77	35	0.7
TB-88-10	5	0.4
13	NIL	0.4
17	NIL	0.3
18	NIL	0.4
22	5	0.3
23	10	0.6
24	5	0.2
25	NIL	0.1
26	NIL	NIL
27	NIL	3.8
28	NIL	0.3
29	NIL	0.1
30	NIL	0.2
31	5	0.2
32	5	0.2
33	5	0.1
34	NIL	0.3
35	NIL	0.5
36	NIL	0.4
37	NIL	1.4
38	NIL	0.1
39	5	0.2
40	235	0.1
41	75	0.2
51	10	0.2
52	NIL	0.3
53	25	0.3
60	NIL	0.4
61	25	0.4
63	5	0.4
64	10	0.4

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Rejects retained one month.
Pulpa retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date August 26, 1988
Samples Silt
MT. MADGE PROJECT

ATTN: Jack Wyder

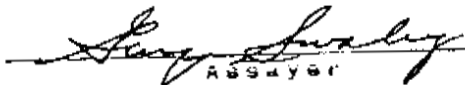
Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	PPB Au	PPM Ag
TB-88-65	10	0.2
67	15	0.3
68	5	0.4
69	NIL	0.4
70	10	0.4
71	NIL	0.3
72	10	0.4
73	10	0.4
74	15	0.3
75	20	0.4
76	10	0.4
77	10	0.3
78	NIL	0.3
79	NIL	0.4
80	NIL	0.6
81	NIL	0.3
TM-88-02	NIL	NIL
03	5	0.1
05	NIL	NIL
06	5	NIL
07	NIL	NIL
10	5	0.1
15	5	0.1
16	NIL	0.1
20	NIL	0.7
21	NIL	0.4
22	NIL	0.4
27	5	0.3
TD-88-03	30	0.1
11	6	3.0
64	5	0.6
65	25	0.2
67	15	NIL
		0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Refracts retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



Date August 26, 1988
Samples Silt
MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.	PPB AU	PPM Ag
TD-88- 72	10	0.1
73	10	0.2
76	30	0.1
78	5	NIL
79	5	0.2
82	NIL	0.3
83	5	0.3
84	40	0.7
DL-88-174	10	0.5
176	5	0.6
178	5	0.5
190	NIL	0.3
194	NIL	0.3
195	5	0.4
196	NIL	0.2
JP-88- 18	10	0.7
19	5	0.5
20	10	0.7
22	5	0.5
23	5	0.4
24	NIL	0.4
25	10	0.7
26	15	0.7
28	15	0.6
29	10	0.1
30	10	0.4
31	5	0.4
35	5	0.3
37	NIL	1.4
40	NIL	0.4
42	NIL	0.4
44	NIL	0.3
60	NIL	0.4

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Date August 26, 1988

Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

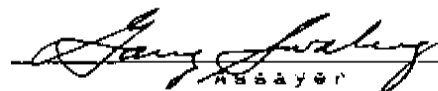
Certificate of Assay LORING LABORATORIES LTD.

Page # 5

SAMPLE NO.	PPB Au	PPM Ag
JP-88- 61	NIL	0.3
62	NIL	0.5
63	NIL	0.2
64	NIL	0.3
65	NIL	0.7
66	NIL	0.3
69	NIL	0.3
70	NIL	0.2
73	NIL	0.3
78	NIL	0.4
84	NIL	0.3
85	NIL	0.4
86	NIL	0.4
87	5	0.7
95	5	0.2
97	NIL	0.2
98	NIL	0.2
99	NIL	NIL
100	NIL	0.3
101	NIL	0.3
102	NIL	0.3
103	NIL	0.2
104	NIL	0.9
105	5	0.3
106	NIL	0.3
107	NIL	0.2
108	5	0.3
115	NIL	0.2
117	5	0.3
119	NIL	0.2
124	NIL	0.4
125	NIL	0.2
126	5	0.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

400, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Date August 26, 1988

Samples Silt

MT. MADGE PROJECT

ATTN: Jack Wyder

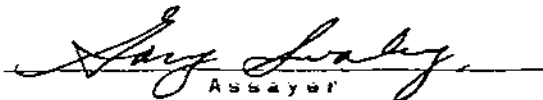
Certificate of Assay LORING LABORATORIES LTD.

Page # 6

SAMPLE NO.	PPB Au	PPM Ag
JP-88-133	NIL	0.3

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.


Assayer

255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8



File No. 31007-1
Date September 27, 1998
Samples Rock
MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.


SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER
------------	-----------------	-------------------

"Rock Samples"
Assay Analysis"

BK-88-78	.058	-
BK-88-94 A	1.614	10.99
BK-88-94 B	1.384	6.76

I Hereby Certify that the above results are those
assays made by me upon the herein described samples....

Subjects retained one month.
Tests retained one month
Unless specific arrangements
made in advance.


Assayer

200, 255 - 17th Avenue S.W.,

Calgary, Alberta T2S 2T8



Date August 26, 1988

Samples Rock

MT. MADGE PROJECT

ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

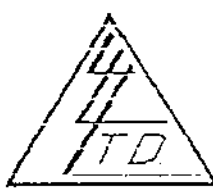
Page # 1

SAMPLE NO.	PPB Au	PPM Ag
"Rock Samples"		
"Assay Analysis"		
BK-88- 39	NIL	0.1
40	NIL	0.1
41	370	2.0
41 A	40	0.8
42	20	0.3
43	30	2.3
44	90	0.6
45	50	8.9
46	NIL	0.6
46 A	NIL	0.4
47	20	3.3
48	5	4.8
49	NIL	0.5
50	NIL	0.3
51	NIL	0.2
52	NIL	0.3
53	NIL	0.2
54	NIL	0.2
55	NIL	0.2
56	NIL	0.4
57	NIL	0.1
58	NIL	0.1
59	NIL	0.1
60	NIL	NIL
61	NIL	0.1
70	NIL	0.3
71	NIL	0.1
72	NIL	0.1
73	30	0.5
74	15	2.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Sulphs retained one month
unless specific arrangements
are made in advance.


Assayer



ATTN: Jack Wyder

Certificate of Assay LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB AU	PPM AG
BK-88- 75	5	0.9
76	30	0.8
77	80	0.7
78	+1000	0.7
79	90	4.8
80	NIL	0.4
81	NIL	0.2
82	5	0.2
83	5	0.1
84	NIL	0.1
85	NIL	NIL
86	NIL	0.1
87	NIL	0.2
88	NIL	0.1
89	NIL	0.2
90	NIL	0.1
91	NIL	0.1
92	NIL	NIL
93	NIL	0.1
94	NIL	0.2
94 A	+1000	+30.0
94 B	+1000	+30.0
95	320	3.3
96	100	1.0
97	270	0.8
98	20	0.8
99	60	1.2
100	10	0.1
101	20	0.2
102	20	0.4
103	5	0.1
104	NIL	0.2
105	15	0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Jack Wyder
Assayer

To: BIG HORN DEVELOPMENT CORP.,
40, 255 - 17th Avenue S.W.,
Calgary, Alberta T2S 2T8
 ATN: Jack Wyder



DATE NO. 91007
 Date August 26, 1988
 Samples Rock
 MT. MADGE PROJECT

Certificate of Assay

LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	PPB Au	PPM Ag
BK-88-106	85	5.5
107	10	0.5
108	20	0.4
109	20	0.4
110	15	0.4
111	20	0.2
112	375	8.8
113	80	1.1
114	30	0.4
115	25	0.5
116	980	1.9
117	55	0.5
118	60	0.6
119	100	1.5
120	200	1.4
121	10	0.3
122	20	1.2
123	20	NIL
T8-88-01	NIL	NIL
02	5	0.2
03	5	0.4
04	NIL	0.4
05	5	0.1
06	NIL	0.1
07	10	0.2
08 A	5	0.4
08 B	10	0.4
09	10	0.1
10	10	0.1
11	15	0.1
12	10	0.4
13	30	0.3
14	15	0.3

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
 Slips retained one month
 unless specific arrangements
 are made in advance.

Jack Wyder
 Assayer



Client: Jack Wyder

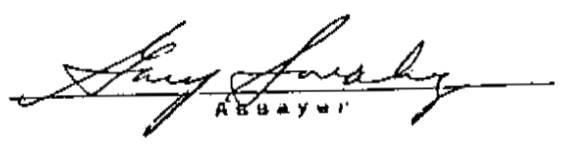
Certificate of Assay LORING LABORATORIES LTD.

Page # 4

SAMPLE NO.	PPB Au	PPM Ag
TB-88- 15	5	0.1
16	140	1.0
DL-88-179	5	0.6
181	15	0.3
185	40	0.2
186	40	0.3
187	30	0.2
188	10	0.2
189	10	0.4
212	90	5.1
213	35	2.1
214	15	0.3
215	30	0.2
216	25	0.2
217	10	0.2
218	15	0.1
219	20	0.3
219	20	0.8
220	20	0.2
221	100	0.2
222	5	0.1
223	25	NIL
AR-88- 01	20	0.5
JPR-88- 01	10	0.2
02	20	0.3
03	50	0.6
AE-88- 23	10	0.3
44-1	20	0.2
44-2	30	0.2
45-3	35	0.1
46-1	15	0.1
47-2	30	0.1

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Samples retained one month.
Copies retained one month
unless specific arrangements
are made in advance.


Assayer

APPENDIX IV

SAMPLE DESCRIPTIONS

SAMPLE DESCRIPTIONS

- BR88R-039: grab sample; sil'ed vol., dk grey, weakly schistose, lim/hem ox.
- BR88R-040: grab sample; sil'ed volc, 10 mm qtz vein with 1 mm veinlets (approx 25% qtz), dk grey, very sil'ed, 1-2% py.
- BK88R-041: 2' chip; sericite schist, lim + hem ox., 5% pyrite cubes (<1 mm), 5% qtz stringers.
- BK88R-041A: 3' chip; qtz sericite schist, lim + hem ox., (as 040)
- BK88R-042: 5' chip; as above with more silicification, almost whitish on fresh surface.
- BK88R-047: 5' chip; strong sericite schist, intense lim + hem ox., almost a fine breccia, 1-2% py, 3-5% qtz veinlets.
- BK88R-044: grab sample; crystal tuff, 15 mm qtz veinlet, 1 mm veinlet of moly? (trace); 5-10% chlorite, trace py, lim + hem ox.
- BK88R-045: 6' chip; weathered dk grey-green tuff, sil'ed, rusty weathering, trace py, lim + hem ox.
- BK88R-046: sil'ed tuff or intrusive (can't distinguish) lim + hem ox., 5% qtz veinlets, 2-3% fine diss. py.
- BK88R-046A: grab sample, very soft, sucrosic, brown weathered o/c with apparent volcanic tuff modules (pillows) look like limestone, lime green weathering just under surface.
- BK88R-047: 4' chip; 206/75, sil'ed layered tuff, drk grey, hem + lim ox., 2-5% py veinlets, 5-10% qtz veinlets.
- BK88R-048: 2.5' chip, as 047 except 10-15% qtz veinlets, looking more schistose.
- BK88R-049: 3' chip; sil'ed phyllite (weakly schistose), black, moderate to heavy lim + hem ox., 2-3% py, 3-7% qtz veinlets.
- BK88R-050: chloritic tuff, weakly phyllitic, abundant qtz veins, veinlets and stringers (30-40%), lim + hem ox.
- BK88R-051: 3' chip, 350/52, brown weathering, phyllite, schistose, heavy lim staining.
- BK88R-052: 6' chip, micaceous tuff, pale grey to dark grey, occasional qtz vein (5%), lim + hem staining, 1-2% py + CP both diss. and in veinlets.

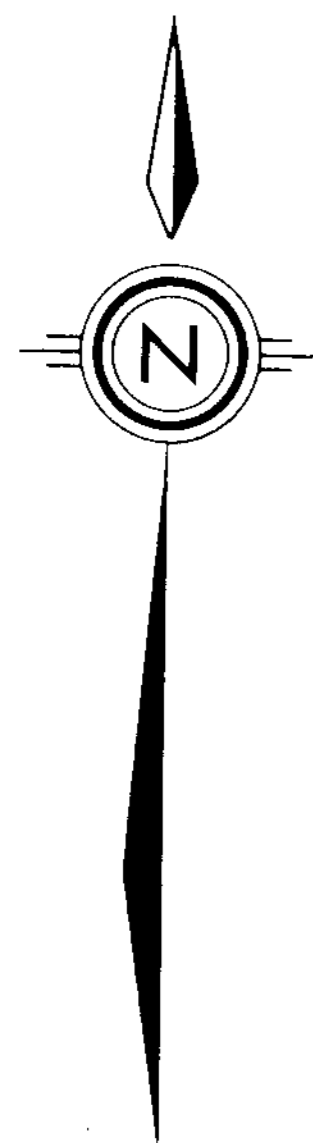
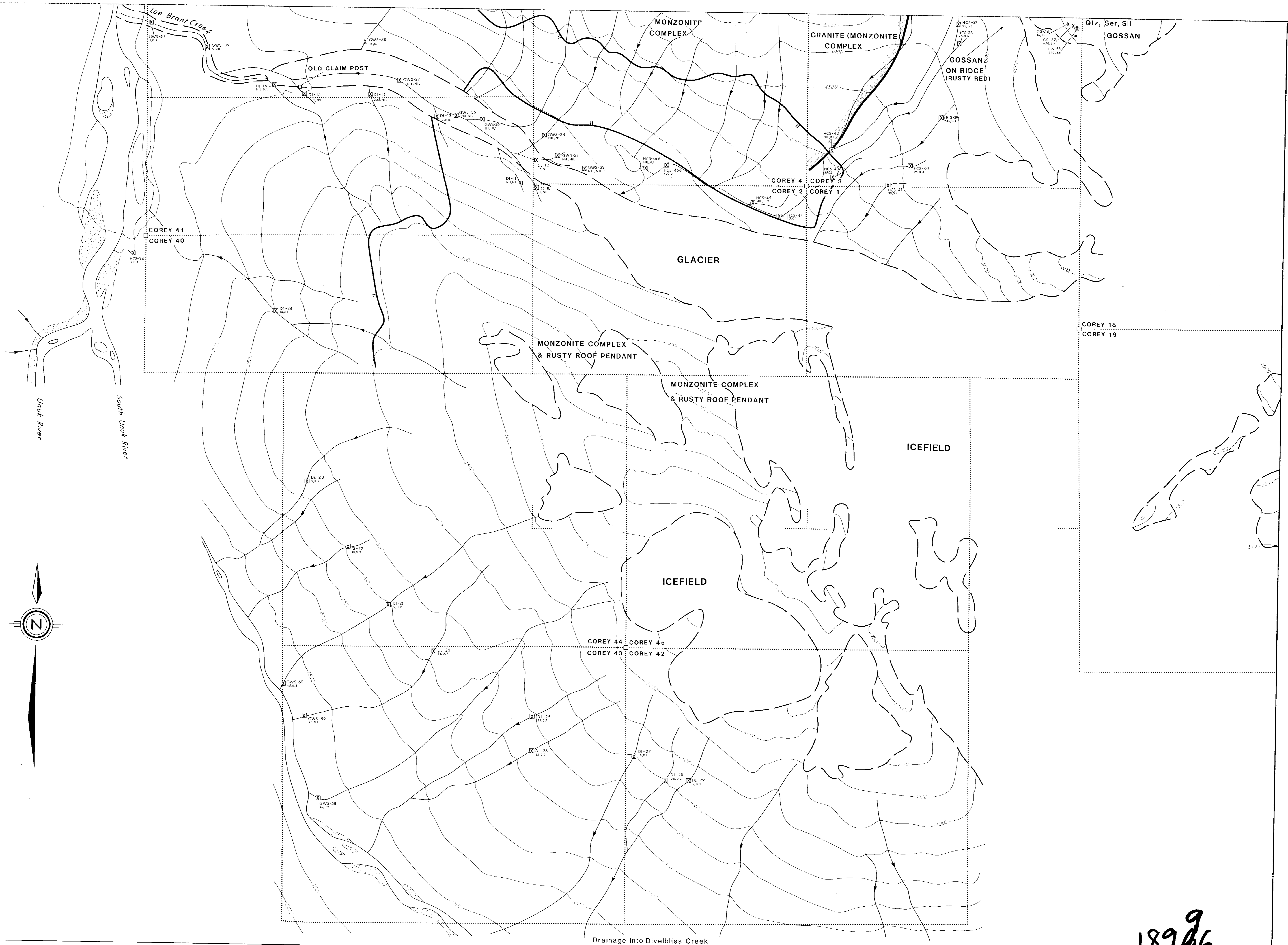
- BK88R-053: 3' chip; as above.
- BK88R-054: 3' chip; as above, except more siliceous
- BK88R-055: 4' chip; siliceous volcanic tuff, 018/75, mod to intense hem + lim ox., occasional qtz veins (<2%), 1-2% py + CP.
- BK88R-056: 7' chip; as 055, except contains 3-5% 1-5 mm py + CP veinlets & stringers; abundant jarosite alteration/oxidation.
- BK88R-057: 2.5' chip; as 056 except contains 7-10% qtz veins.
- BK88R-058: float, sil'ed lithic tuff, lim + hem stain, clasts < 4 mm, sil'ed with qtz veinlets, 50% of rock.
- BK88R-059: 3' chip; sil'ed lithic tuff with thick 5-10 cm white barren qtz veins and veinlets, rusty weathering.
- BK88R-060: 4' chip; sil'ed tuff, schistose, pale grey to med. grey, 1-2% py, ghost py common, strong hem + lim + jarosite ox.
- BK88R-061: 5' chip; sil'ed tuff, pale-med. grey lim + hem ox., f.g. diss. py pervasive, well sheared.
- NOTE: BK88R-062 to BK 88R-069 do not exist: numbering error
- BK88R-070: altered lithic tuff, hem + lim ox., <1% f.g. diss. py + veinlets < 1 mm wide.
- BK88R-071: as above.
- BK88R-072: 3' chip; pale to med. grey lithic tuff, mod. to intense lim + hem + greenish-yellow ox., weakly pyritic (<1%) finely diss. but occasional 1 mm cubes & blebs.
- BK88R-073: 7' chip; black - dark grey siltstone/fine-grained tuff, contains coarse clasts of lithic tuff, <1% f.g. diss. py, moderately foliated.
- BK88R-074: 350/52, thinly bedded dk grey-black siltstone (1mm - 3 cm thick beds) with numerous small faults & folds, abundant qtz veins parallel and perpendicular to bedding, barren rusty qtz.
- BK88R-075: 2.5' chip; chloritic tuff, med. green, moderate lim + hem ox., abundant calcite veinlets and blebs in o/c, 15-20% hornblende phen. < .5 mm in size.
- BK88R-076: 7' chip; siltstone, dk grey, pyritic 2-4% f.g. diss. py + blebs, hem + lim ox., 356/48.

- BK88R-077: 3' chip; as 076.
- BK88R-078: 5' chip; as 076.
- BK88R-079: 3' chip, sil'ed altered f.g. tuff, dk grey-purple, 1% diss. py + blebs.
- BK88R-080: sil'ed tuff, pale grey-green, pyritic <1%, slight lim ox.
- BK88R-081: 3' chip; sil'ed grey-purple f.g. tuff, hem + lim ox., appears barren.
- BK88R-082: 4' chip; as 081.
- BK88R-083: 3' chip; grey-purple tuff with qtz stockwork, qtz rusty, chloritic, appears barren.
- BK88R-084: 4' chip; sil'ed lithic tuff, pale grey-greenish grey, well fractured with lim + hem filling fractures, 2-5% qtz veinlets + stringers with tr. py.
- BK88R-085: 3' chip; lithic flow tuff, med. to pale green-grey, 50% white, barren, qtz veins & stockwork, minor lim ox. in fractures.
- BK88R-086: 6' chip; blue-grey tuff, whitish when metamorphosed (near fractures or faults), weakly pyritic 1% v.f.g. diss. py, lim + hem + greenish yellow ox., <2% qtz veinlets.
- BK88R-087: 5' chip; schistose tuff, sericite schist, blue grey, foliated, <1% f.g. diss. py, hem + lim + jarosite ox.
- BK88R-088: 6' chip; sil'ed crystal tuff, pale-med. grey, lim + hem jarosite ox. along weathered surface and fractures, tr py.
- BK88R-089: 4' chip, sil'ed lithic tuff, grey-brown, weak lim ox., 50% 1 - 2 cm qtz veins/veinlets, barren.
- BK88R-090: 4' chip; lithic tuff, moderately, altered mod. lim + hem ox. on surface and fracture plains, very fissile (appears schistose).
- BK88R-091: as 090 except more sil'ed.
- BK88R-092: grab sample; sil'ed crystal tuff, grey-green, mod. hem + lim ox., 1-2% PØ specks 1-2 mm dia., tr py in thin 1 mm veinlets and pervasively diss.
- BK88R-093: 4' chip; as 090.
- BK88R-094: 7' chip, as 090.

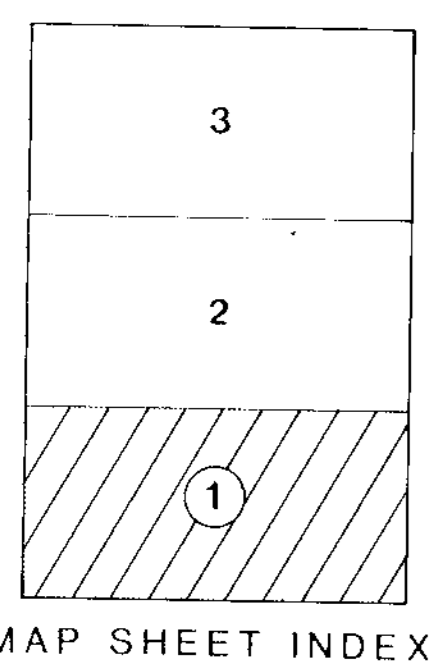
- BK88R-094A: float; siderite boulder with massive pyrite, qtz vein and arsenopyrite (1%), identical to gold bearing boulder.
- BK88R-094B: as above.
- BK88R-095: sil'ed crystal tuff, med.-pale grey, hem + lim + jarosite ox. on weathered surface, v.f.g. 1% pervasively diss. py, 2% qtz veinlets.
- BK88R-096: 5' chip; sil'ed crystal tuff, dk grey, very qtz rich, 40% qtz stockwork in o/c, hem + lim stain, slightly metamorphosed (schist-like).
- BK88R-097: 4' chip; dark green crystal tuff, 10% 1-2 mm hornblende phen, lim + hem ox., on surface, minor < 1% qtz veinlets.
- BK88R-098: med-dark grey laminated crystal tuff, lim + hem ox. on surface and fracture planes.
- BK88R-099: 2' chip; mod. intensely altered layered tuff, partly silty, (dk grey and shaly) tr. f.g. diss. py, partly schistose, pale grey-blue very fissile, weakly pyritic.
- BK88R-100: 4' chip; weakly sil'ed crystal tuff, med. grey-green, weak-mod. hem + lim surface ox. 10% qtz veinlets in sample 2 cm thick.
- BK88R-101: 3' chip; weakly metamorphosed siltstone, dk grey fresh surface, silvery greenish-grey weathered surface abundant qtz stockwork in o/c (30-40% 1-3 cm qtz veinlets), 1% arsenopyrite?
- BK88R-102: 3.5' chip; sil'ed crystal tuff, 30-40% qtz veinlets + stockwork, blue-grey, mod. hem + lim ox., blocky fracturing, tr. py.
- BK88R-103: sil'ed crystal tuff, buff-pale grey, 2% 1 mm hornblende phen., interlayered with schistose beds, hem + lim + jarosite surface ox., tr. py.
- BK88R-104: 4' chip; sil'ed crystal tuff, variable from creamy, brittle f.g. tuff to a schistose pale blue crystal tuff, 10% qtz + calcite stringers and veinlets, lim ox. on surface and fracture.
- BK88R-105: 5' chip; qtz "plug" 10' x 20', host rock: blue-grey phyllitic schist, lim ox. on surface, qtz contains tr. py and hem + lim ox.
- BK88R-106: 6' chip; shale, grey-black, tr. py, thin beds .5 - 4 cm thick, lim + hem + jarosite surface ox.

- BK88R-107: 7' chip; as 106
- BK88R-108: 3' chip, pale-med. grey, weakly metamorphosed crystal tuff, almost gneissic with occasional pale-dark alternating layers, weakly sil'ed, 2-3% CP, 2-3% py, lim + hem ox.
- BK88R-109: 7' chip; as 108.
- BK88R-110: as 108 except greater silicification and jarosite ox.
- BK88R-111: 6' chip; as 108.
- BK88R-112: 8' chip; as 110.
- BK88R-113: 3' chip; dk grey, weakly metamorphosed sil'ed tuff, tr. py, 1-2% CP, lim + hem + jarosite surface ox.
- BK88R-114: 4' chip; sil'ed chloritic tuff, 30% qtz veinlets and stringers, purplish-dk grey, weakly metamorphosed, mod. lim + hem + jarosite ox., tr. py.
- BK88R-115: 6' chip; as 114 except only 5% qtz and 1-2% py + CP.
- BK88R-116: 3' chip; as 115.
- BK88R-117: 6' chip; as 115.
- BK88R-118: 3' chip; as 115 with intensity altered and oxidized zone, powdery yellow-grey, barren.
- BK88R-119: 4' chip; as 118 except 2-3% py + CP, leached.
- BK88R-120: as 118.
- BK88R-121: siltstone, black, weakly calcareous, weak-mod. lim + hem ox. on surface, tr. py.
- BK88R-122: as 121.
- BK88R-123: sil'ed flow tuff, buff to pale grey, weakly ox. with lim + hem in fractures and on weathered surface, tr. py + PØ, 1-2% qtz veinlets.
- BK88R-124: 8' chip; pale grey-green, chlorite-sericite schist, 1-2% v.f.g. diss. py, mod. lim + hem ox. on weathered surface and fractures.
- BK88R-125: 8' chip; as above.
- BK88R-126: float sample, white qtz with grey patches, in olive green sil'ed tuff - fragile, ie. often frothy and well fractured.

- BK88R-127: as 126.
- BK88R-128: as 127.
- BK88R-129: 2 m chip; med. grey-green crystal tuff occasionally dk grey, calcite veinlets up to 10% and up to 5 mm thick.
- BK88R-130: 2 m chip; as 129.
- BK88R-131: 2 m chip; as 129.
- BK88R-132: 1 m chip; as 129.
- BK88R-133: 2 m chip; as 129.
- BK88R-134: 2 m chip; well to mod. sil'ed dk grey-green crystal-lithic tuff, 3% qtz veinlets and stockwork.
- BK88R-135: 1.5 m chip, very well sil'ed crystal-lithic tuff, 10-15% qtz veinlets and stockwork up to 25 mm thick.
- BK88R-136: 1.5 m chip; very well sil'ed crystal tuff, 20-30% qtz veinlets and stockwork in some areas, veinlets up to 15 mm, tr. Ag? or possibly P₀, mod. local lim ox. on weathered surface and fracture planes.



18986



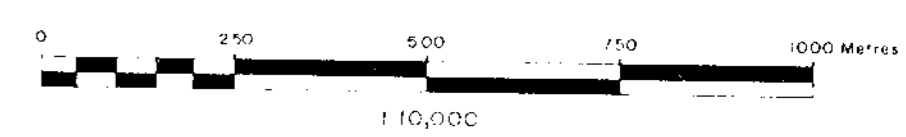
MAP SHEET INDEX

TOPOGRAPHICAL & CLAIM FEATURES:

- Icefield, Glacier
- Creek (Direction of Flow)
- Above Tree Line
- Below Tree Line
- Contours in Feet AMSL
- Sandbar
- LCP and Claim Line

GEOLOGICAL FEATURES:

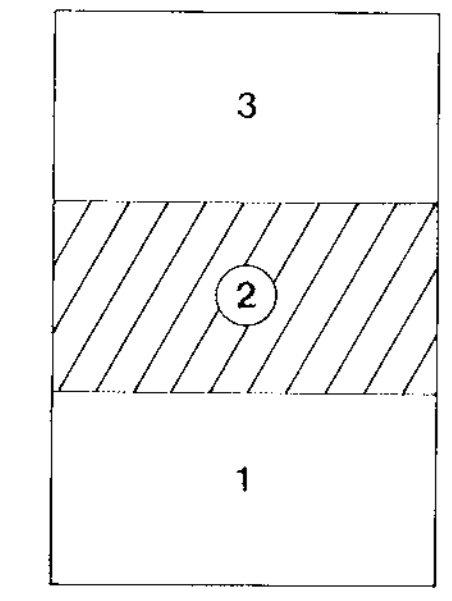
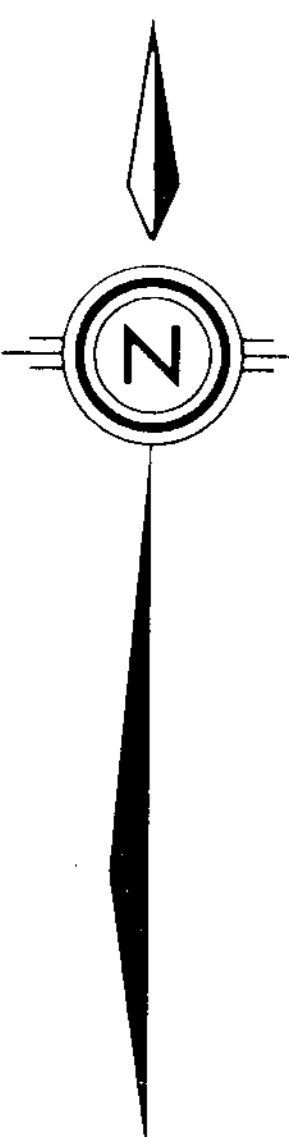
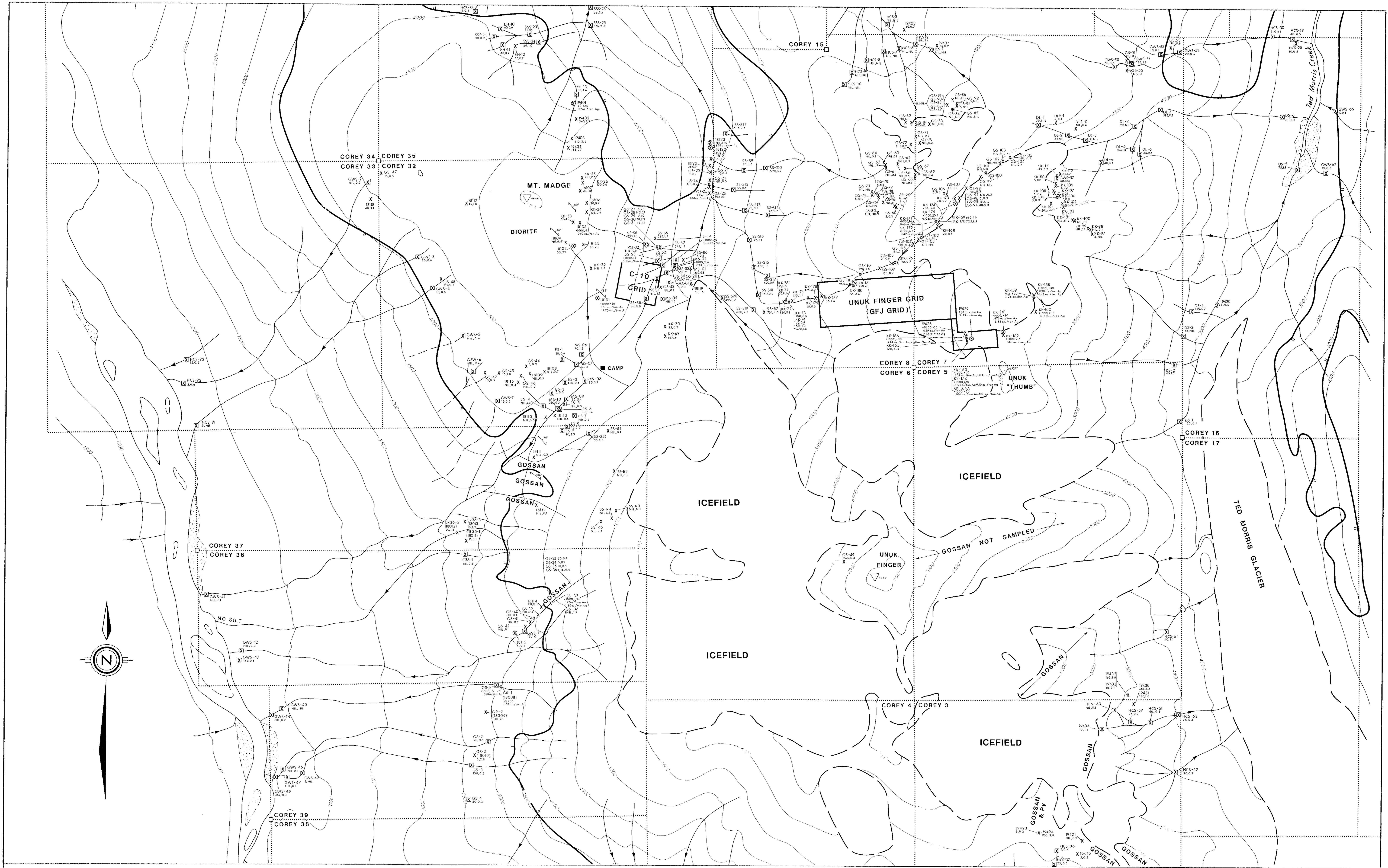
- Fault or Shear Zone
- Strike and Dip (Foliation)
- GEOCHEMICAL SAMPLE SITES**
- Silt
- Outcrop
- Rock: Float
- Au(ppb), Ag(ppm)
(unless otherwise stated)



BIGHORN DEVELOPMENT CORPORATION
MT. MADGE PROJECT
COREY CLAIMS
GEOCHEMICAL SAMPLE SITE LOCATION MAP

Scale: 1:10,000 C.I.: 500' By: [Signature]
 Date: April, 1988 Revised: Figure: 1

BELT CHAIN & ODOMETER DISTANCES
 CO-ORDINATES UTM GRID
 MAP BASE: ENLARGEMENT FROM 1:50,000 TOPOGRAPHIC



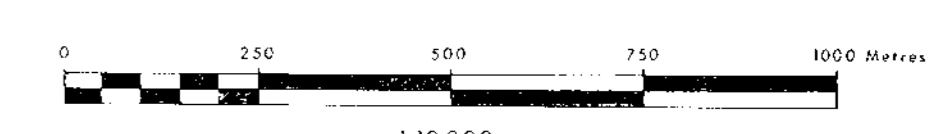
MAP SHEET INDEX

TOPOGRAPHICAL & CLAIM FEATURES:

- Icefield, Glacier
- Creek (Direction of Flow)
- Above Tree Line
- Below Tree Line
- Contours in Feet AMSL
- Sandbar
- LCP and Claim Line

GEOLOGICAL FEATURES:

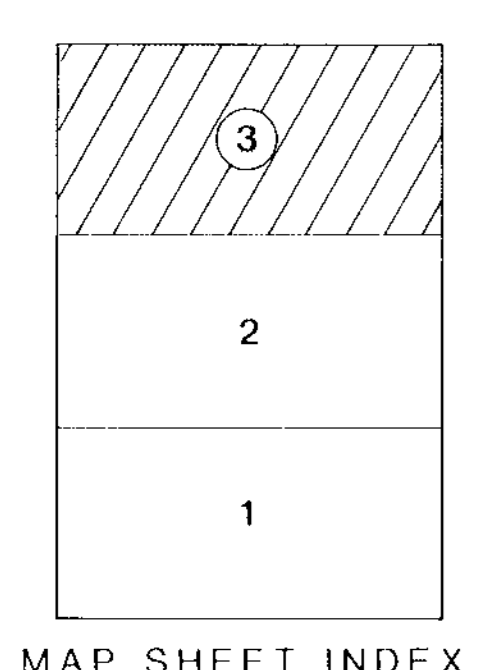
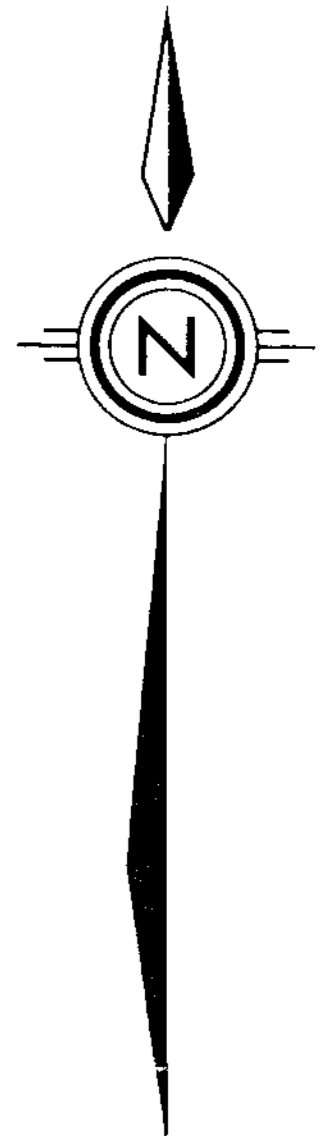
- Fault or Shear Zone
 - Strike and Dip (Foliation)
- GEOCHEMICAL SAMPLE SITES**
- Silt
 - Outcrop
 - Rock: Float
 - Au(ppb), Ag(ppm) (unless otherwise stated)



BIGHORN DEVELOPMENT CORPORATION		
MT. MADGE PROJECT		
CORE CLAIMS		
GEOCHEMICAL SAMPLE LOCATION MAP		
Scale: 1:10,000	C.I. 500'	By
Date: April, 1988	Revised	Figure 5

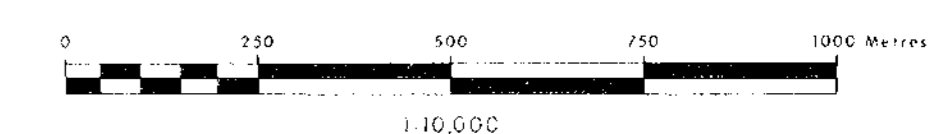
BEI 1 CHAIN & 100 METER DISTANCES
 1:40,000 ENLARGEMENT FROM 1:500,000 TOPOGRAPHIC
 MAP BASE

18966



- TOPOGRAPHICAL & CLAIM FEATURES:**
- Icefield, Glacier
 - Creek (Direction of Flow)
 - Above Tree Line
Below Tree Line
 - Contours in Feet AMSL
 - Sandbar
 - LCP and Claim Line

- GEOLOGICAL FEATURES:**
- Fault or Shear Zone
 - Strike and Dip (Foliation)
- GEOCHEMICAL SAMPLE SITES**
- Silt
 - Outcrop
 - Rock: Float
 - Au(ppb), Ag(ppm)
(unless otherwise stated)



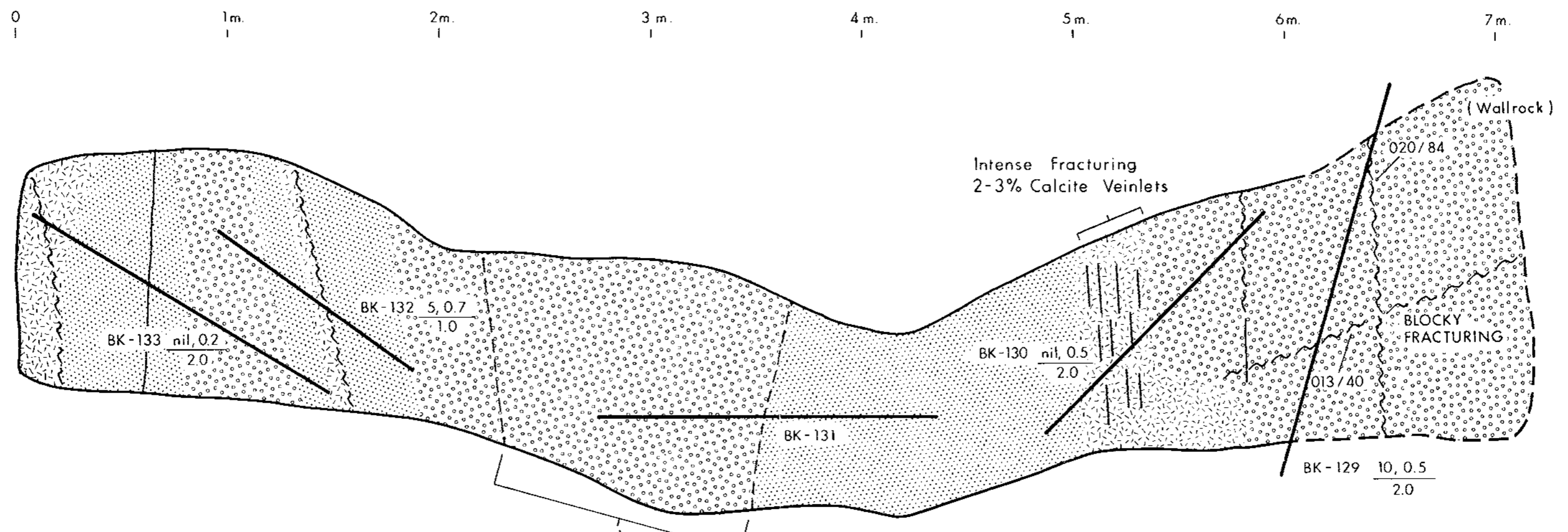
BIGHORN DEVELOPMENT CORPORATION
MT. MADGE PROJECT
COREY CLAIMS
GEOCHEMICAL SAMPLE LOCATION MAP

Scale: 1:10,000	C.I. 500	By
Date: April, 1988	Revised	Figure: 6

REF. CHAIN & QUADRE FOR DISTANCE
 CO. ORIGINATES UTM GRID
 MAP BASE ENLARGEMENT FROM 1:50,000 TOPOGRAPHIC

18906

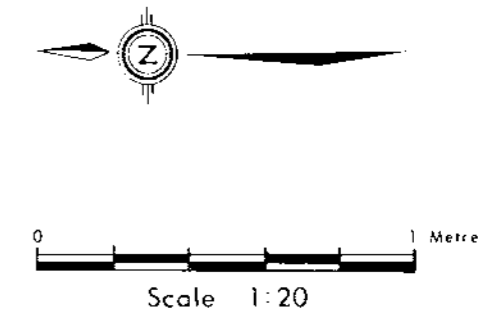
TRENCH No. 1 (near sample 19436)



LEGEND

- Crystal-Lithic Dacitic Tuff, chloritic, blocky to schistose, 2-10% quartz and calcite veinlets, 1% fine-grained disseminated pyrite
- Altered Tuff, light to moderate limonite oxidation, 1-10% quartz and calcite stringers and veinlets, 2-3% fine-grained disseminated pyrite
- Sericite schist, intensely altered, strong limonite oxidation, 2-10% quartz and calcite stringers and veinlets, 2-10% disseminated fine-grained pyrite

In muddy seep unable to map accurately. When mucked always caves in.



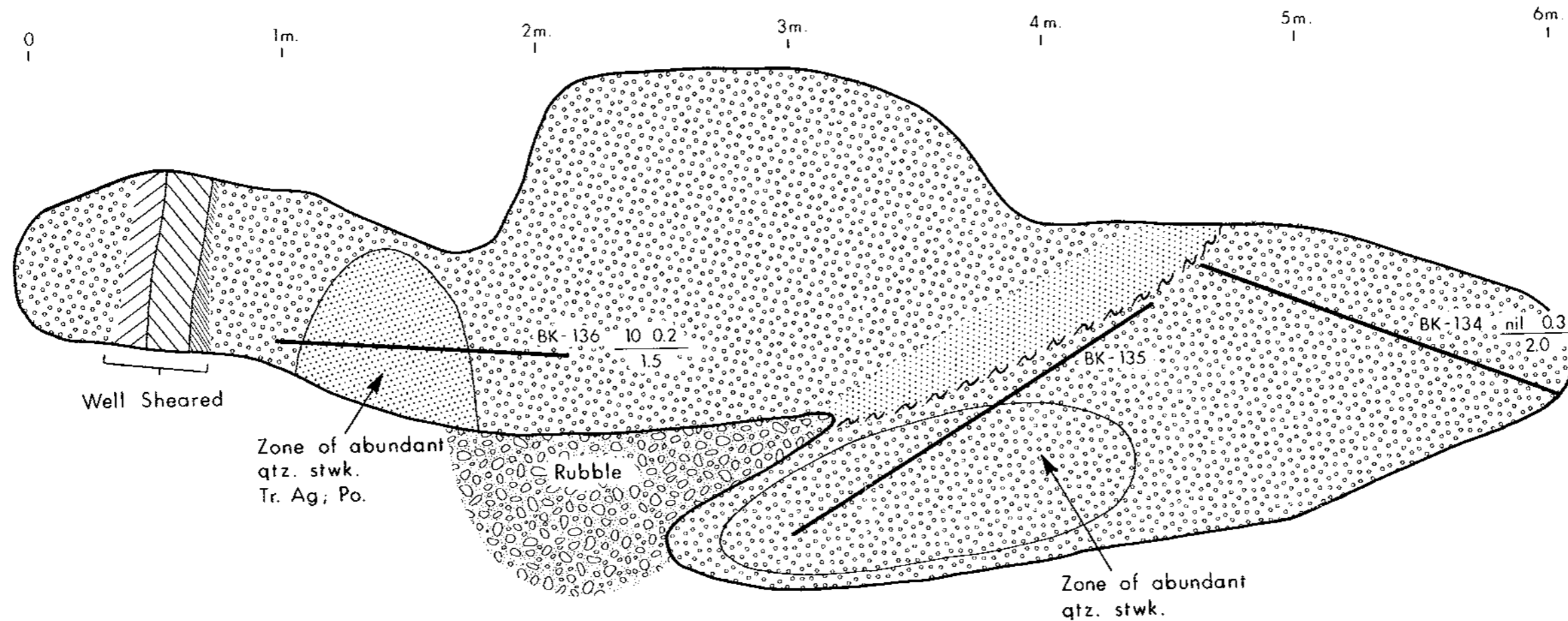
10, 0.2 2.0	Au (ppb), Ag (ppm) width (m)
130/ 70	Strike/Dip (right hand rule)

BIGHORN DEVELOPMENT CORP.

**DEVILS CLUB CREEK
SHOWING TRENCH No. 1**

Date : Feb., 1989	Scale : 1:20
By: B. Krutow	Figure: 7

TRENCH No. 2 (near sample 19437)

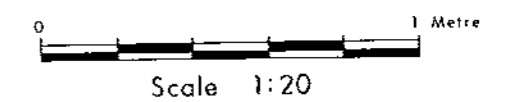


LEGEND

- Crystal-Lithic Dacitic Tuff, chloritic, blocky to schistose, 2-10% quartz and calcite veinlets, 1% fine-grained disseminated pyrite
- Altered Tuff, light to moderate limonite oxidation, 1-10% quartz and calcite stringers and veinlets, 2-3% fine-grained disseminated pyrite
- Sericite schist, intensely altered, strong limonite oxidation, 2-10% quartz and calcite stringers and veinlets, 2-10% disseminated fine-grained pyrite

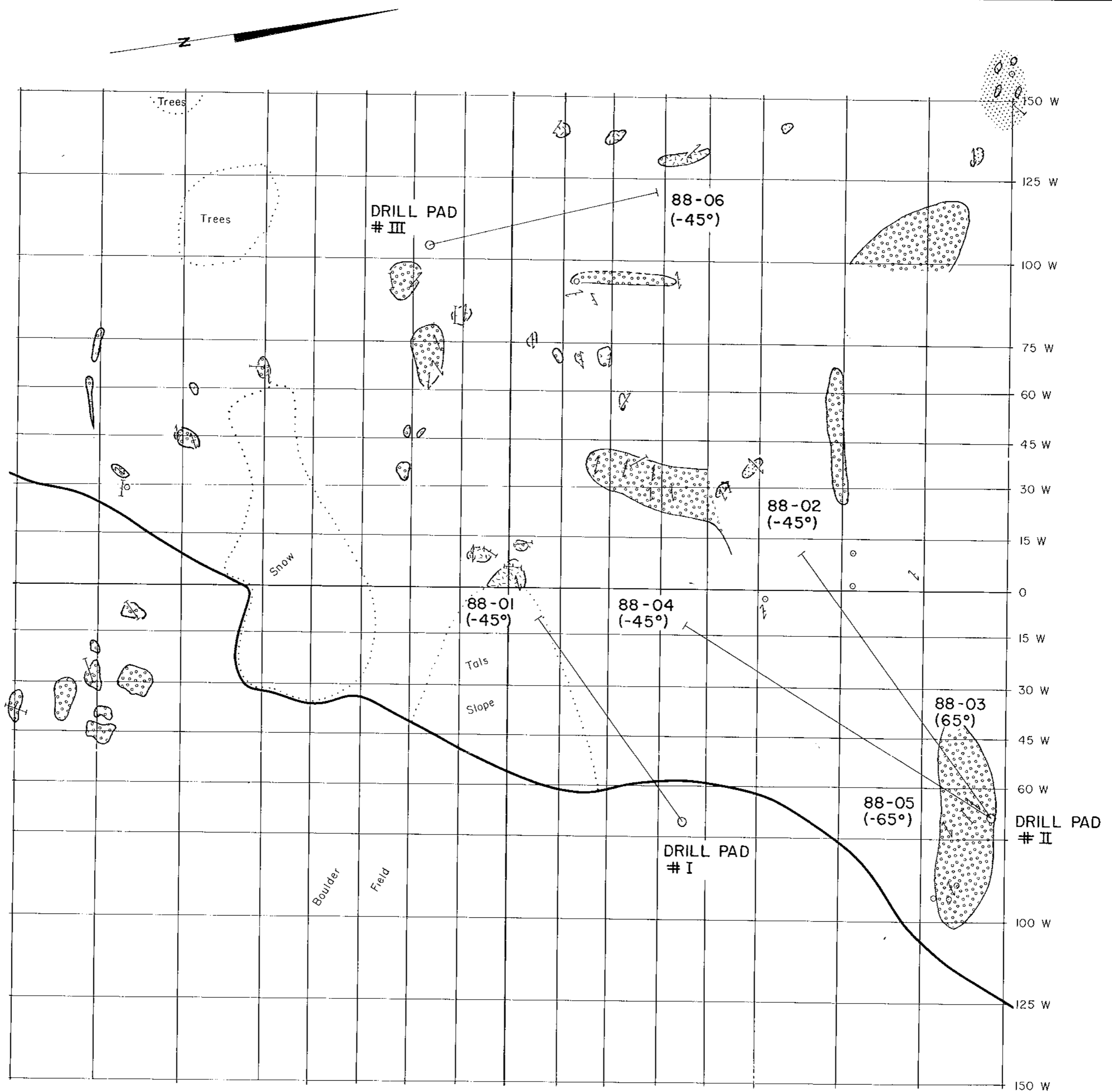
10, 0.2 Au (ppb), Ag (ppm)
2.0 width (m)

130/ 70 Strike/Dip (right hand rule)



BIGHORN DEVELOPMENT CORP.	
DEVILS CLUB CREEK SHOWING TRENCH No. 2	
Date: Feb., 1989	Scale: 1:20
By: B. Krutow	Figure: 8




18996



SYMBOLS

- | | |
|-------------|-------------|
| Bedding | ┌ Joining |
| Schistosity | ┐ Foliation |

LEGEND

-  Crystal-Lithic Dacitic Tuff, chloritic, blocky to schistose, 2-10 % quartz and calcite veinlets, 1% fine-grained disseminated pyrite
-  Altered Tuff, light to modern limonite oxidation, 1-10 % quartz and calcite stringers and veinlets, 2-3 % fine-grained disseminated pyrite
-  Sericite schist, intensely altered, strong limonite oxidation, 2-10 % quartz and calcite stringers and veinlets, 2-10 % disseminated fine-grained pyrite

18966⁹

BIGHORN DEVELOPMENT CORP.
CALGARY ALBERTA

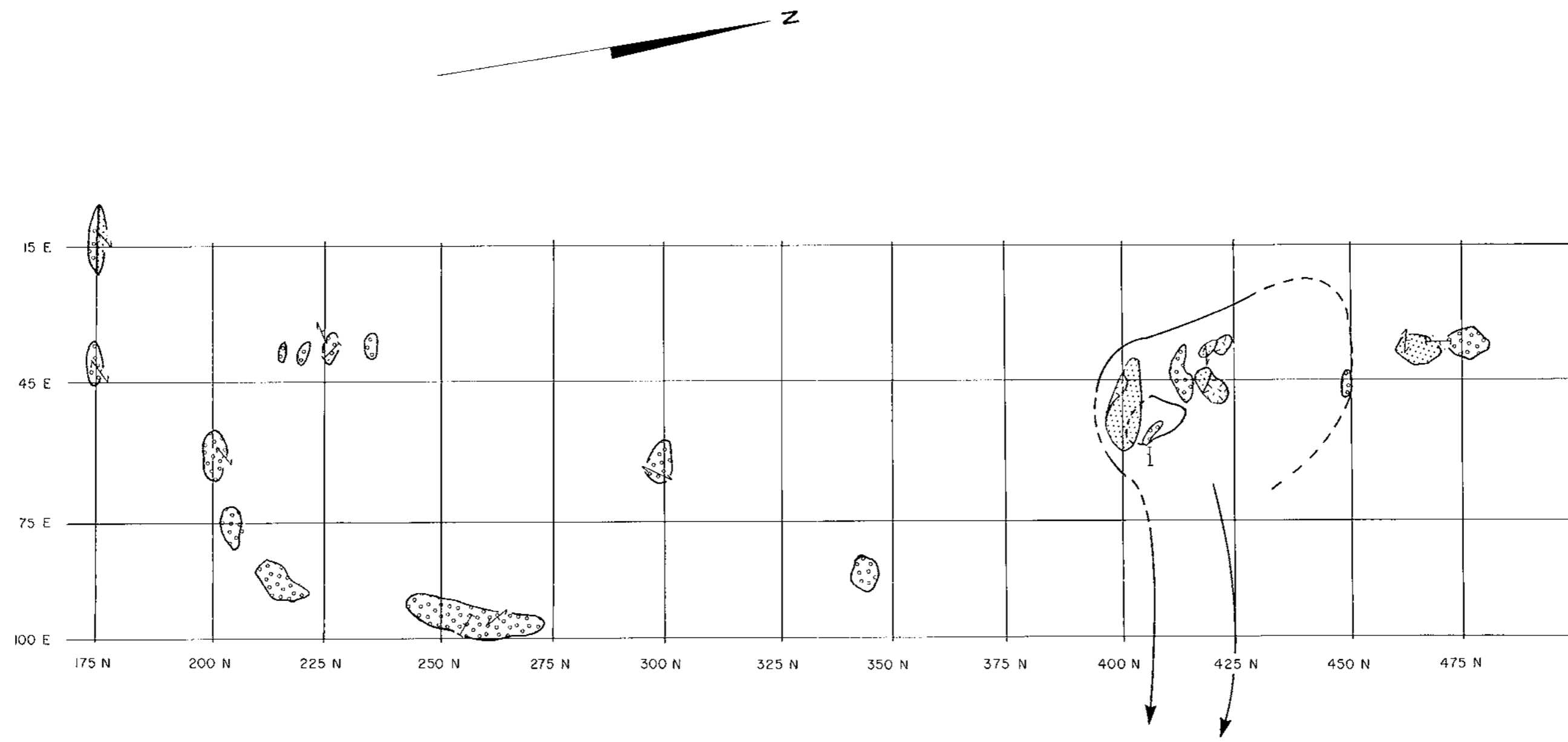
GEOLOGY OF SHOWING
(C-10)

DATE: APRIL 1989

SCALE: 1:1000

DRAWN BY: B. KRUTOW




FIGURE: 9



SYMBOLS

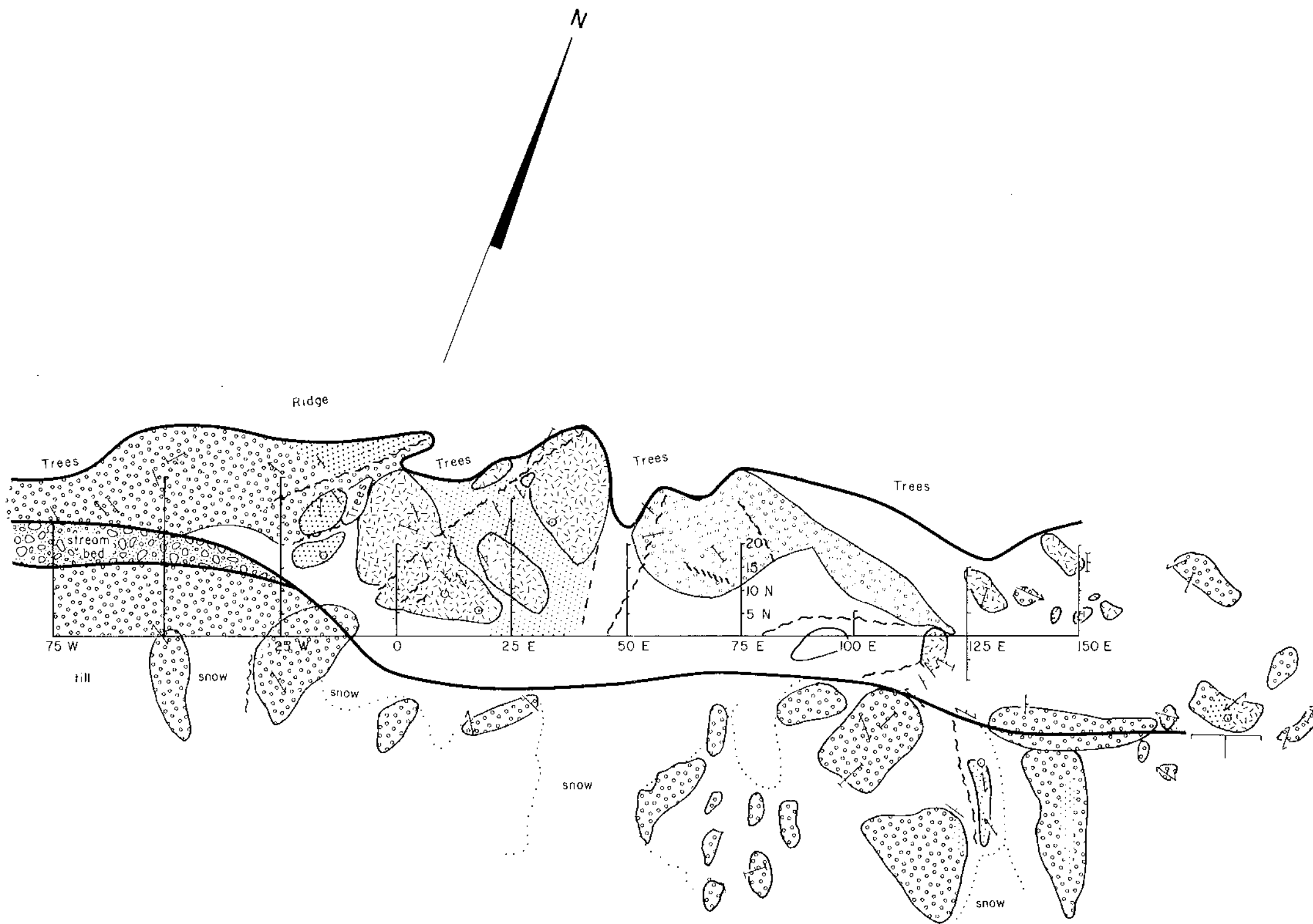
- ┆ Bedding
- ┆ Schistosity
- ┆ Joining
- ┆ Foliation

LEGEND

-  Crystal-Lithic Dacitic Tuff, chloritic, blocky to schistose, 2-10 % quartz and calcite veinlets, 1% fine-grained disseminated pyrite
-  Altered Tuff, light to modern limonite oxidation, 1-10 % quartz and calcite stringers and veinlets, 2-3 % fine-grained disseminated pyrite
-  Sericite schist, intensely altered, strong limonite oxidation, 2-10% quartz and calcite stringers and veinlets, 2-10 % disseminated fine-grained pyrite




18996

BIGHORN DEVELOPMENT CORP. CALGARY ALBERTA	
GEOLOGY OF SHOWING (C-25)	
DATE: APRIL 1989	SCALE: 1:1000
DRAWN BY: K. KONKIN	FIGURE: 10



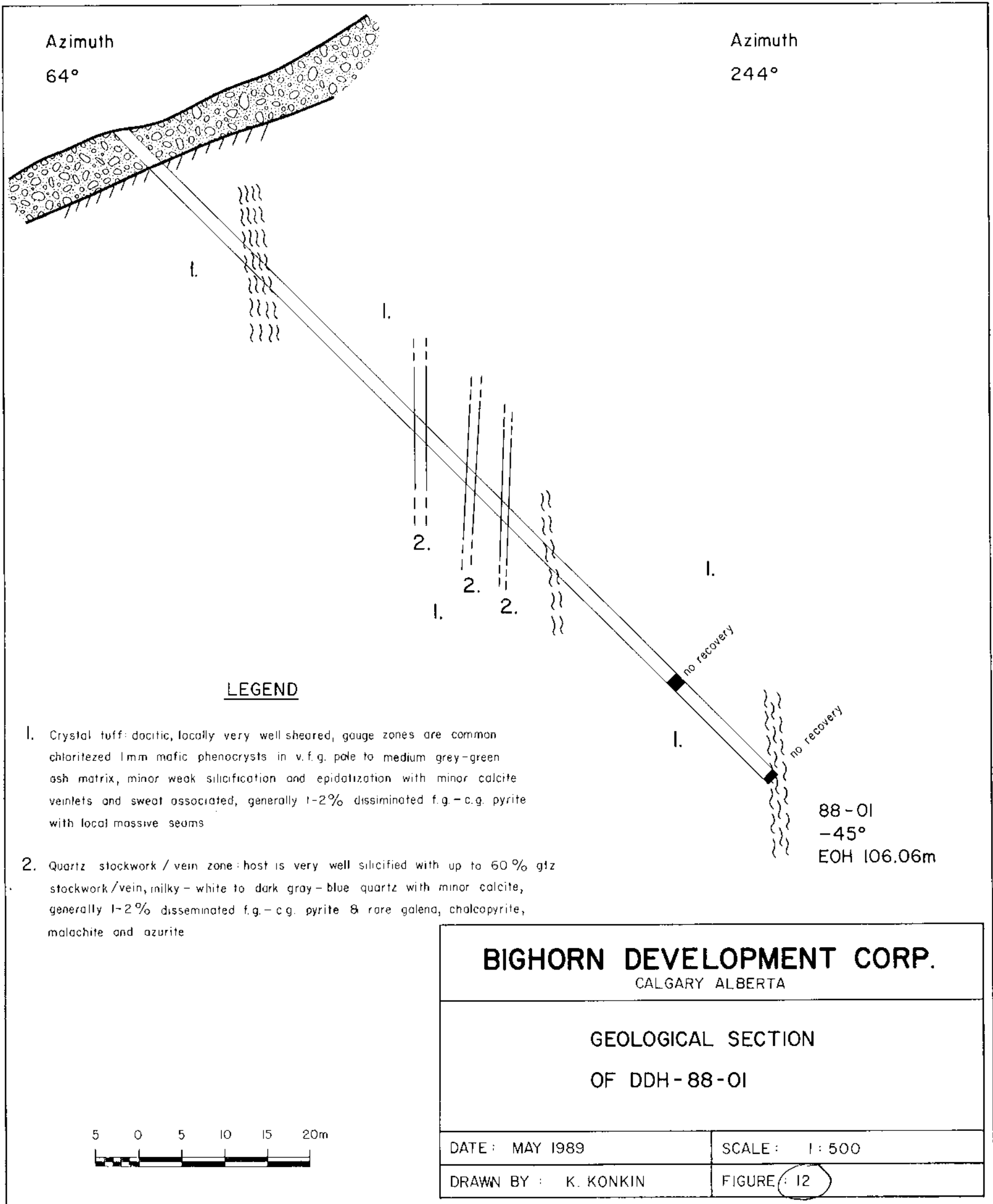
LEGEND

- ┆ Bedding
- ┆ Schistosity
- ┆ Joining
- ┆ Foliation

-  Crystal-Lithic Dacitic Tuff, chloritic, blocky to schistose, 2-10 % quartz and calcite veinlets, 1% fine-grained disseminated pyrite
-  Altered Tuff, light to modern limonite oxidation, 1-10 % quartz and calcite stringers and veinlets, 2-3 % fine-grained disseminated pyrite
-  Sericite schist, intensely altered, strong limonite oxidation, 2-10% quartz and calcite stringers and veinlets, 2-10 % disseminated fine-grained pyrite

18996

BIGHORN DEVELOPMENT CORP. CALGARY ALBERTA	
GEOLOGY OF SHOWING (C-28)	
DATE : APRIL 1989	SCALE : 1:1000
DRAWN BY : B. KRUTOW	FIGURE <u>11</u>



Azimuth
64°

Azimuth
244°

LEGEND

1. Crystal tuff: dacitic, locally very well sheared, gouge zones are common chloritized 1mm mafic phenocrysts in v.f.g. pale to medium grey-green ash matrix, minor weak silicification and epidatization with minor calcite veinlets and sweat associated, generally 1-2% disseminated f.g.-c.g. pyrite with local massive seams
2. Quartz stockwork / vein zone: host is very well silicified with up to 60% gtz stockwork/vein, milky-white to dark gray-blue quartz with minor calcite, generally 1-2% disseminated f.g.-c.g. pyrite & rare galena, chalcopryite, malachite and azurite



BIGHORN DEVELOPMENT CORP.
CALGARY ALBERTA

**GEOLOGICAL SECTION
OF DDH-88-01**

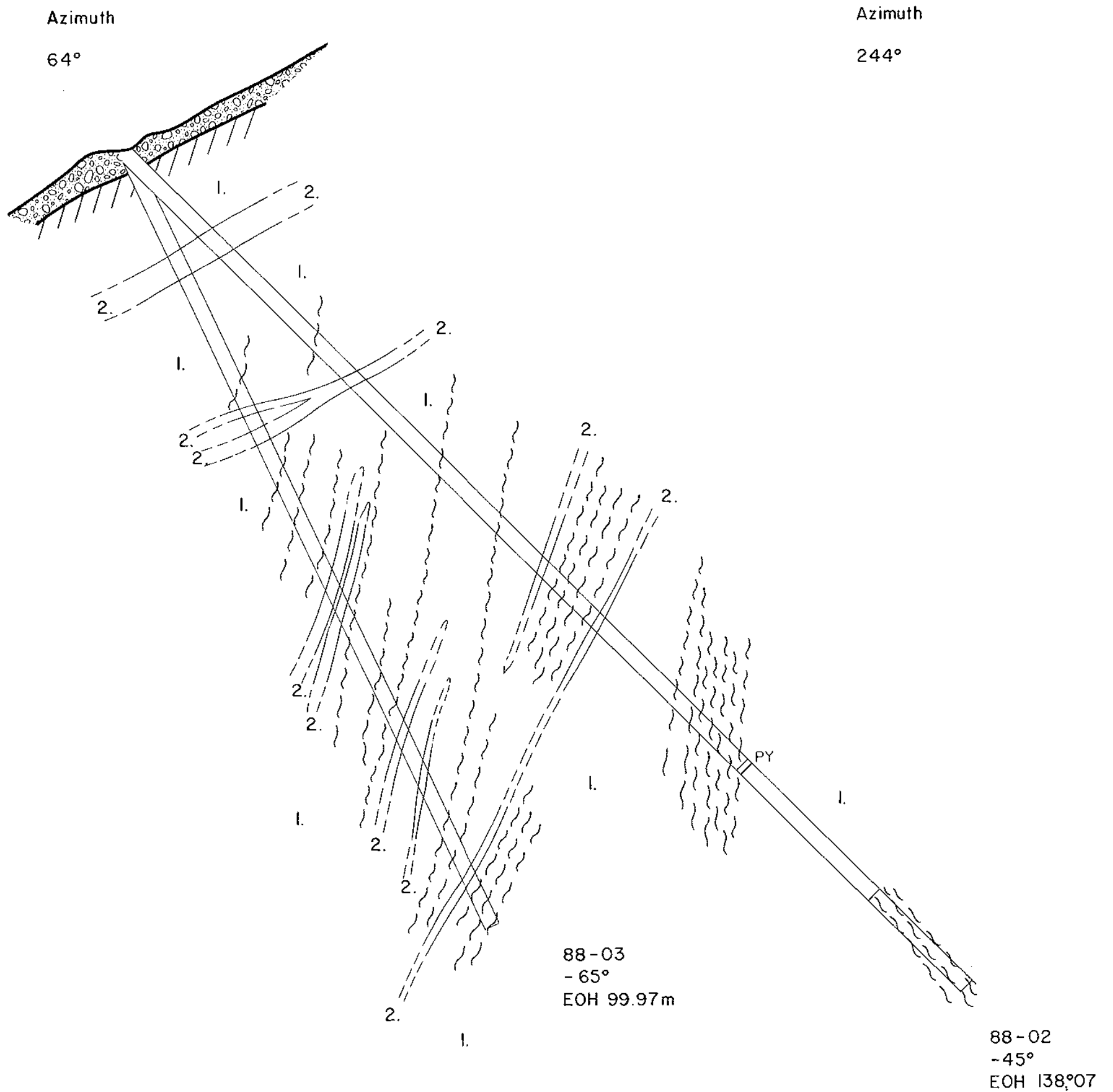
DATE: MAY 1989

SCALE: 1:500

DRAWN BY: K. KONKIN

FIGURE: 12

88-01
-45°
EOH 106.06m



LEGEND

1. Crystal tuff dacitic, locally very well sheared, gouge zones are common chloritized 1mm mafic phenocrysts in v.f.g. pale to medium grey-green ash matrix, minor weak silicification and epidatization with minor calcite veinlets and sweat associated, generally 1-2% disseminated f.g.-c.g. pyrite with local massive seams
2. Quartz stockwork / vein zone host is very well silicified with up to 60% qtz stockwork / vein. milky - white to dark gray - blue quartz with minor calcite, generally 1-2% disseminated f.g.-c.g. pyrite & rare galena, chalcopryite, malachite and azurite

18996

BIGHORN DEVELOPMENT CORP.
CALGARY ALBERTA

**GEOLOGICAL SECTION
OF DDH-88-02 &
DDH-88-03**

DATE : MAY 1989

SCALE : 1 : 500

DRAWN BY : K. KONKIN

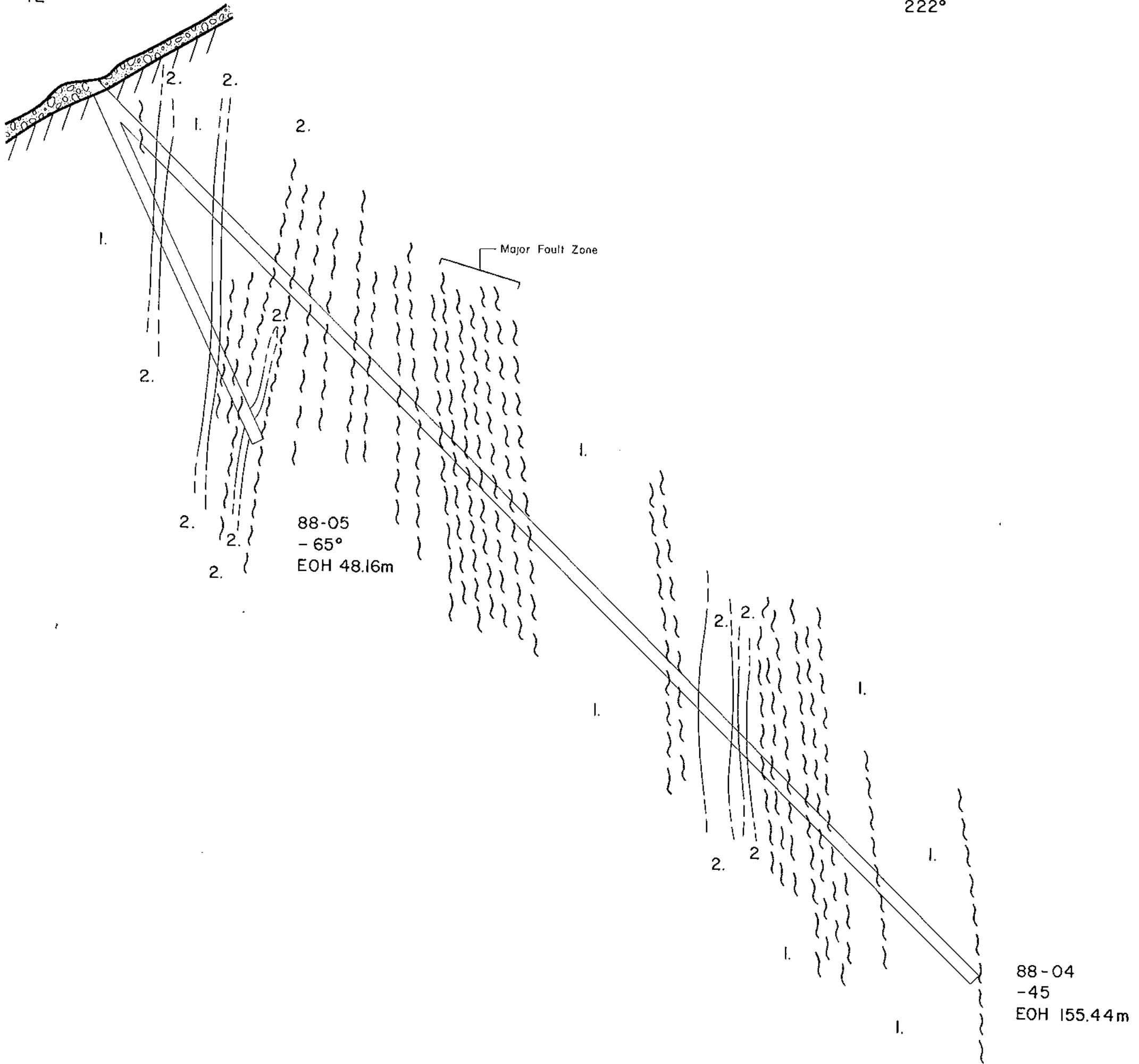
FIGURE 13

Azimuth

42°

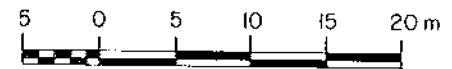
Azimuth

222°



LEGEND

1. Crystal tuff: dacitic, locally very well sheared, gauge zones are common chloritized 1mm mafic phenocrysts in v.f.g. pale to medium grey-green ash matrix, minor weak silicification and epidatization with minor calcite veinlets and sweat associated, generally 1-2% disseminated f.g - c.g. pyrite with local massive seams.
2. Quartz stockwork / vein zone: host is very well silicified with up to 60% qtz stockwork / vein, milky - white to dark gray - blue quartz with minor calcite, generally 1-2% disseminated f.g. - c.g. pyrite & rare galena, chalcopyrite, malachite and azurite



BIGHORN DEVELOPMENT CORP.
CALGARY ALBERTA

**GEOLOGICAL SECTION
OF DDH-88-04 &
DDH-88-05**

DATE: MAY 1989

SCALE: 1:500

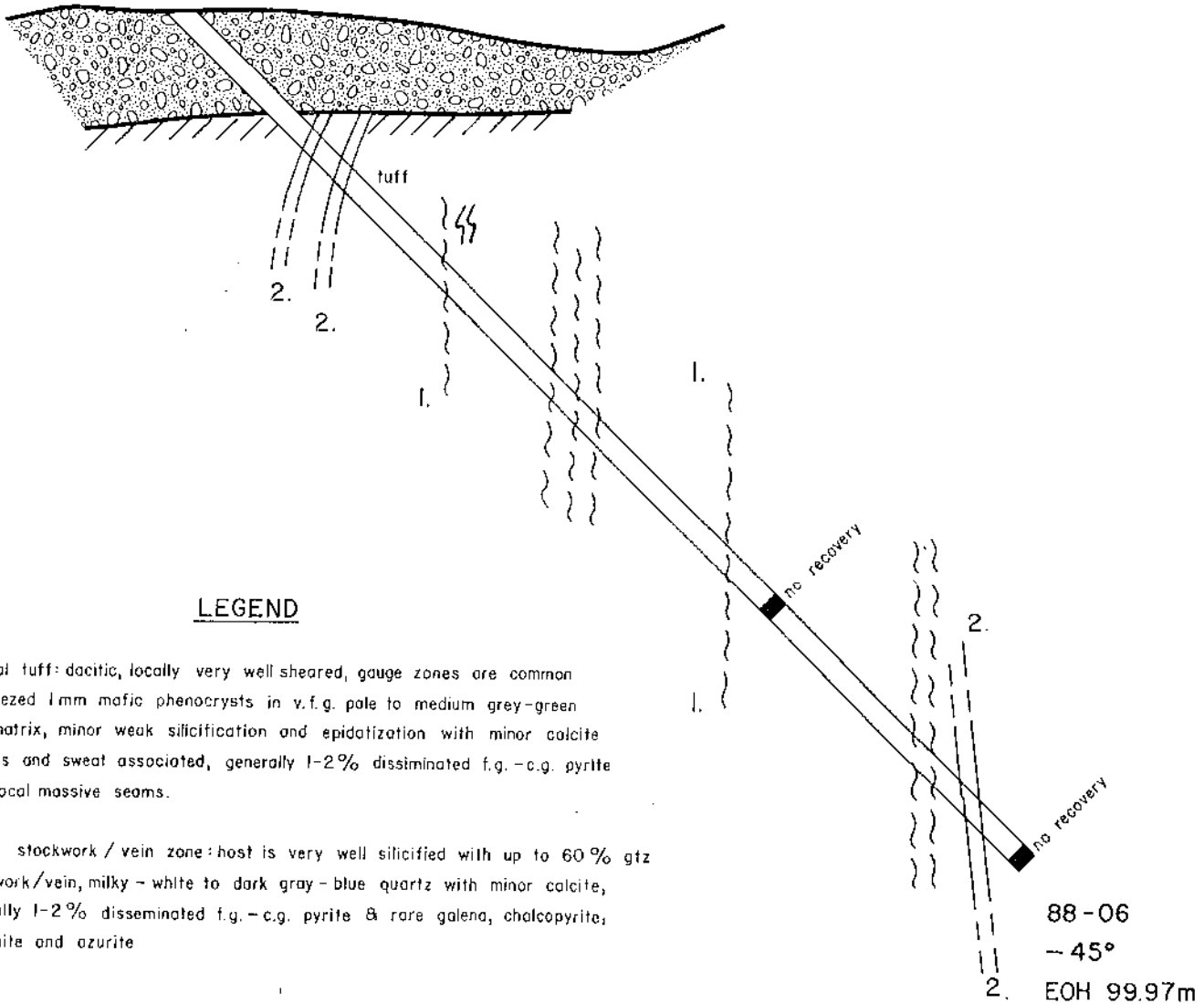
DRAWN BY: K. KONKIN

FIGURE 14

18996

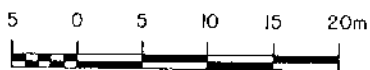
Azimuth
176°

Azimuth
356°

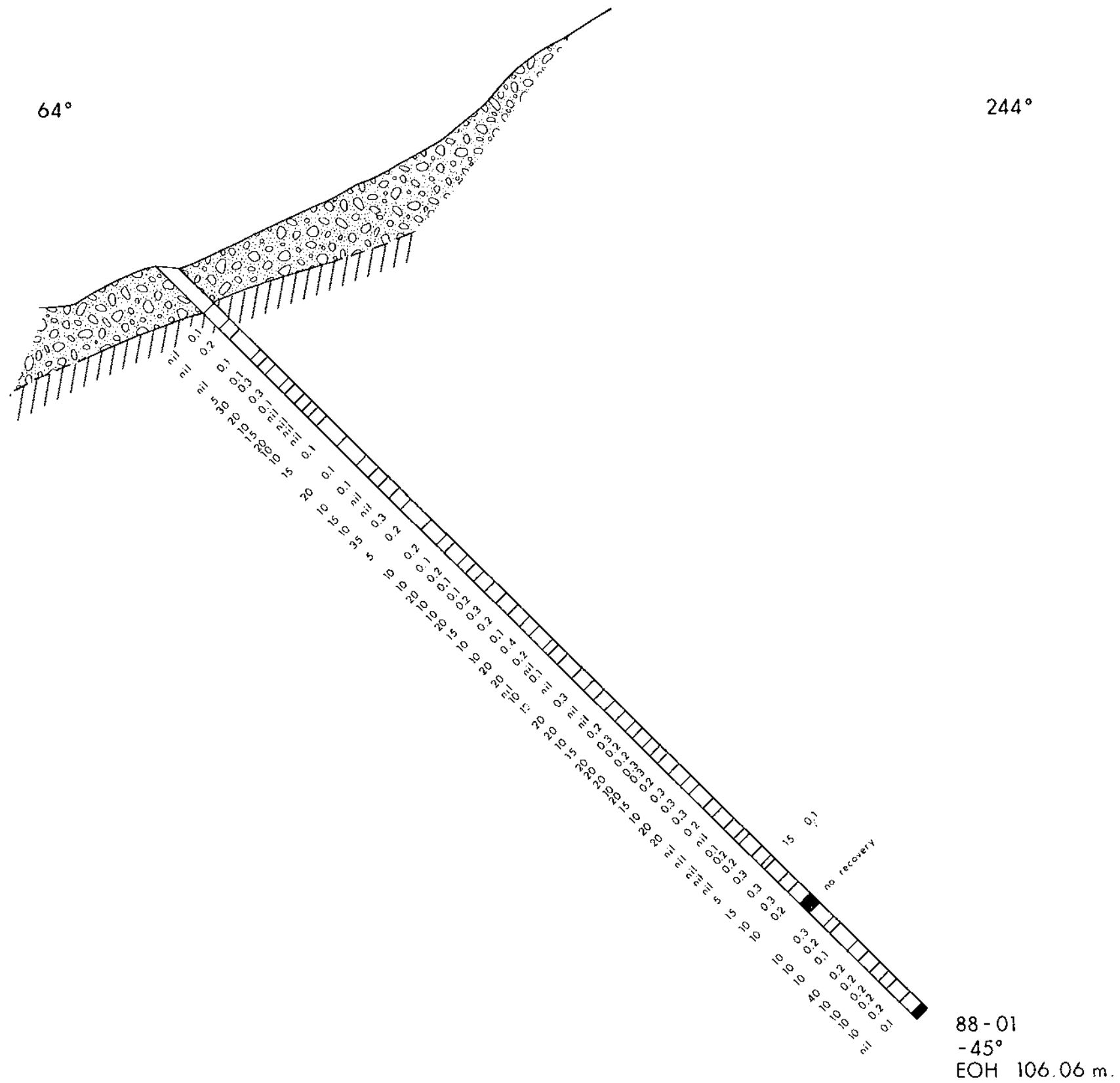


LEGEND

1. Crystal tuff: dacitic, locally very well sheared, gauge zones are common chloritized 1mm mafic phenocrysts in v.f.g. pale to medium grey-green ash matrix, minor weak silicification and epidatization with minor calcite veinlets and sweat associated, generally 1-2% disseminated f.g. -c.g. pyrite with local massive seams.
2. Quartz stockwork / vein zone: host is very well silicified with up to 60% gtz stockwork/vein, milky - white to dark gray - blue quartz with minor calcite, generally 1-2% disseminated f.g. -c.g. pyrite & rare galena, chalcopryite, malachite and azurite

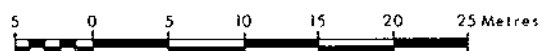


BIGHORN DEVELOPMENT CORP. CALGARY ALBERTA	
GEOLOGICAL SECTION OF DDH-88-06	
DATE : MAY 1989	SCALE : 1 : 500
DRAWN BY : K. KONKIN	FIGURE : 15



LEGEND

40 0.2 Au (ppb), Ag (ppm)



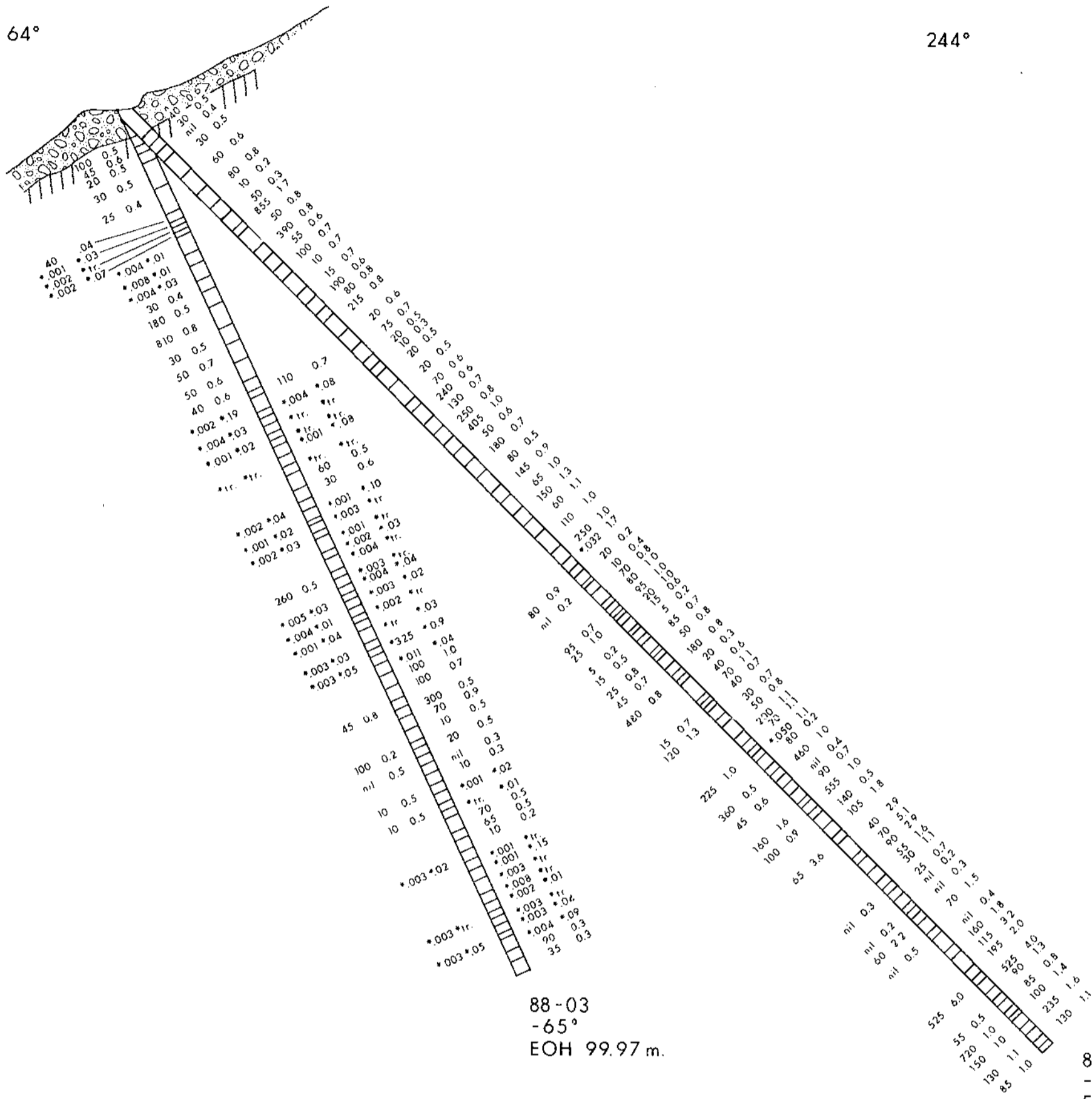
Scale: 1:500

18996

BIGHORN DEVELOPMENT CORP.	
MOUNT MADGE PROJECT	
ASSAY SECTION OF	
DDH - 88 - 01	
Drawn by K. Konkin	Figure: 16
Scale: 1:500	Date: Jan, 1989

64°

244°

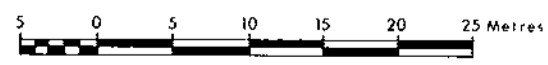


88-03
-65°
EOH 99.97 m.

88-03
-45°
EOH 138.07 m.

LEGEND

855 1.7 Au (ppb), Ag (ppm)
 *.008 *.01 Au (opt), Ag (opt)



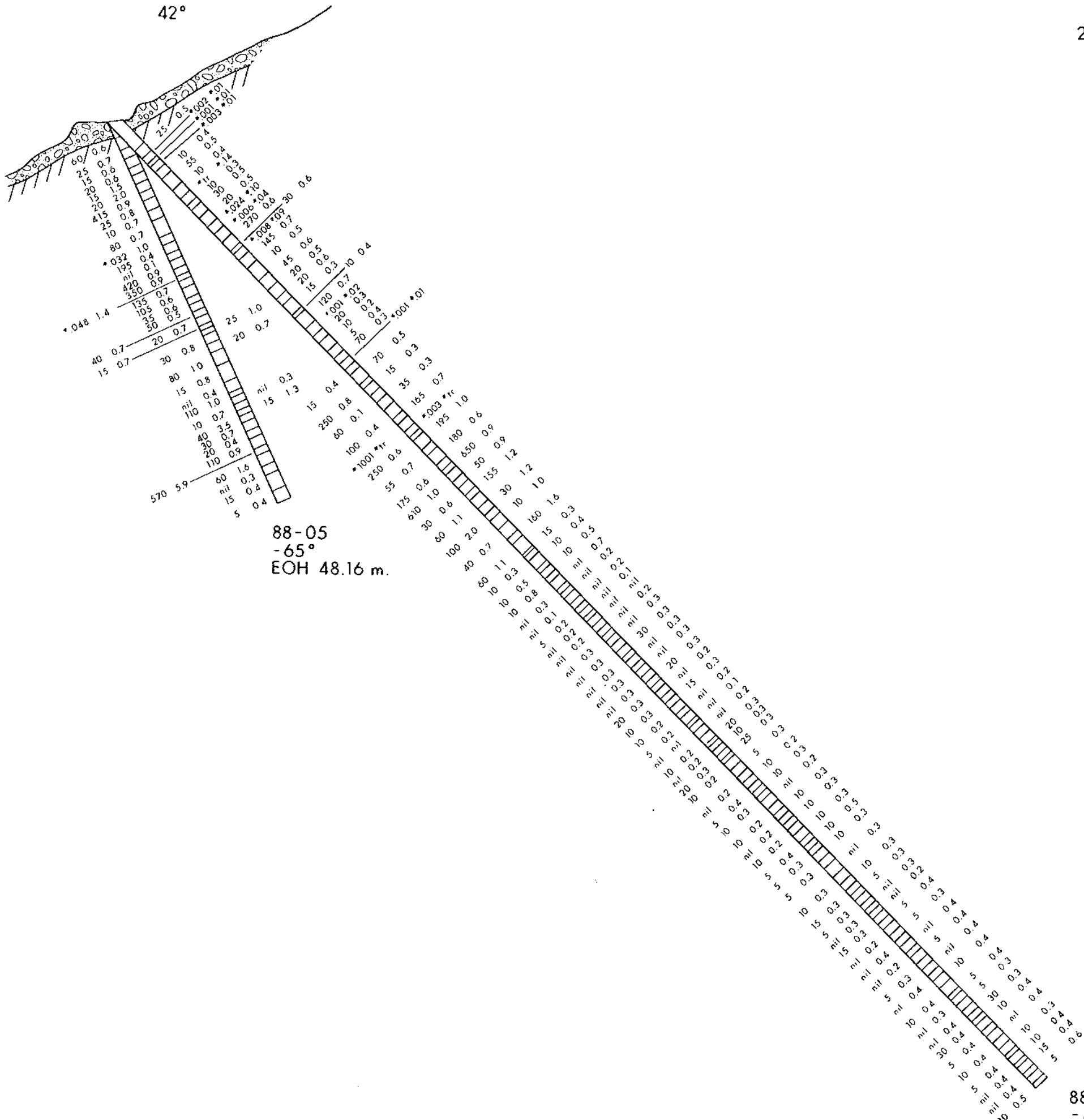
Scale: 1:500

18996

BIGHORN DEVELOPMENT CORP.	
MOUNT MADGE PROJECT	
ASSAY SECTIONS OF	
DDH-88-02 & DDH-88-03	
Drawn by: K. Konkin	Figure 17
Scale: 1:500	Date: Jan., 1989

42°

222°



LEGEND

570 59 Au (ppb), Ag (ppm)
 *024 *.10 Au (opt), Ag (opt)



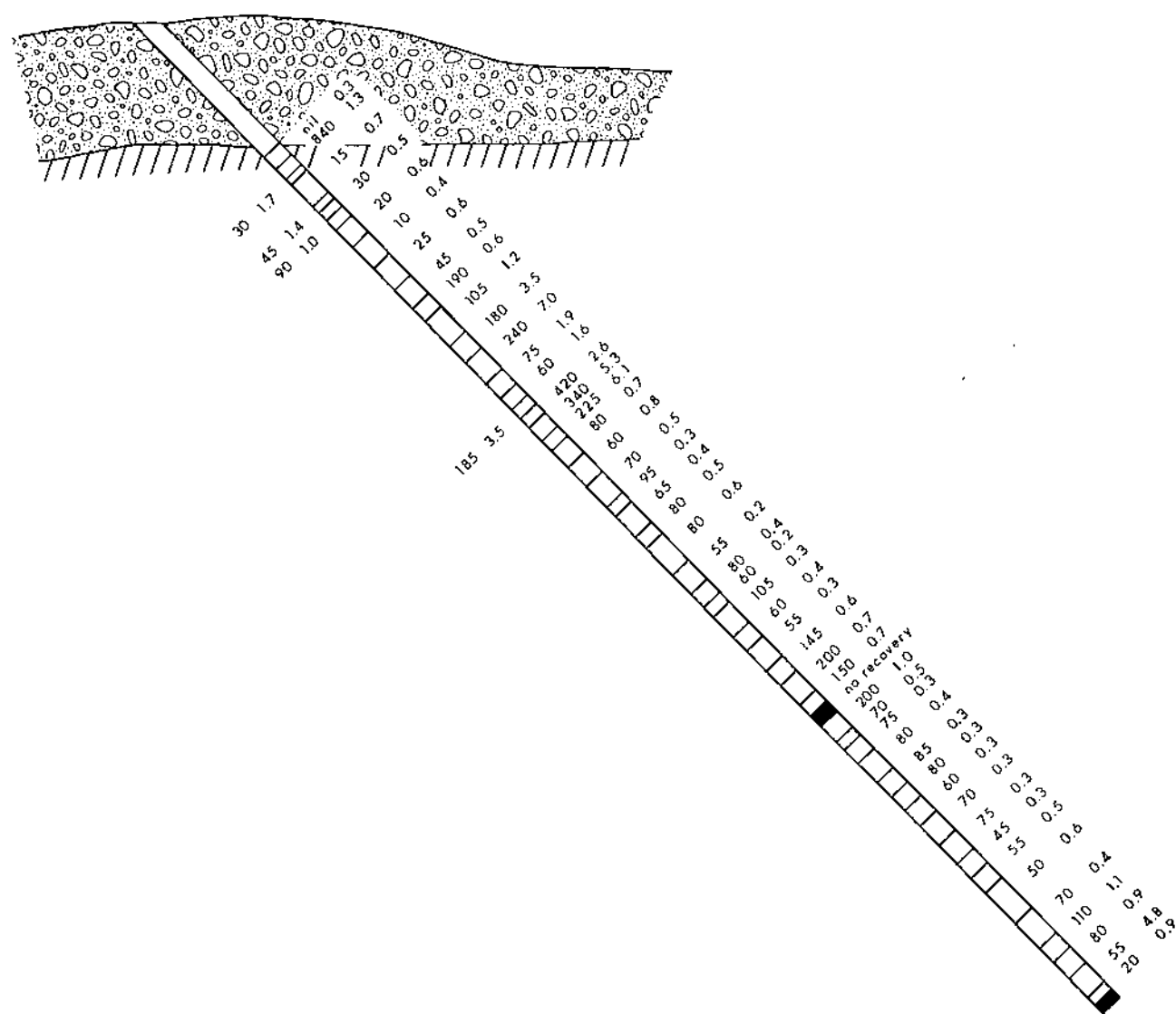
Scale: 1:500

18796

BIGHORN DEVELOPMENT CORP.	
MOUNT MADGE PROJECT	
ASSAY SECTIONS OF	
DDH-88-04 & DDH-88-05	
Drawn by: K. Konkin	Figure: 18
Scale: 1:500	Date: Jan., 1989

176°

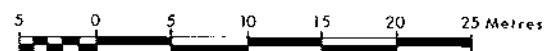
356°



88-06
-45°
99.97 m.

LEGEND

420 2.6 Au (ppb) Ag (ppm)



Scale: 1:500

18996

BIGHORN DEVELOPMENT CORP.	
MOUNT MADGE PROJECT	
ASSAY SECTION OF	
DDH - 88 - 06	
Drawn by: K. Konkin	Figure: 17
Scale: 1:500	Date: Jan, 1989