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

130°

BY

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MINING  
 GEOLOGICAL  
 BRANCH  
 ASSESSMENT  
 REPORT

18,691

CALGARY, ALBERTA  
 FEBRUARY, 1989

OUR FILE: COREYFEB89

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## 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 OPT</u>	<u>AG 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. Kruckowski 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 a diamond drill program and assessment work completed on the Corey 1-8 claims. This assessment report deals primarily with the Corey 10-45 claims and Cumberland claims. The cost for the geochemical sampling program pertaining to the Corey 10-45 and Cumberland Claims is \$192,000.

The 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.

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 chalcopyrite.

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. Kruckowski 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.

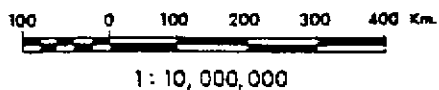
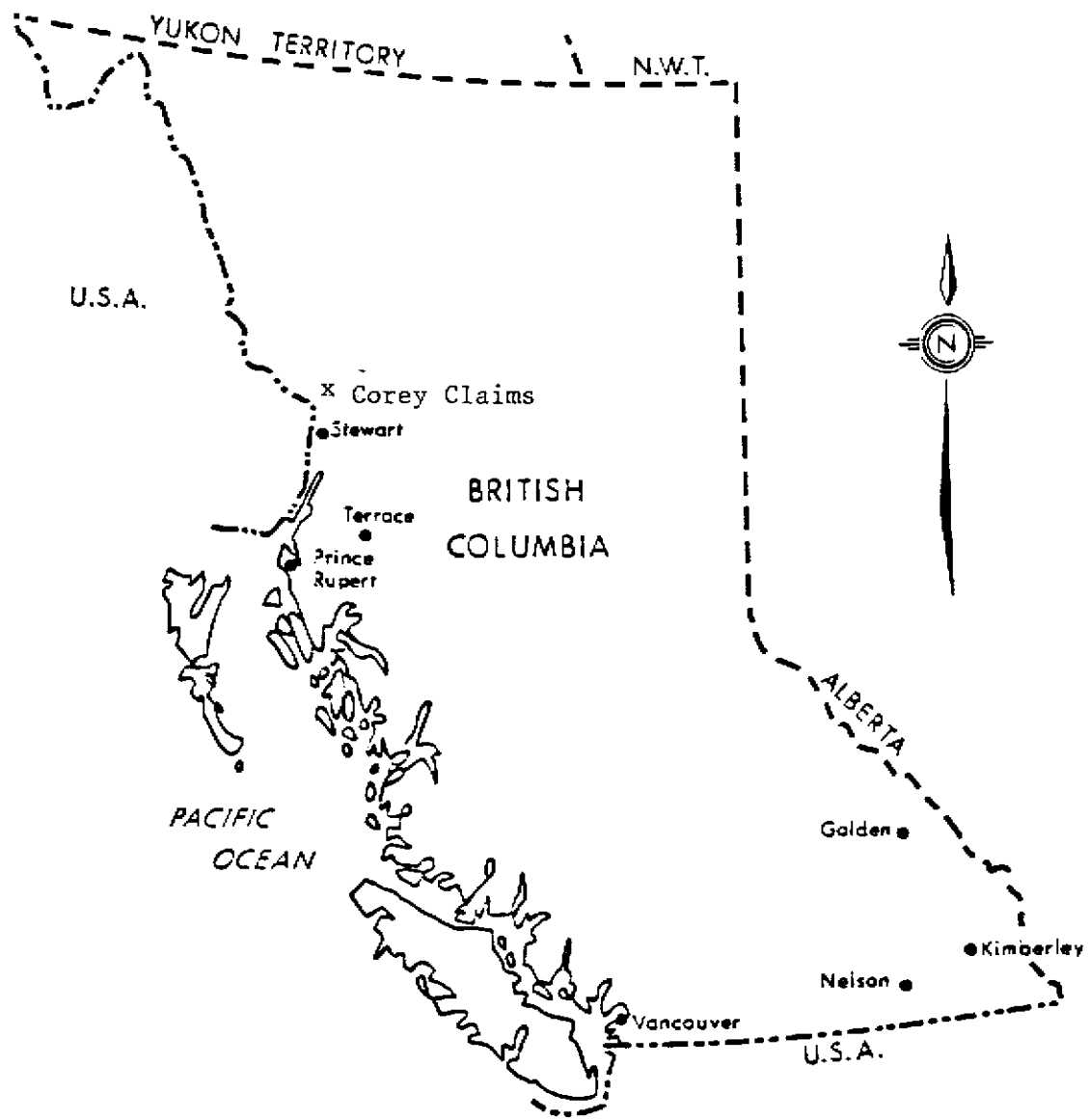
All analyses were performed by Loring Laboratories of Calgary, Alberta, and the camp was supported by helicopter service from Vancouver Island Helicopters stationed in Stewart and the Catear's Goldwedge Camp.

### 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.



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 gulleys 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)

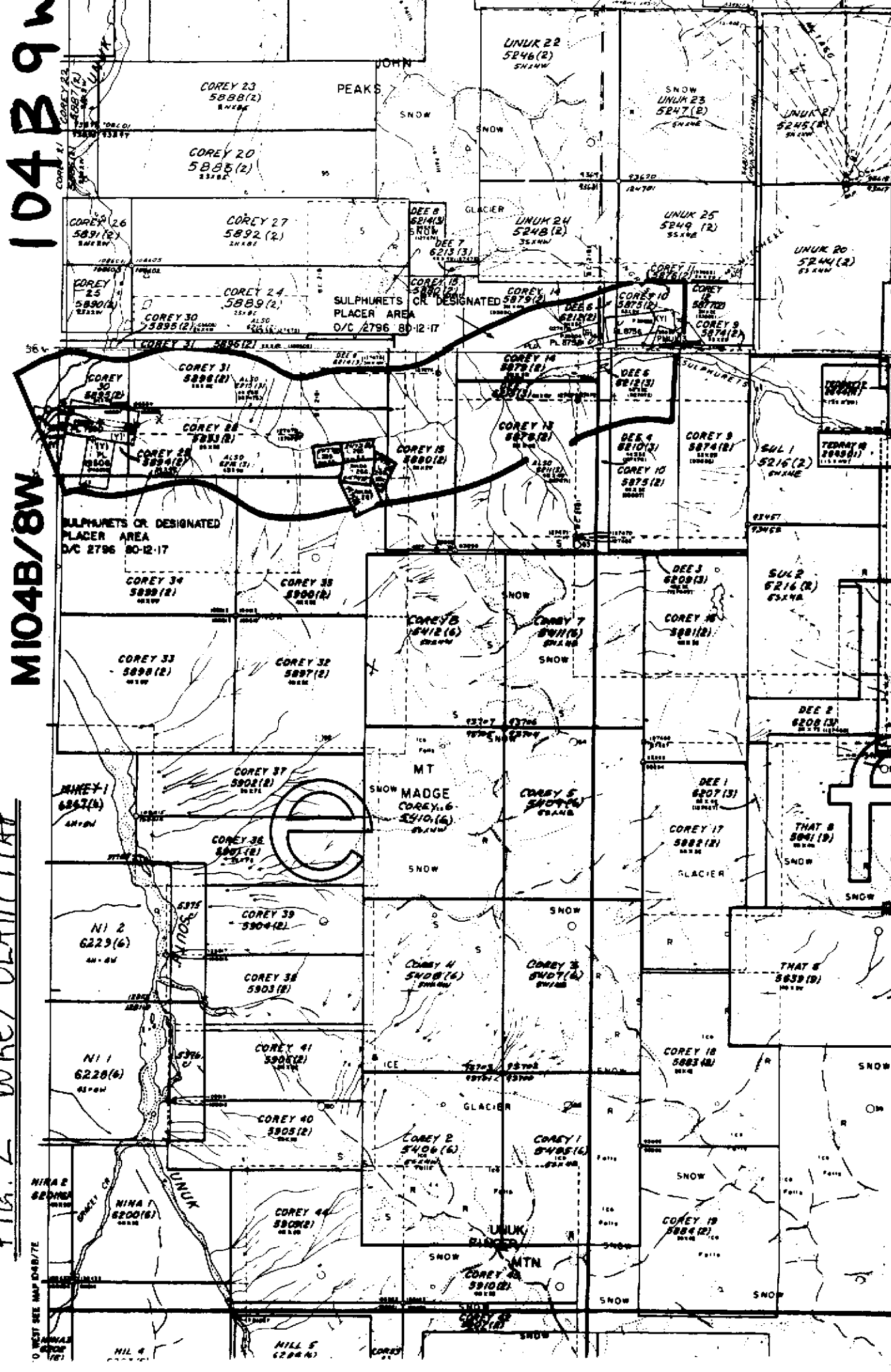
<u>NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>	<u>DATE OF RECORDING</u>
Corey 1	5405	20	June 25, 1986
Corey 2	5406	20	"
Corey 3	5407	20	"
Corey 4	5408	20	"
Corey 5	5409	20	"
Corey 6	5410	20	"
Corey 7	5411	20	"
Corey 8	5412	20	June 25, 1986
Corey 10	5875	12	February 11, 1987
Corey 11	5876	4	"
Corey 12	5877	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



104B9W

M104B/8W

FIG. 2 COREY CLAIM MAP



WEST SEE MAP SHEET

HILL 5 6288(6)

COREY 44 5808(2)

COREY 43 5810(2)

COREY 42 5812(2)

COREY 41 5814(2)

COREY 40 5816(2)

COREY 39 5818(2)

NINA 2 6200(6)

NINA 1 6200(6)

COREY 44 5808(2)

COREY 43 5810(2)

COREY 42 5812(2)

COREY 41 5814(2)

COREY 40 5816(2)

COREY 39 5818(2)

COREY 38 5820(2)

COREY 37 5822(2)

COREY 36 5824(2)

COREY 35 5826(2)

COREY 34 5828(2)

COREY 33 5830(2)

COREY 32 5832(2)

NI 2 6229(6)

NI 1 6228(6)

COREY 39 5804(2)

COREY 38 5806(2)

COREY 37 5808(2)

COREY 36 5810(2)

COREY 35 5812(2)

COREY 34 5814(2)

COREY 33 5816(2)

COREY 32 5818(2)

COREY 31 5820(2)

COREY 30 5822(2)

COREY 29 5824(2)

COREY 28 5826(2)

COREY 27 5828(2)

NI 2 6229(6)

NI 1 6228(6)

COREY 39 5804(2)

COREY 38 5806(2)

COREY 37 5808(2)

COREY 36 5810(2)

COREY 35 5812(2)

COREY 34 5814(2)

COREY 33 5816(2)

COREY 32 5818(2)

COREY 31 5820(2)

COREY 30 5822(2)

COREY 29 5824(2)

COREY 28 5826(2)

COREY 27 5828(2)

NI 2 6229(6)

NI 1 6228(6)

COREY 39 5804(2)

COREY 38 5806(2)

COREY 37 5808(2)

COREY 36 5810(2)

COREY 35 5812(2)

COREY 34 5814(2)

COREY 33 5816(2)

COREY 32 5818(2)

COREY 31 5820(2)

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COREY 29 5824(2)

COREY 28 5826(2)

COREY 27 5828(2)

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COREY 39 5804(2)

COREY 38 5806(2)

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COREY 35 5812(2)

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COREY 27 5828(2)

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COREY 28 5826(2)

COREY 27 5828(2)

NI 2 6229(6)

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COREY 39 5804(2)

COREY 38 5806(2)

COREY 37 5808(2)

COREY 36 5810(2)

COREY 35 5812(2)

COREY 34 5814(2)

COREY 33 5816(2)

COREY 32 5818(2)

COREY 31 5820(2)

COREY 30 5822(2)

COREY 29 5824(2)

COREY 28 5826(2)

COREY 27 5828(2)

NI 2 6229(6)

NI 1 6228(6)

COREY 39 5804(2)

COREY 38 5806(2)

COREY 37 5808(2)

COREY 36 5810(2)

COREY 35 5812(2)

COREY 34 5814(2)

COREY 33 5816(2)

COREY 32 5818(2)

COREY 31 5820(2)

COREY 30 5822(2)

COREY 29 5824(2)

COREY 28 5826(2)

COREY 27 5828(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	"
Ziph's 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	47 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. Kruckowski	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 Mudge Unuk River area is as follows:

- 1898 - H.W. Ketchum staked an area situated on the Mount Mudge 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

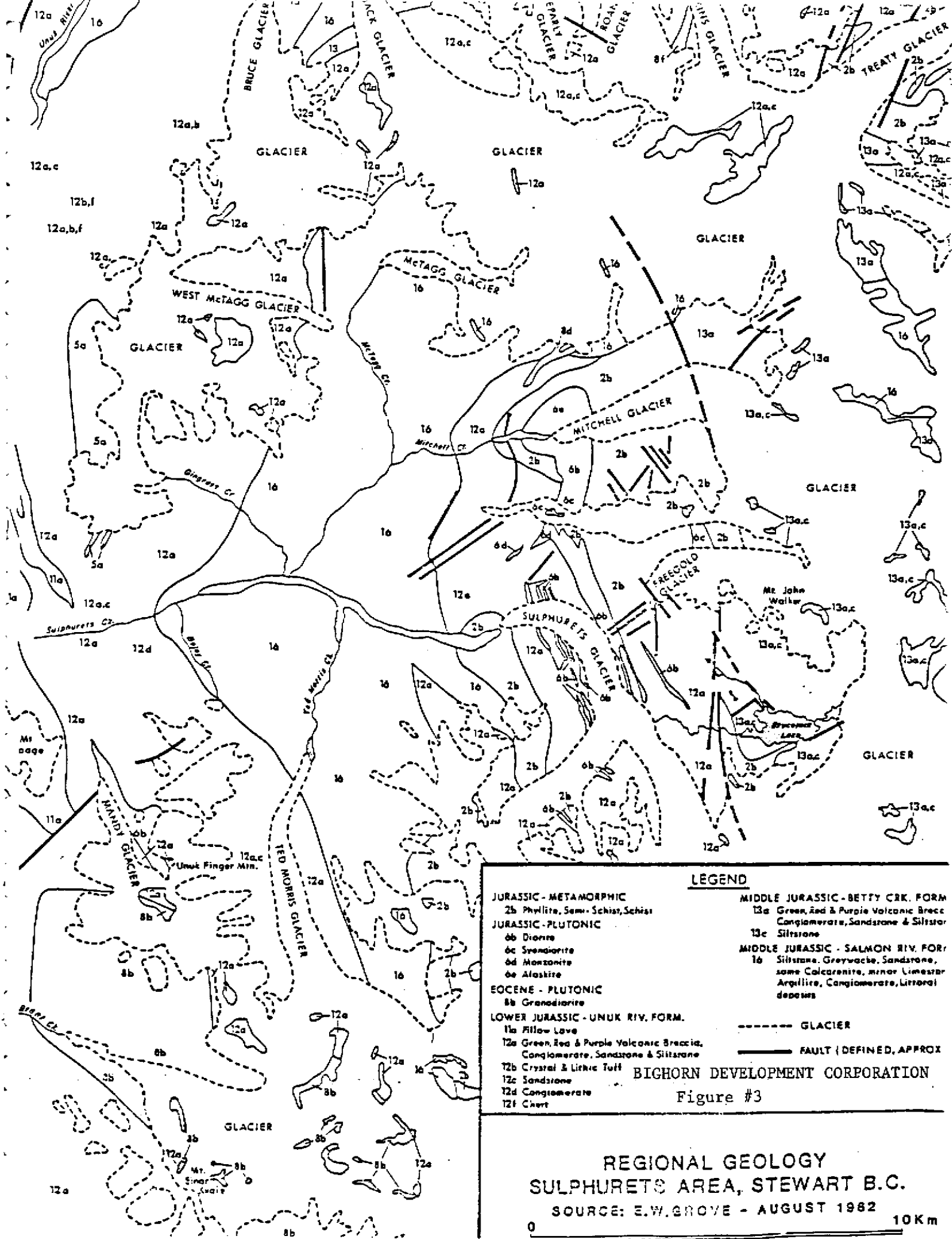
### Regional Geology

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) volcaniclastic 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**

<p><b>JURASSIC - METAMORPHIC</b></p> <p>2b Phyllite, Sem. Schist, Schist</p> <p><b>JURASSIC - PLUTONIC</b></p> <p>6b Diorite</p> <p>6c Spondonite</p> <p>6d Monzonite</p> <p>6e Alaskite</p> <p><b>EOCENE - PLUTONIC</b></p> <p>8b Granodiorite</p> <p><b>LOWER JURASSIC - UNUK RIV. FORM.</b></p> <p>11a Fillow Lava</p> <p>12a Green, Red &amp; Purple Volcanic Breccia, Conglomerate, Sandstone &amp; Siltstone</p> <p>12b Crystal &amp; Litic Tuff</p> <p>12c Sandstone</p> <p>12d Conglomerate</p> <p>12f Chert</p>	<p><b>MIDDLE JURASSIC - BETTY CRK. FORM</b></p> <p>13a Green, Red &amp; Purple Volcanic Brecc Conglomerate, Sandstone &amp; Siltstone</p> <p>13c Siltstone</p> <p><b>MIDDLE JURASSIC - SALMON RIV. FOR:</b></p> <p>16 Siltstone, Greywacke, Sandstone, some Calcareous, minor Limestone Argillite, Conglomerate, Littoral deposits</p> <p>----- GLACIER</p> <p>———— FAULT (DEFINED, APPROX)</p>
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**BIGHORN DEVELOPMENT CORPORATION**

Figure #3

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

SOURCE: E.W. GROVE - AUGUST 1982

10K m

0

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 rock geochemical grid, 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 one-half to one mile in width. It consists primarily of pyrite-sericite schist where exposed at mountain or ridge tops. As the zone is followed down hill 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.

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 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. 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.

## Personnel

K. Konkin	Project Geologist 10.5 days @ \$250/d	2,625.00
	July 2 - August 27	
B. Krutow	Project Geologist 47 days @ \$250/d	11,750.00
	June 30 - August 19	
D. Lund	Geological Assist. 27 days @ \$150/d	4,050.00
	July 10 - August 19	
A. Heinrichs	Geological Assist. 13 days @ \$150/d	1,950.00
	July 10 - July 22	
T. Bonenfante	Geological Assist. 47 days @ \$150/d	7,050.00
	June 30 - August 15	
D. Funk	Geological Assist. 46 days @ \$150/d	6,900.00
	June 30 - August 15	
A. Reimer	Geological Assist. 44 days @ \$150/d	6,600.00
	June 30 - August 15	
A. Engstrom	Geological Assist. 29 days @ \$150/d	4,350.00
	July 8 - August 5	
T. McIndoe	Geological Assist. 27 days @ \$150/d	4,050.00
	July 8 - July 28	
J. Paquette	Geological Assist. 27 days @ \$150/d	4,050.00
	June 30 - July 28	
A. Hoffman	Geological Assist. 36 days @ \$150/d	5,400.00
	June 30 - July 28	
B. Heinrichs	Carpenter 67.5 hrs @ \$23/hr	1,552.50
	July 9 - July 15	
C. Moehling	Apprent. Carpenter 47.5 hrs @ \$19/hr	902.50
	July 9 - July 13	
S. Edwards	Geological Assist. 5 days @ \$150/d	750.00
	July 9 - July 13	
M. Brown	Camp Cook 60 hrs @ \$16/hr	960.00
	July 13 - July 17	
J. Wyder	Exploration Manager 12 days @ \$450/d	5,400.00
	June 30 - August 27	
E. Kruckowski	Senior Geologist 14 days @ \$300/d	4,200.00
	June 30 - August 27	
M. Jaeger	Geological Assist. 1 day @ \$150/d	150.00
	August 27	
Food - 415.5 mandays @ \$23/manday		9,556.50
Lodging - 415.5 mandays @ \$25/manday		10,387.50
Transportation - (Bell 206 and Bell 204)		65,992.00
Communication - 52 days @ \$20/day		520.00
Generator Rental - 52 days @ \$20/day		1,040.00
Cobra Drill Rental - 52 days @ \$50/day		2,600.00
Consumables - 415.5 mandays @ \$7/manday		2,908.50
Lumber, Fuel, Explosives		3,500.00
Freight		250.00
Hardware Supplies		1,850.00
Expediting Cost - Limar Industries		1,600.00
Mob/Demob		4,592.50
Report Writing/Drafting/Administration (contractor change)		5,000.00
Geochemical Analysis \$15/sample x 634 samples		9,510.00
TOTAL		\$192,000.00

STATEMENT OF COSTS TO BE APPLIED TO CLAIM GROUPINGS

Costs applied to the various Corey groupings are as follows:

<u>Claim Group</u>	<u>Units</u>	<u>Amount of Work Applied %</u>	<u>Amount Spent</u>
Corey 22, 23, 21, 26, 27, 25, 24, 30, 29	96	20.83	40,000
Corey 31, 28, 34 35, 32 RCG L265 RCG L266 RCG L267 RCG L268 RCG L269	97	20.83	40,000
Corey 33, 37, 36 39, 38, 41	84	20.83	40,000
Corey 40, 44, 45 43, 42	92	15.63	30,000
Corey 18, 19	40	4.17	8,000
Corey 15, 10, 11 12, 16, 14	66	17.71	34,000
	<u>475</u>	<u>100%</u>	<u>\$192,000</u>

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- 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 1985.
2. I have been practicing my profession continuously since graduation.
3. I am a consulting geologist working on behalf of E.R. Kruckowski Consulting Ltd.
4. This report is based on a review of reports, documents, maps and other technical data, and field work carried out by myself from June 01 to September 30, 1988, and on my experience and knowledge of the area.
5. I hold no direct interest in the property.

May 1, 1989  
DATE

K. J. Konkino  
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  $\text{HCl}$

For Pb/Zn: Nitric-perchloric dissolution to dryness,  
taken up in  $\text{HCl}$

For Au/Ag: Fire assay fusion, cupellation and acid  
dissolution of precious metal beads.

Analysis: Atomic absorption

APPENDIX II

GEOCHEMICAL ANALYSIS



To: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8

ATTN: Jack Wyder



File No. 31809

Date October 12, 1988

Samples Rock

MT. MADGE PROJECT

## 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....

Samples retained one month.  
Residue 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 # 1

SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER	% Cu
<u>"Core Samples"</u>			
<u>"Assay Analysis"</u>			
<del>8805</del> 42369	.048	-	-
KK-88-T1	-	11.40	-
KK-88-T4	-	1.32	-
KK-88-T5	-	27.30	-
<del>8806</del> 42396	-	-	.03
<del>42399</del>	-	-	.04
<del>42403</del>	-	-	.04
<del>42404</del>	-	-	.03
<del>42405</del>	-	-	.05
<del>42406</del>	-	-	.02
<del>42407</del>	-	-	.02
<del>42408</del>	-	-	.06
<del>42409</del>	-	-	.20
<del>42410</del>	-	-	.20
<del>42411</del>	-	-	.10
<del>42412</del>	-	-	.14
<del>42413</del>	-	-	.23
<del>42414</del>	-	-	.20
<del>42415</del>	-	-	.38
<del>42416</del>	-	-	.49

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 # 10

SAMPLE NO.	PPB Au	PPM Ag
<del>3006</del> 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....

Objects 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. 21778 and 28 1988

RECEIVED

Date September 26, 1988

Samples Silt

MT. MADCE PROJECT



TIN: Jack Wyder

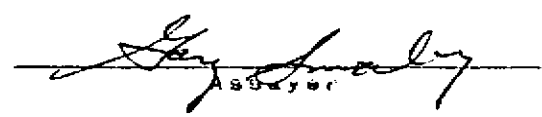
# Certificate of Assay LORING LABORATORIES LTD.

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....

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

  
Assayer

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



File No. 31778

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....

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

  
Assayer

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

File No. 31778  
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
TB-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....

Amy Swaley

Specimens retained one month.  
Specimens retained one month  
unless specific arrangements  
are made in advance.

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



File No. 31778  
Date September 26, 1989  
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	NIL	0.1
134 f	NIL	0.2

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

Refractometers retained one month.  
Refractors 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. 31740  
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- 01	NIL	0.4
02	NIL	0.3
03	NIL	0.4
04	NIL	0.3
05	NIL	0.3
06	50	0.5
07	NIL	0.4
08	NIL	0.4
09	NIL	0.3
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	0.3
33	NIL	0.3
34	NIL	0.5
35	NIL	0.4
40	NIL	0.4
41	NIL	0.3
42	25	0.3
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



IG HORN DEVELOPMENT CORP.,

File No. 31740

255 - 17th Avenue S.W.,

Date August 26, 1988

gary, Alberta T2S 2T8

Samples Silt

MT. MADGE PROJECT



By Jack Wyder

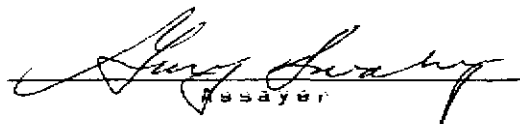
# Certificate of Assay LORING LABORATORIES LTD.

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	0.8
R-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	150	0.6

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

of retained one month.  
of retained one month  
and specific arrangements  
made in advance.

  
Assayer

To: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8



File No. 31740

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
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

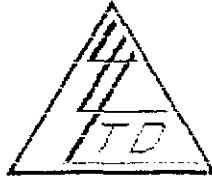
To: BIG HORN DEVELOPMENT CORP.,  
400, 255 - 17th Avenue S.W.,  
Calgary, Alberta T2S 2T8

File No. 31740

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
009	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....

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. 31740

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
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

To: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T9

File No. 31740

Date August 26, 1988

Samples Silt

MT. MADGE PROJECT



ATTN: Jack Wyder

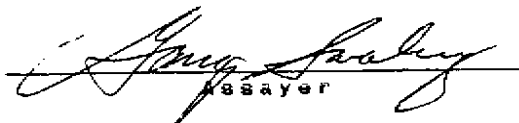
# Certificate of Assay LORING LABORATORIES LTD.

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
36	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

To: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8

ATTN: Jack Wyder

File No. 31740

Date August 26, 1988

Samples Silt

MT. MADGE PROJECT



# Certificate of Assay LORING LABORATORIES LTD.

Page # 7

SAMPLE NO.	PPB Au	PPM Ag
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

To: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8



File No. 31740

Date August 26, 1988

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

To: BIG HORN DEVELOPMENT CORP.,  
400, 255 - 17th Avenue S.W.,  
Calgary, Alberta T2S 2T9

File No. 31693  
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
"SITE 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.

*Ray Swaley*  
Assayer



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

File No. 31693  
Date August 26, 1988  
Samples Silt  
MT. MADGE PROJECT



ATTN: Jack Wyder

## Certificate of Assay LORING LABORATORIES LTD.

Page # 2

SAMPLE NO.	PPB AU	PPM 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.  
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. 31693

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	0.3
27	5	0.1
TD-88-03	30	3.0
11	5	0.5
64	5	0.2
65	25	NIL
67	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.

  
Assayer

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

File No. 31693  
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	0.3
35	5	0.4
37	NIL	1.4
40	NIL	0.4
42	NIL	0.3
44	NIL	0.4
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

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

File No. 31693

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- 51	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

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

File No. 31693

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

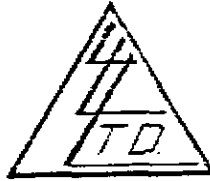
I Hereby Certify that the above results are those  
assays made by me upon the herein described samples....

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

  
Assayer

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

File No. 31677  
 Date August 26, 1988  
 Samples Core  
 PROJECT: MT. MADGE



ATTN: Jack Wyder

## Certificate of Assay LORING LABORATORIES LTD.

Page # 3

SAMPLE NO.	OZ./TON GOLD	OZ./TON SILVER
<del>42146</del>	<del>.003</del>	<del>Trace</del>
<del>42147</del>	<del>.003</del>	<del>.04</del>
<del>42148</del>	<del>.003</del>	<del>.05</del>
<del>8883 42149</del>	<del>.004</del>	<del>.09</del> <i>3195-319</i>
<del>8884 42153</del>	<del>.002</del>	<del>.01</del> <i>15-18.5</i>
<del>42154</del>	<del>.001</del>	<del>.01</del>
<del>42155</del>	<del>.003</del>	<del>.01</del>
<del>42159</del>	<del>Trace</del>	<del>.14</del>
<del>42163</del>	<del>.024</del>	<del>.10</del> <i>525-55.5</i>
<del>42164</del>	<del>.006</del>	<del>.04</del> <i>55.5-60.1</i>
<del>42167</del>	<del>.008</del>	<del>.09</del> <i>66-69</i>
<del>42176</del>	<del>.001</del>	<del>.02</del>
<del>42181</del>	<del>.001</del>	<del>.01</del>
<del>42190</del>	<del>.001</del>	<del>Trace</del>
<del>42191</del>	<del>.003</del>	<del>Trace</del> <i>160.5-163</i>
BK88R-124	.008	.01
125	.002	.03
126	Trace	.02
127	Trace	.14
128	Trace	.04

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.

*Lang Leaking*  
 Assayer

To: BIG HORN DEVELOPMENT CORP.,

File No. 31657-1

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

Date September 27, 1988

Calgary, Alberta T2S 2T8

Samples Rock

MT. MADGE PROJECT



ATTN: Jack Wyder

## Certificate of Assay LORING LABORATORIES LTD.

SAMPLE NO.

OZ./TON  
GOLD

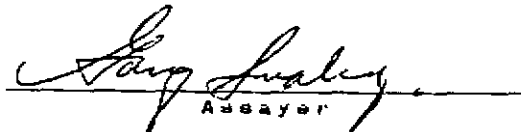
OZ./TON  
SILVER

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....

Re: tests retained one month.  
Assays retained one month  
in case specific arrangements  
are made in advance.

  
Assayer

J: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8

File No. 31657

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

  
Assayer



Co: BIG HORN DEVELOPMENT CORP.,

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

Calgary, Alberta T2S 2T8

ATTN: Jack Wyder

File No. 31657

Date August 26, 1988

Samples Rock

MT. MADGE PROJECT



# 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....

Objects retained one month.  
Samples 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. 31657  
Date August 26, 1988  
Samples Rock  
MT. MADGE PROJECT



ATTN: Jack Wyder


# 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
TB-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....

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

  
Assayer

BIG HORN DEVELOPMENT CORP.,

255 - 17th Avenue S.W.,

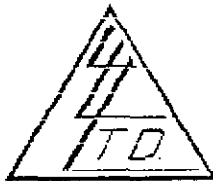
Calgary, Alberta T2S 2T8

File No. 31657

Date August 26, 1989

Samples Rock

MT. MADGE PROJECT



TTN: Jack Wyder

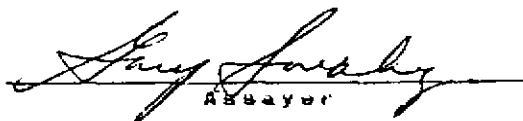
# Certificate of Assay LORING LABORATORIES LTD.

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
220	20	0.8
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....

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

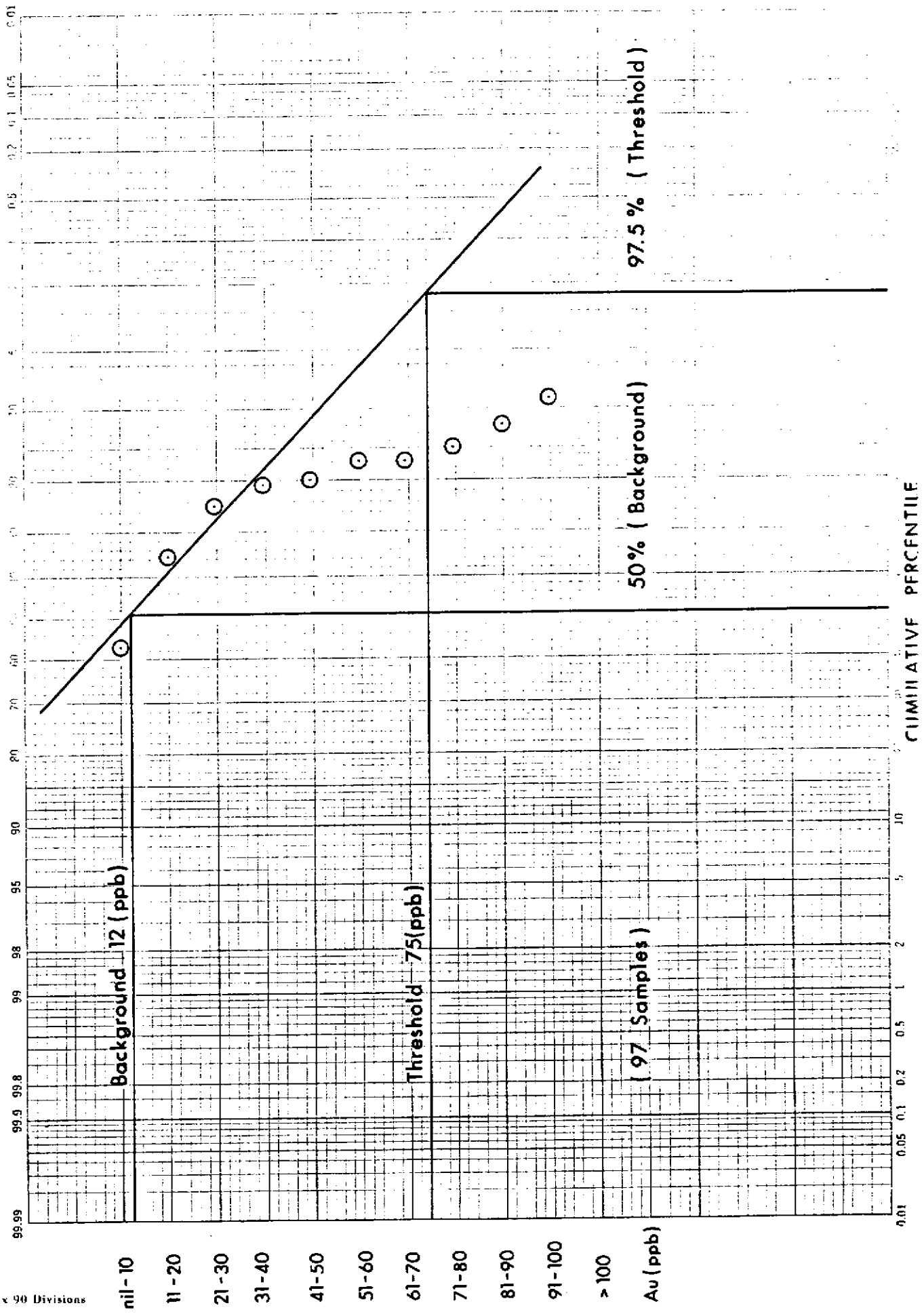
  
Assayer

APPENDIX III

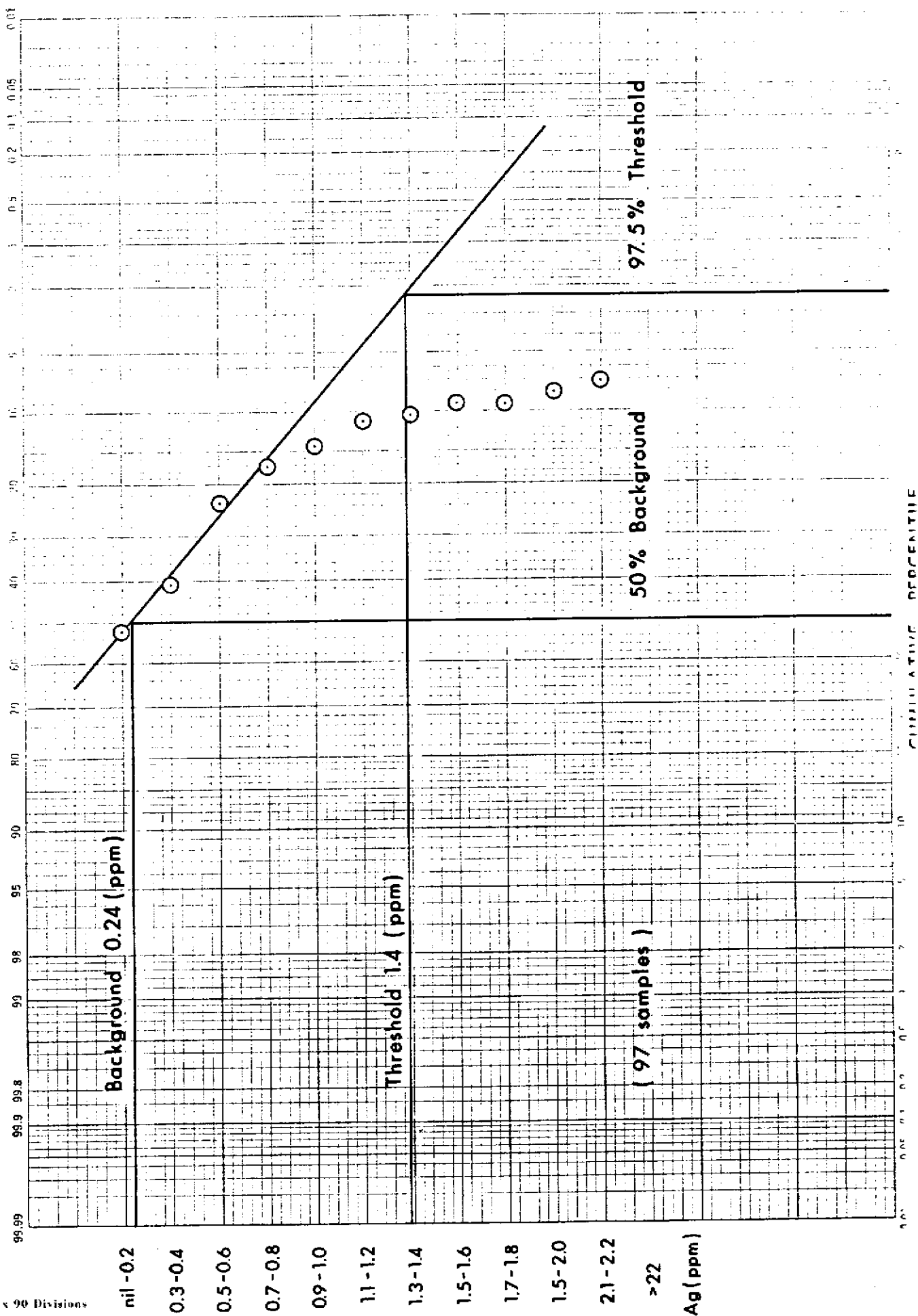
CUMULATIVE FREQUENCY CHARTS



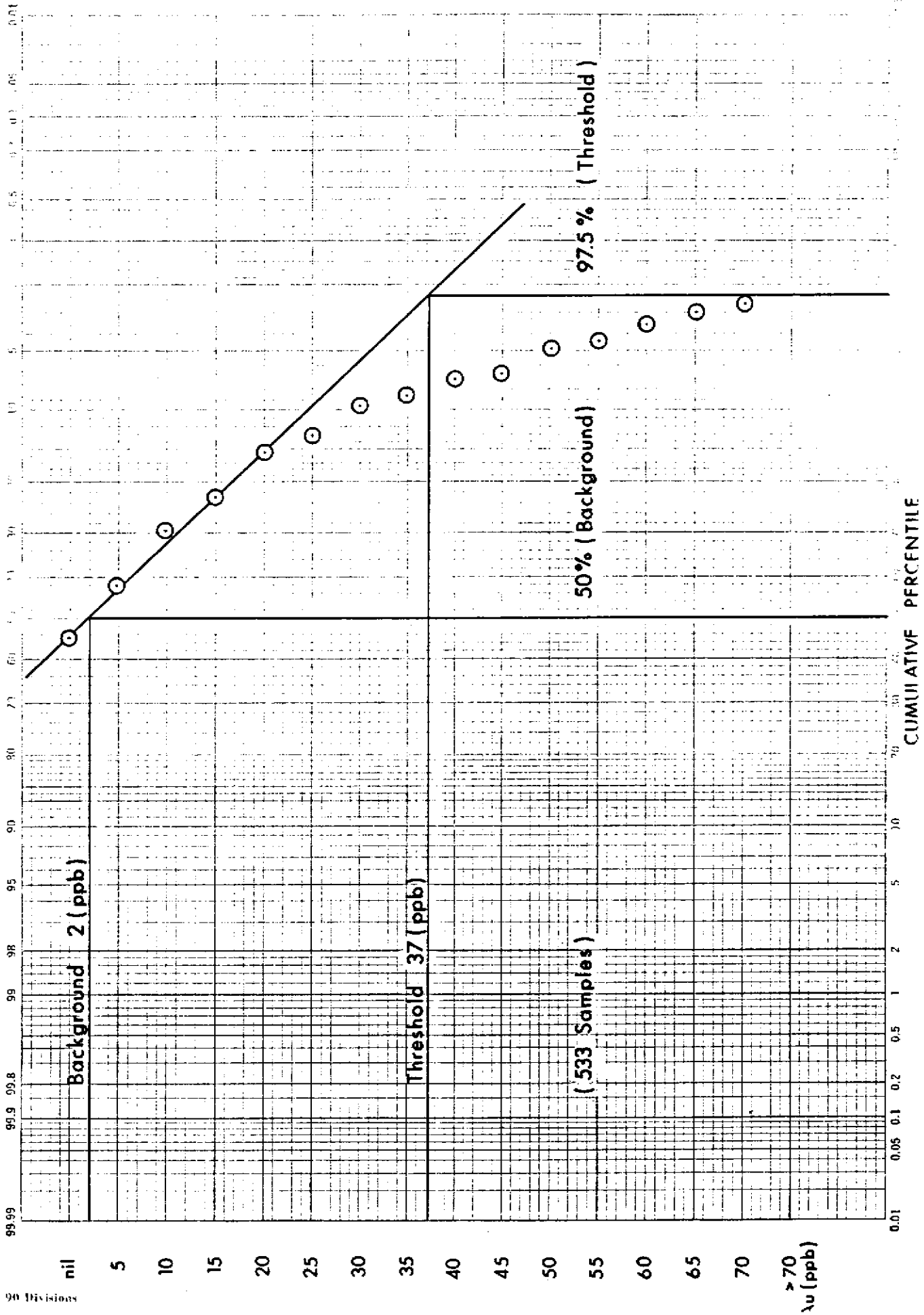
# CUMULATIVE FREQUENCY PLOT FOR Au (ppb) IN ROCK SAMPLES



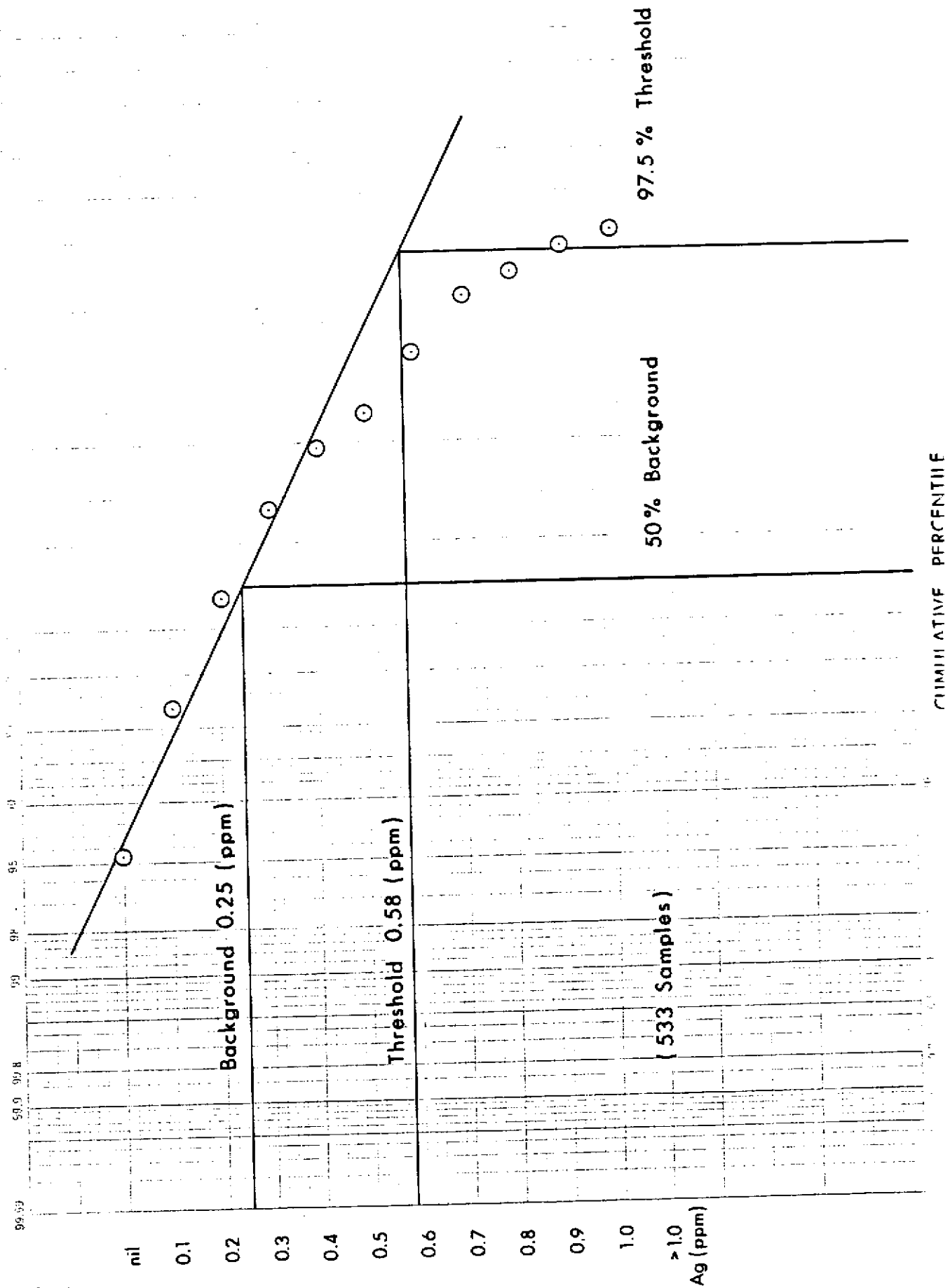
# CUMULATIVE FREQUENCY PLOT FOR Ag (ppm) IN ROCK SAMPLES



# CUMULATIVE FREQUENCY PLOT FOR Au (ppb) IN SILT SAMPLES



# CUMULATIVE FREQUENCY PLOT FOR Ag (ppm) IN SILT SAMPLES





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.

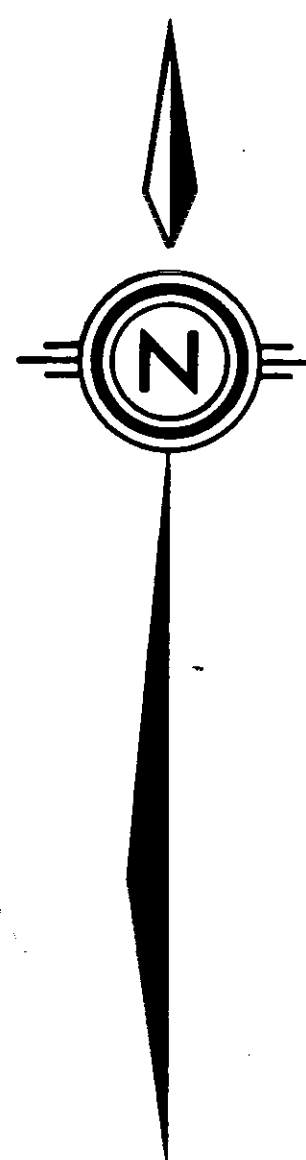
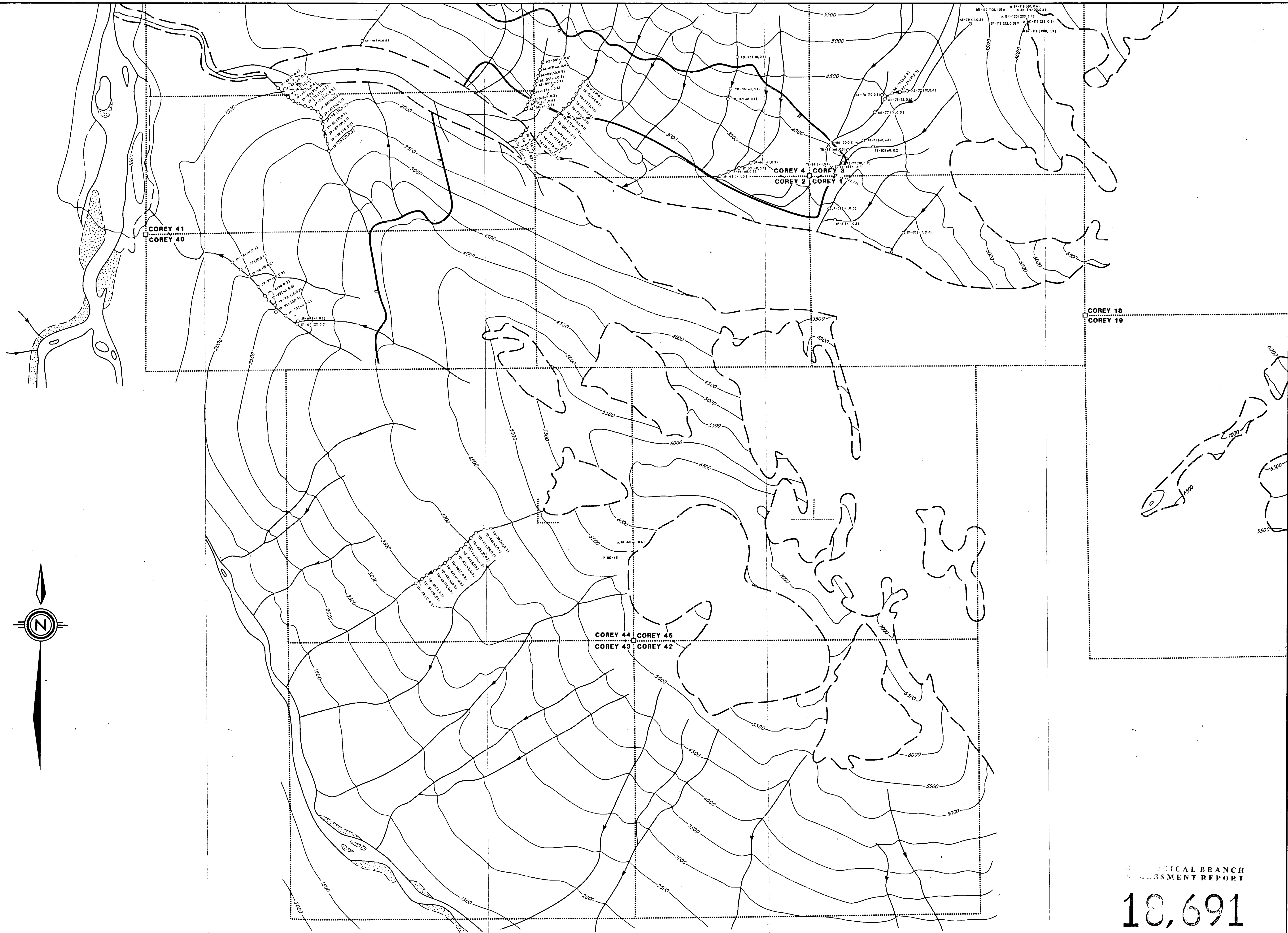
- BK88R-053: 3' chip; as above.
- BK88R-054: 3' chip; as above, except more siliceous
- BK88R-055: 4' chip; siliceous volcanic tuff, 018/75, mod to intense hem + lim ox., occasional qtz veins (<2%), 1-2% py + CP.
- BK88R-056: 7' chip; as 055, except contains 3-5% 1-5 mm py + CP veinlets & stringers; 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. silted dk grey-green crystal-lithic tuff, 3% qtz veinlets and stockwork.
- BK88R-135: 1.5 m chip, very well silted crystal-lithic tuff, 10-15% qtz veinlets and stockwork up to 25 mm thick.
- BK88R-136: 1.5 m chip; very well silted crystal tuff, 20-30% qtz veinlets and stockwork in some areas, veinlets up to 15 mm, tr. Ag? or possibly P<sub>0</sub>, mod. local lim ox. on weathered surface and fracture planes.



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,691

3
2
1

MAP SHEET INDEX

TOPOGRAPHICAL & CLAIM FEATURES:

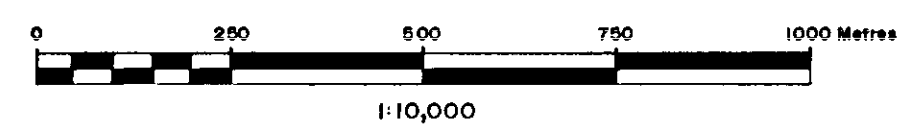
- Icefield, Glacier
- Creek (Direction of Flow)
- Above Tree Line
- Below Tree Line
- Contours in Feet AMSL
- Sandbar
- LCP and Claim Line

GEOLOGICAL FEATURES:

- Fault or Shear Zone
- Strike and Dip (Foliation)

GEOLOGICAL SAMPLE SITES

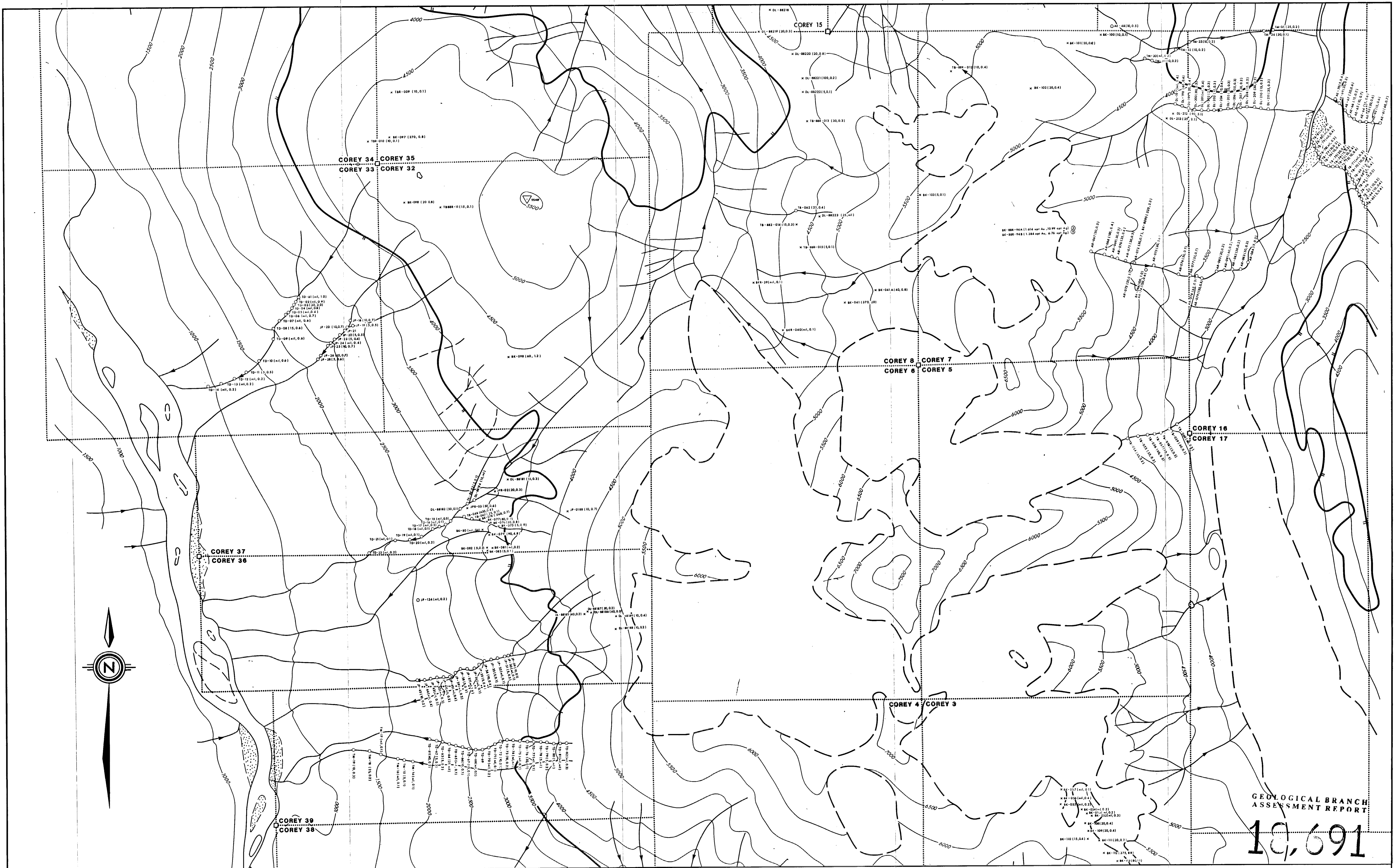
- Silt
- Rock
- Rock Float
- Au (ppb), Ag (ppm)  
(unless otherwise stated)



<b>BIGHORN DEVELOPMENT CORPORATION</b>		
MT. MADGE PROJECT		
COREY CLAIMS		
GEOCHEMICAL SAMPLE LOCATION MAP		
Scale: 1:10,000	C.I.: 500'	By: K. Konkin
Date: Feb. 1989	Revised: 1989	Figure: 4

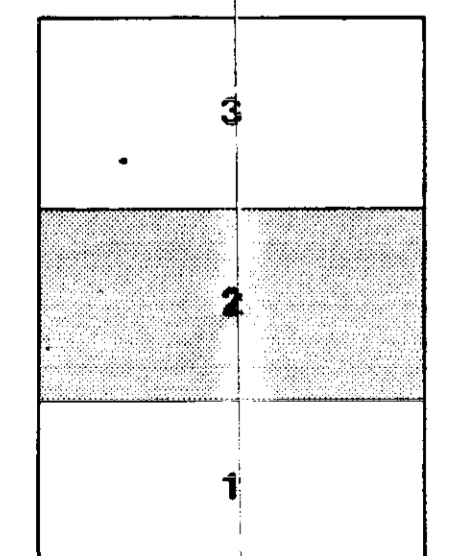
BELT CHAIN & ODOMETER DISTANCES  
CO-ORDINATES UTM GRID  
MAP BASE: ENLARGEMENT FROM 1:50,000 TOPOGRAPHIC





GEOLOGICAL BRANCH  
ASSESSMENT REPORT

10,691



MAP SHEET INDEX

TOPOGRAPHICAL & CLAIM FEATURES:

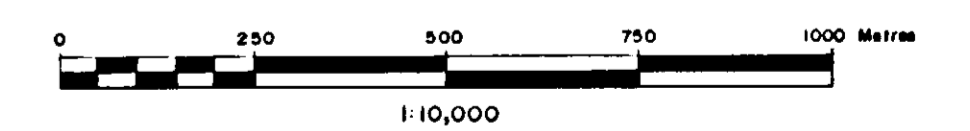
- Icefield, Glacier
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- Above Tree Line
- Below Tree Line
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- Sandbar
- LCP and Claim Line

GEOLOGICAL FEATURES:

- Fault or Shear Zone
- Strike and Dip (Foliation)

GEOLOGICAL SAMPLE SITES

- Silt
- Rock
- Rock Float
- Au (ppb), Ag (ppm)  
(unless otherwise stated)



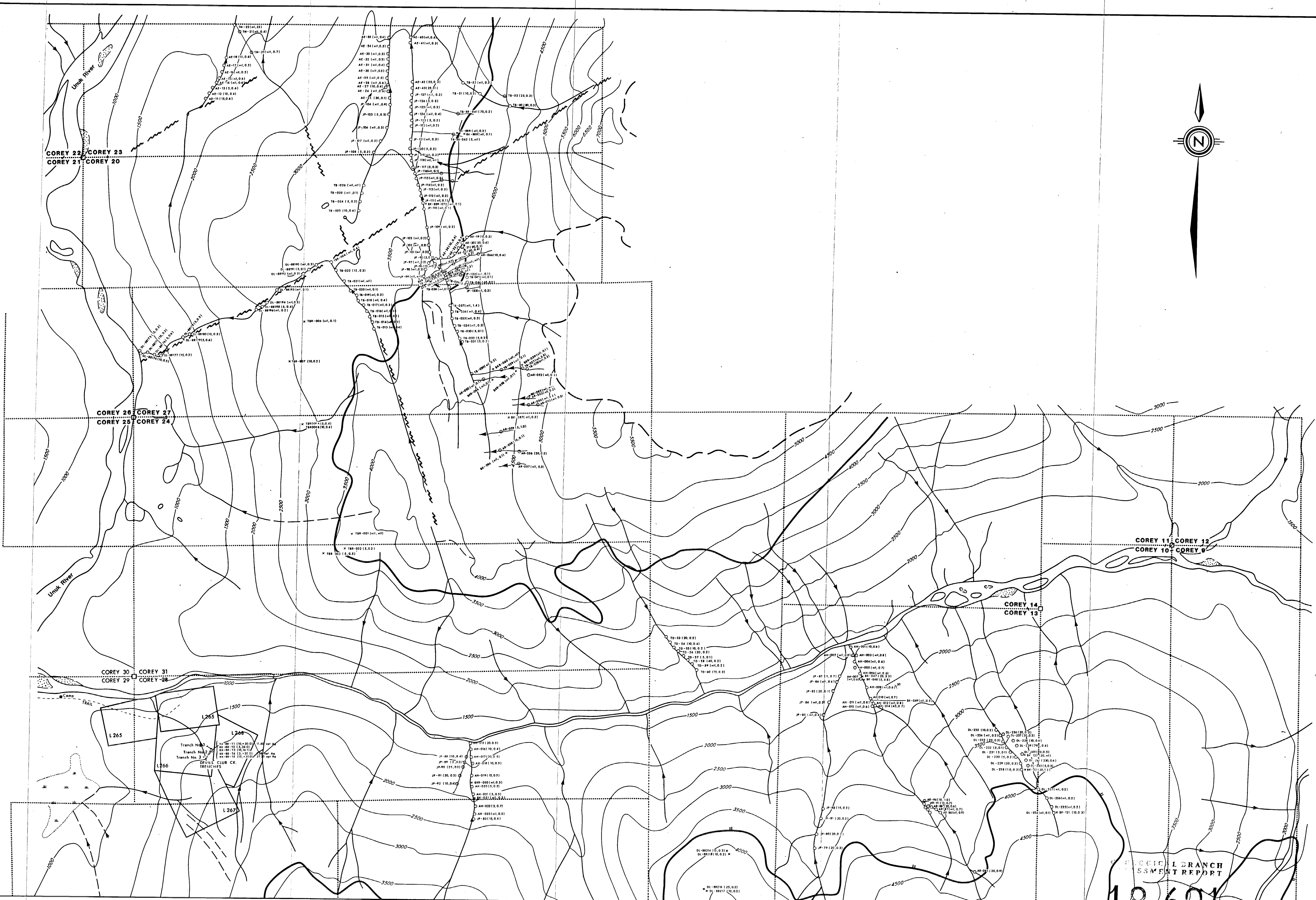
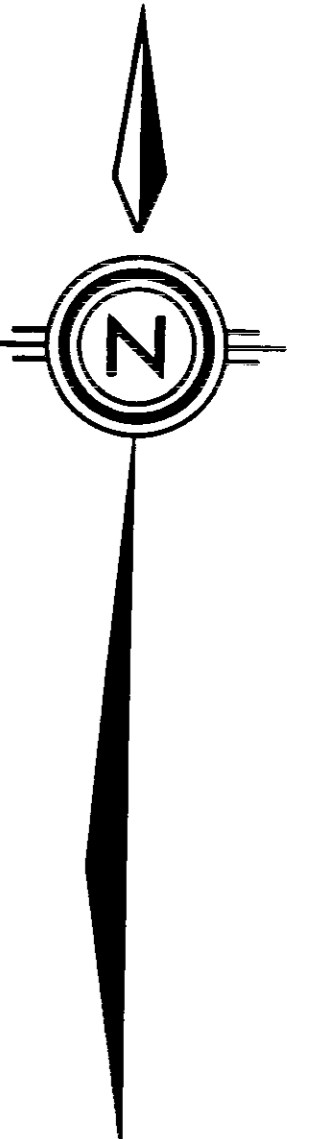
BIGHORN DEVELOPMENT CORPORATION

MT. MADGE PROJECT  
COREY CLAIMS

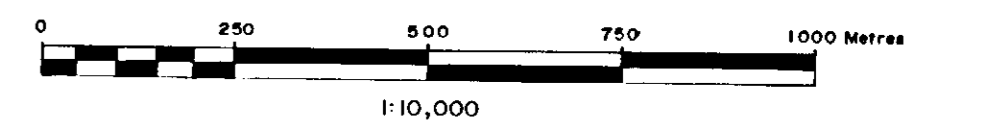
GEOCHEMICAL SAMPLE LOCATION MAP

Scale: 1:10,000	C.I.: 500'	By: K. Konkin
Date: Feb, 1989	Revised: 1989	Figure: 5

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



REGIONAL BRANCH  
SUMMIT REPORT  
**18,691**



3
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MAP SHEET INDEX

**TOPOGRAPHICAL & CLAIM FEATURES:**

- Icefield, Glacier
- Creek (Direction of Flow)
- Above Tree Line
- Below Tree Line
- 1000 Contours in Feet AMSL
- Sandbar
- LCP and Claim Line

**GEOLOGICAL FEATURES:**

- Fault or Shear Zone
- Strike and Dip (Foliation)

**GEOLOGICAL SAMPLE SITES**

- Silt
- Rock
- Rock Floor
- Au (ppb), Ag (ppm)  
(unless otherwise stated)

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

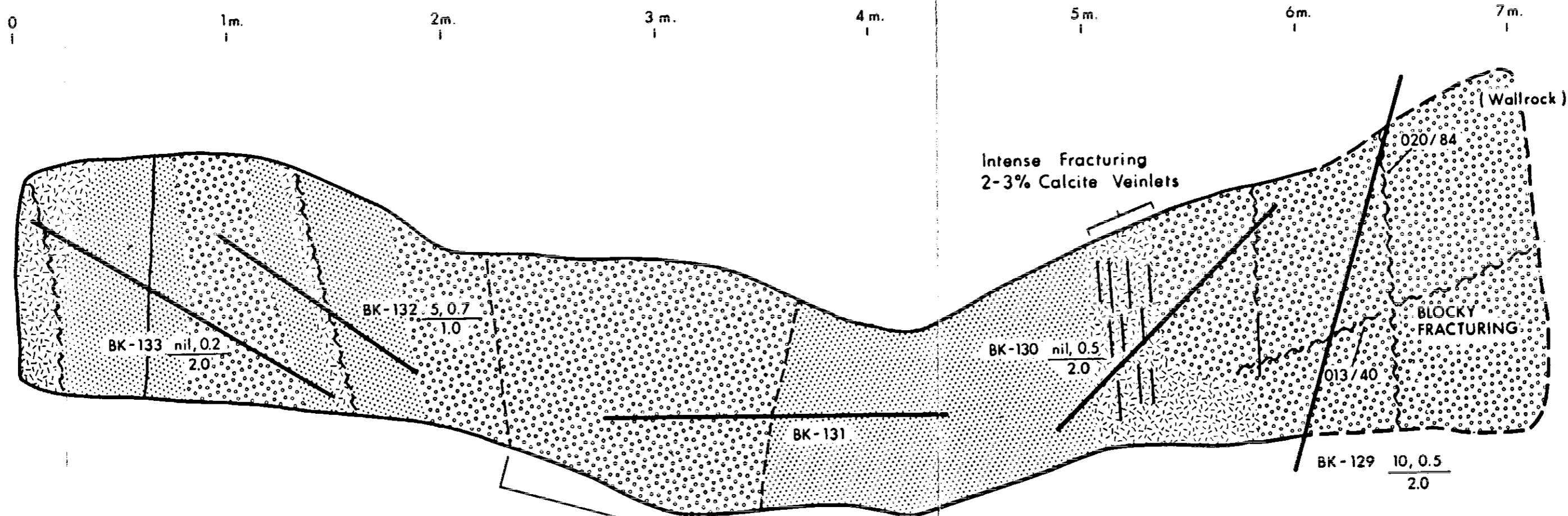
**BIGHORN DEVELOPMENT CORPORATION**

MT. MADGE PROJECT  
COREY CLAIMS 3




**GEOCHEMICAL SAMPLE LOCATION MAP**

Scale: 1:10,000	C.I.: 500'	By: K. Konkin
Date: Feb, 1989	Revised: 1989	Figure: 6

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

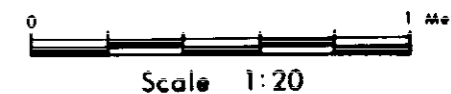
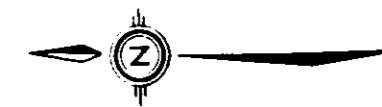
10, 0.2      Au (ppb), Ag (ppm)  
2.0              width (m)

130/ 70      Strike/Dip (right hand rule)

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

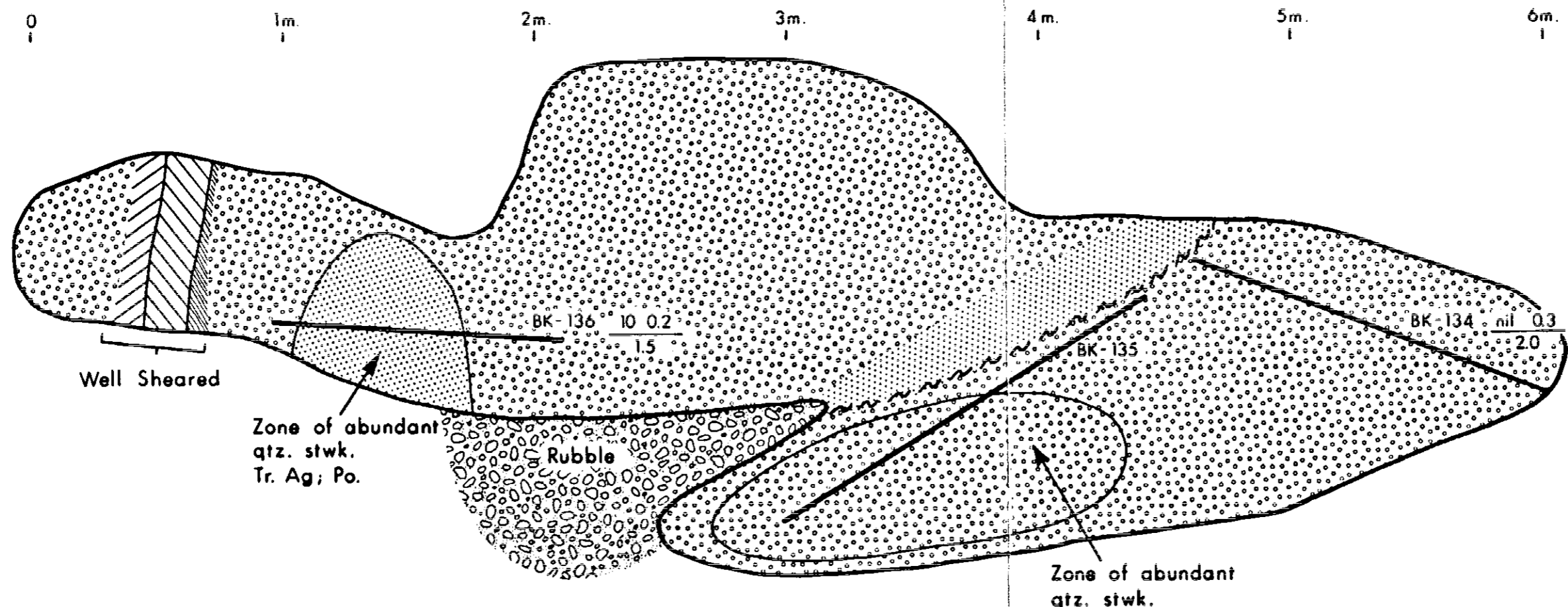
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

18,691



BIGHORN DEVELOPMENT CORP.	
DEVILS CLUB CREEK SHOWING TRENCH No. 1 ④	
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)



0 1 Metre  
Scale 1:20

DEVILS CLUB CREEK  
 BIGHORN DEVELOPMENT CORP.  
 1989

BIGHORN DEVELOPMENT CORP.	
DEVILS CLUB CREEK SHOWING TRENCH No. 2 (5)	
Date: Feb., 1989	Scale: 1:20
By: B. Krutow	Figure: 8