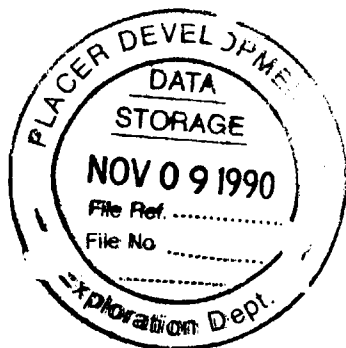


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SUMMARY REPORT OF MT MADGE PROPERTY
STEWART, BRITISH COLUMBIA
SKEENA MINING DIVISION
NTS 104B 8W
LATITUDE 56° 27'
LONGITUDE 103° 25'

PREPARED FOR:

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CALGARY, ALBERTA
January, 1990

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SUMMARY

The Mt Madge property consisting of the Corey claims and five reverted Crown Grants is located about 70 kilometres northwest of Stewart, B.C. east of the Unuk River near its junction with Sulphurets Creek. The claims lie within a belt of rocks referred to as B.C.'s "Golden Triangle" which encompasses the Iskut River Gold Camp to the west, the Unuk River Camp to the east, and the Stewart Gold Belt to the south. Besides the recent Eskay Creek area, the "Triangle" has two producing gold mines and at least three more in the process and a recently discovered porphyry copper-gold deposit.

The property consists of 630 units within 42 separate claim blocks with the five reverted crown grants overstaked by the above claims.

It is underlain by an area of volcanic tuffs, sandstones and conglomerates of the Unuk River formation as well as Mt Dilworth formation tuffs variably altered and intruded by a variety of plugs related to the Coast Range Batholith. Mineralized zones are numerous and varied on the claims. Areas of interest include:

1. A thick sequence of pyritiferous Mt Dilworth formation in the N/W corner of the claim.
2. A second area of interest is the Cumberland and Daly showings on the reverted Crown Grants. The Cumberland showing consists of a wide section of pyritiferous, dacitic or rhyolitic tuffs containing narrow lenses and pods of massive barite, sphalerite, galena and chalcopyrite with associated gold and silver values. The Daly showing consists of narrow carbonate altered zones with associated galena, sphalerite and tetrahedrite veins carrying high silver values but no significant gold values, narrow high grade silver bearing pyrrhotite and tetrahedrite? Lenses are present 2000 feet west of the Cumberland and Daly showings. These showings have been called the Silver Creek Showings.

3. A third area of interest consists of the C-10 zone. This is a long alteration zone consisting of a quartz and calcite injected sericite schist with abundant disseminated pyrite and locally traces of arsenopyrite and sphalerite. The zone is fault offset in several locations but has been traced for approximately 4 miles across the Corey claims. Within this zone up to one half mile wide, several locations contain pyrite with sphalerite and chalcopyrite bearing quartz stockworks. The weak stockworks generally show a marked increase in gold values relative to the sericite schist.

4. Another area of interest consists of flat lying to gently dipping siderite, pyrite, sphalerite, galena and arsenopyrite veins, lenses, pods and stringers found along the southeast edge of the C-10 zone. One boulder from the above veins contained spectacular coarse native gold.

5. Another area includes the peripheral areas to the Le Brant Batholith, particularly in the extreme south east corner of the property. In this area copper and gold mineralization are present in altered volcanics.

The north edge of the property is approximately 5 kilometres south of the recent Calpine discovery in the Mt Dilworth formation. The above discovery is a major precious and base metal deposit in a stratabound horizon indicating a massive sulphide environment. Present reserves in 3 separate zones is indicated as being in excess of 4,000,000 ounces of gold equivalent. The property is also 20 kilometres west of the epithermal-mesothermal deposits of Newhawk and Catear in the Brucejack Lake area. In addition, numerous significant gold and silver occurrences are reported in the vicinity of this property. The Doc property, on the south edge of the property is also host to a small deposit in quartz-sulphide veins.

To date, Bighorn Development Corporation and its partner have conducted an extensive exploration program on the property with minor detailed work in the Cumberland and C-10 zones. This work has included:

1. Silt sampling in many of the creeks on the properties. A total of 802 sample sites were tested for gold and silver.

2. Soil sampling on several small grids; one over the Cumberland Showing and the second over Silver Creek. A total of 28 samples on the Silver Creek grid and 174 samples on the Cumberland grid were analyzed for gold and silver.
3. Rock geochemistry on gossaned outcrops and mineralized float boulders. Rock samples were analyzed as follows: 516 gold, 516 silver, 15 copper, 20 lead, 22 zinc, 1 nickel, 1 arsenic, 1 platinum and 1 palladium.
4. Diamond drilling in two locations:
 - a) 1936 feet in 6 holes on the Cumberland,
 - b) 2124 feet in 6 holes on the northwestern portion of the C-10 zone.
5. Trenching in two locations:
 - a) 77 feet in 5 locations on the Cumberland showing,
 - c) 85 feet in 3 locations on the Daly showing.

The results of the rock and silt geochemistry indicate numerous anomalies throughout the entire claim block area. The geochemistry is particularly anomalous for gold and silver along the C-10 zone in both rocks and silts. In addition anomalous gold in silts are present along the southeast portion of the claims. Anomalous gold in rocks is present in the area of the Cumberland showings as well as in siliceous rocks southwest of the Cumberland.

The rock geochemistry also indicated an area of gold bearing siderite, pyrite, sphalerite, galena and arsenopyrite veins, lenses, pods and stringers along the northeast flank of Unuk Finger Mountain. This work indicated numerous sulphide veins with gold values up to 3.534 opt gold and 19.75 opt silver across widths up to 3 feet. Silver in silts is extremely anomalous along a creek named "Devils Club" which drains the area of the Daly showings.

Soil sampling on the Cumberland showings indicated weak gold and silver anomalies along the zone. However, the survey had difficulty in obtaining good soil samples and this may have resulted in the weaker anomalies.

Soil sampling on the Silver Creek grid indicated anomalous values in silver (1 ppm) below and west of the showing. The anomalies are on strike with the shear zones carrying the mineralization above and east of the showing, no soil samples were obtained.

Drilling on the Cumberland indicated several intersection of strong galena, sphalerite and barite mineralization over narrow widths with spotty gold-silver values. The host rock for the mineralization appears to be of siliceous dacitic tuff variably mineralized with pyrite and pyrrhotite. Sulphide content is from 2-5% with focal massive seams of pyrrhotite. The above dacitic rock appears to be in contact with a hematitic siliceous tuff with abundant pyrite and pyrrhotite. The two units appear to be in excess of several hundred feet wide. The best intersection in DDH-1 yielded 0.157 opt gold and 5.35 opt silver over a true width of 5.6 feet with copper-lead-zinc values of .396%, 1.89% and 5.96% respectively.

The limited core sampling from the program also indicated gold values in pyrrhotite rich tuffs. Several intersections; one in DDH-1 yielded .152 opt gold over 2.1 feet while one in DDH-2 yielded .032 opt gold over 2.5 feet. Both intersections were from random sampling and do not represent the true nature of gold values in these rocks.

Drilling on the C-10 zone intersected highly sheared calcareous ash flow tuff units with a variable pyrite content. The best values obtained included .024 opt gold in DDH 88-04 and .032 opt gold in DDH 88-05 over narrow intersections. However drilling indicated that the C-10 zone was geochemically highly anomalous in gold and would require further work.

Trenching on the Cumberland zone indicated two areas of galena-sphalerite-barite mineralization. Sampling along the upper adit indicated values up to .804 opt gold, 5.70 opt silver, .32% copper, 11.4% lead and 12.22% zinc in massive barite. Sampling of float below the lower adit indicated .9 opt gold and 2.55 opt silver in sphalerite, galena and barite bearing rocks.

Trenching on the Daly showing indicated narrow galena, sphalerite, pyrite, pyrrhotite and tetrahedrite veins in carbonate altered zones. The veins appear to be up to a maximum width of 2 feet and locally carry silver values up to 200 opt silver. The best trenching results were obtained from a 2 foot wide vein assaying 11.4 opt silver.

Based on the encouraging results to date from the geochemical and drilling programs, a large exploration effort is recommended. This program would include airborne and ground geophysics, prospecting, geological mapping, trenching and diamond drilling and would cost 1.5 million dollars.

INTRODUCTION

The Mt Madge property has been explored over the period 1986 - 1988 by Bighorn Development Corporation and its partners. This report summarizes the work done over the three year period in the separate areas of the claim block. It is prepared from data accumulated during the above period as well as information from the Newcana Joint Venture, Catear Resources Ltd.'s activities to the east on the Goldwedge claim and Calpine's announcement and press releases.

Location and Access

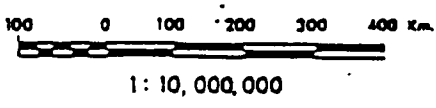
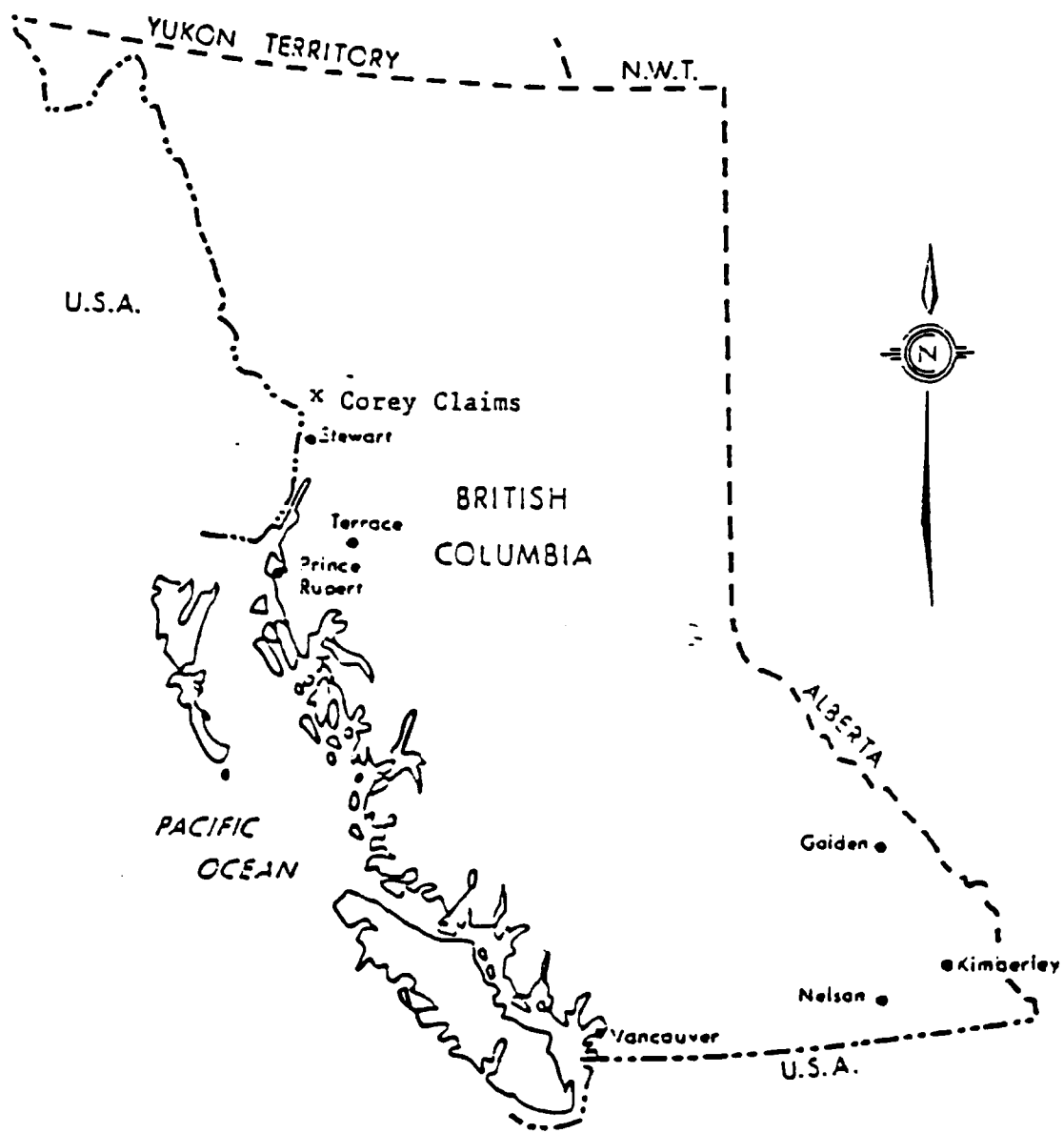
The property is located along the Mt Madge - Unuk Finger Mountains and the west flank of John Peaks, 16 km west of Brucejack Lake and approximately 70 km north-northeast of Stewart, B.C. The Mt Madge area is $56^{\circ} 27'$ north latitude, $130^{\circ} 25'$ west longitude on NTS sheet 104B/8 and 104B/9 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 Mt 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.

Several alternate routes have been proposed into the property area; one is the new proposed toll road from Highway 37 into the Calpine area; the second includes the Granduc Tunnel which accesses the Leduc Valley from the Granduc road. Figure 1 shows the property location.

Physiography and Topography

The area of the property 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.

The property is bound by the Ted Morris valley to the east and South Unuk



BIGHORN DEVELOPMENT CORPORATION

PROPERTY
INDEX MAP

Figure #1

and Unuk Rivers to the west. Sulphurets Creek has incised a deep canyon separating Mt Madge and John Peaks.

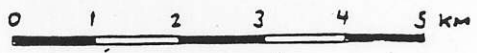
Elevations within the property range from 213 meters (700 feet) along Sulphurets Creek and South Unuk River to 2362 meters (7750 feet) on Unuk Finger Mountain.

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.

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 Mt 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 the
1935 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 Mt Madge adit assayed: gold 0.26 opt; silver 2.4 opt; copper 0.3 percent; lead 3 percent; zinc 10 percent.
- 1980 - Dupont undertook regional geochemical work in the Mt 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. Catear Resources in joint venture with a private Calgary company staked 8 claims totalling 9,880 acres (4,000 hectares) in the Mt Madge area and 10 claims totalling 12,350 acres (5,000 hectares) in the Treaty Creek area.

In the area to the south of Mt 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 opt gold and another intersects 14.6 feet of 0.701 opt 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 Mt 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. Kruchkowski personnel on behalf of Bighorn Development Corporation.

During this year, high silver values were reported on the Cumberland Crown Grants. Diamond drilling of 1936 feet including on the Cumberland Group revealed anomalous gold and silver zones.

1998 - a program of silt and rock sampling, prospecting and trenching was continued on the property. Diamond drilling of 2124 feet in 6 holes occurred on the C-10 zone with anomalous geochemical results in all holes.

1988 - Calpine Resources has been continuously drilling the Eskay Creek
1989 Property on Prout Plateau which has resulted in the discovery of a gold-bearing massive sulphide mineral deposit.

GEOLOGICAL SURVEYS

Regional Geology

The South Unuk property lies in the Stewart area, east of the Coast Crystalline Complex and within the western boundary of the Bowser Basin. Rocks in the area belong to the Mesozoic, Stuhini and Hazelton Group and have been intruded by plugs of both Cenozoic and Mesozoic age.

The base of the volcanic rocks appears to be triassic in age and consists of brown, black and grey, mixed sedimentary rocks interbedded with medium to dark green, mafic to intermediate volcanic and volcanoclastic rocks. The Stuhini Group appears to be conformably overlain by the Hazelton Group.

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 similar, middle Lower Jurassic volcanic cycle (Betty Creek Formation), in turn overlain by an upper Lower Jurassic dacitic lapilli tuff horizon (Mt. Dilworth Formation). Middle Jurassic non-marine sediments with minor volcanics of the Salmon River Formation unconformably overlie the above sequence.

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 middle Lower Jurassic rocks from the Betty Creek Formation. The Betty Creek Formation is another cycle of trough-filling sub-marine pillow lavas, broken pillow breccias, andesitic and basaltic flows, green, red, purple and black volcanic breccia, with self erosional conglomerate, sandstone and siltstone, and minor crystal and lithic tuffs, chert, limestone and lava.

The upper Lower Jurassic Mt. Dilworth Formation consists of a thin sequence varying from black carbonous tuffs to siliceous massive airfall lapilli tuffs and felsic ash flows. Minor interbedded sediments and limestone are present in the sequence. Locally pyritic varieties form strong gossans.

The Middle Jurassic Salmon River Formation is a late to post volcanic episode of banded, predominately dark coloured, siltstone, greywacke, sandstone, intercalated calcarenite, minor limestone, argillite, conglomerate, littoral deposits, volcanic sediments and minor flows.

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.

Mr. Alldrick's work has shown several volcanic centres in the property area. Lower Jurassic volcanic centres in the Unuk River Formation are located in the Big Missouri Premier area, and in the Brucejack Lake area. Volcanic centres within the Lower Jurassic Betty Creek Formation are in the Mitchell Glacier and Knipple Glacier areas.

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 granite to highly felsic; some are, likely, related late phase offshoots of the Coast plutonism, others are synvolcanic and tertiary. Double plunging, northerly-trending synclinal folds (Mitre syncline, Dilworth Syncline, Spider anticline of the Unuk River and Mt. Dilworth Formations dominate the structural setting of the area. These folds are locally disrupted by small east-overthrusts on strikes parallel to the major fold axis, cross-axis steep wrench faults which locally turn beds, selective tectonization of tuff units, and major northwest faults which turn beds. A large fault zone extending along Harrymel Creek south to the South Unuk River has been indicated by the government survey.

Local Geology

The local geology of the Mt Madge area is dominated by the Betty Creek formation occupying most of the property area (Alldrick 1989). The Le Brant batholith, a hornblende biotite quartz manganite intrusive, occupies the southern portion of the property area. The Unuk River formation occurs along Ted Morris Valley, north to John Peaks. An upper triassic sequence of sediments is present along the extreme eastern edge of the property area.

To date, the exploration work has not included any detailed mapping programs. 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 Mt Madge and along the lower west slopes of a ridge immediately east of Mt 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 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 downhill or exposed at lower elevations, a definite increase in silica is encountered. The zone becomes cherty along the lower slopes of Mt 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 Mt 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.

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, numerous 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.

Geological mapping done over the Cumberland grid and Devils Club Creek areas (approximately 0.5 km²) indicates that the area contains the following rock types:

- dacite and dacitic agglomerate and andesite dacite volcanics (crystal and lithic tuff) of Lower Jurassic Unuk River Formation,
- dacitic and chert pebble agglomerate of Lower Jurassic Unuk River Formation,

- black argillite with minor pyrite also interpreted to belong to the Lower Jurassic Unuk River Formation,
- carbonate stockwork of Lower Jurassic Unuk River Formation.

The mapping did not distinguish finer lithological subtleties such as the presence or absence of red chert (jasper) and the degree of fragmental versus massive volcanic nature of the andesitic/dacitic units.

Regional prospecting and mapping was also done along the cliff face below the upper and lower adits. The rock types in this rusty gossan like area consist of andesite and/or intermediate flows and fragmentals with minor pyrite and strong jointing and/or fracturing. Traverses were also done down Devils Club Creek to the junction of Sulphurets Creek. Some intermediate to felsic tuffaceous wedges were noted in proximity to Sulphurets Creek.

Economic Geology

In the Sulphurets and Stewart area, gold and silver mineralization generally appears to be of epithermal vein type origin that is structurally controlled and visually in close association with volcanic rocks. The veins commonly consist of quartz and carbonate with up to 20-30% sulphides within complex vein/shear zones or stockworks. Common associated minerals are pyrite, sphalerite, galena, tetrahedrite, arsenopyrite, electrum, pyrargyrite and barite. Deposits in this category would include the Newhawk deposits, Catear's Goldwedge and Silbak Premier deposit.

A summary of the above deposits is as follows:

	Tonnage Mined	Present Reserves	Grade	
			opt Au	opt Ag
<u>Silbak Premier</u>	4,725,650		.38	7.95
<u>Newhawk West</u> (partially explored)		6,395,580	.07	2.67
<u>Catear Goldwedge</u> (partially explored)		854,072	.354	22.94
Golden Rocket Discovery		319,149	.80	1.12
		37,980	.63	1.08

The C-10 zone on the Mt Madge property offers a good exploration potential for the above type deposits.

The Cumberland showing consists of massive sulphide zones with pyrite, sphalerite, galena, chalcopyrite and barite including some silver sulphosalts? and associated gold. These massive sulphide zones are present within a much wider pyrite-pyrrhotite bearing tuff horizon that may be up to several hundred feet wide. The showing is also exposed for 700 feet along a canyon edge. The Cumberland showing is very comparable to the Calpine geology. The Calpine discovery is a large gold-silver deposit in a massive sulphide environment on the Eskay Creek property, 8 kilometres to the north of the Cumberland showing. Gold and silver mineralization occurs as a stratabound sheet traced by drilling over 1000 metres with a maximum thickness ever 200 metres. Mineralization in the zone is hosted within variably sheared and schistose graphitic mudstone, carbonaceous debris breccia and rhyolite breccia of the Mt. Dilworth formation. The mineralization changes from one with massive to semi-massive stibnite, realgar and orpiment in the south section to an increase of sulphides, especially pyrite and sphalerite with a relative absence of antimony and mercury-bearing minerals to the north. In addition, gold and silver values increase to the north. At present, reserves are quoted as being in excess of 4,000,000 ounces of gold equivalent.

The Daly Showing offers the potential for a narrow, high grade silver exploration target. 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. Galena and tetrahedrite have been reported in the adit by the B.C. Minister of Mines reports.

The presence of sphalerite bearing boulders with silver values several thousand feet above the Daly showing indicates the potential for more

veins similar in nature. Approximately 1000 feet due west of the Cumberland, narrow lenses of pyrrhotite and tetrahedrite? assayed up to 133.58 opt silver. This indicates the presence of at least 3 separate silver bearing zones.

The flat lying to gently dipping siderite-sulphide veins, lenses, pods and stringers are found along the south and east edge of the C-10 zone. The veins are from several inches up to 3-4 feet in width and are generally exposed over 300 to 400 feet in length. In some localities, mineralized boulders form from 5-10% of the talus slopes. The veins are exposed over an elevation difference of at least 2,000 feet. They extend from the valley floor of Joe Mandy Creek to the ridge forming the east flank of Unuk Finger Mountain. The veins carry up to 30-40% sulphides in a siderite-calcite material. The sulphides consist of pyrite, sphalerite, galena and arsenopyrite. In several localities, massive arsenopyrite has been observed in small lenses without any other sulphides.

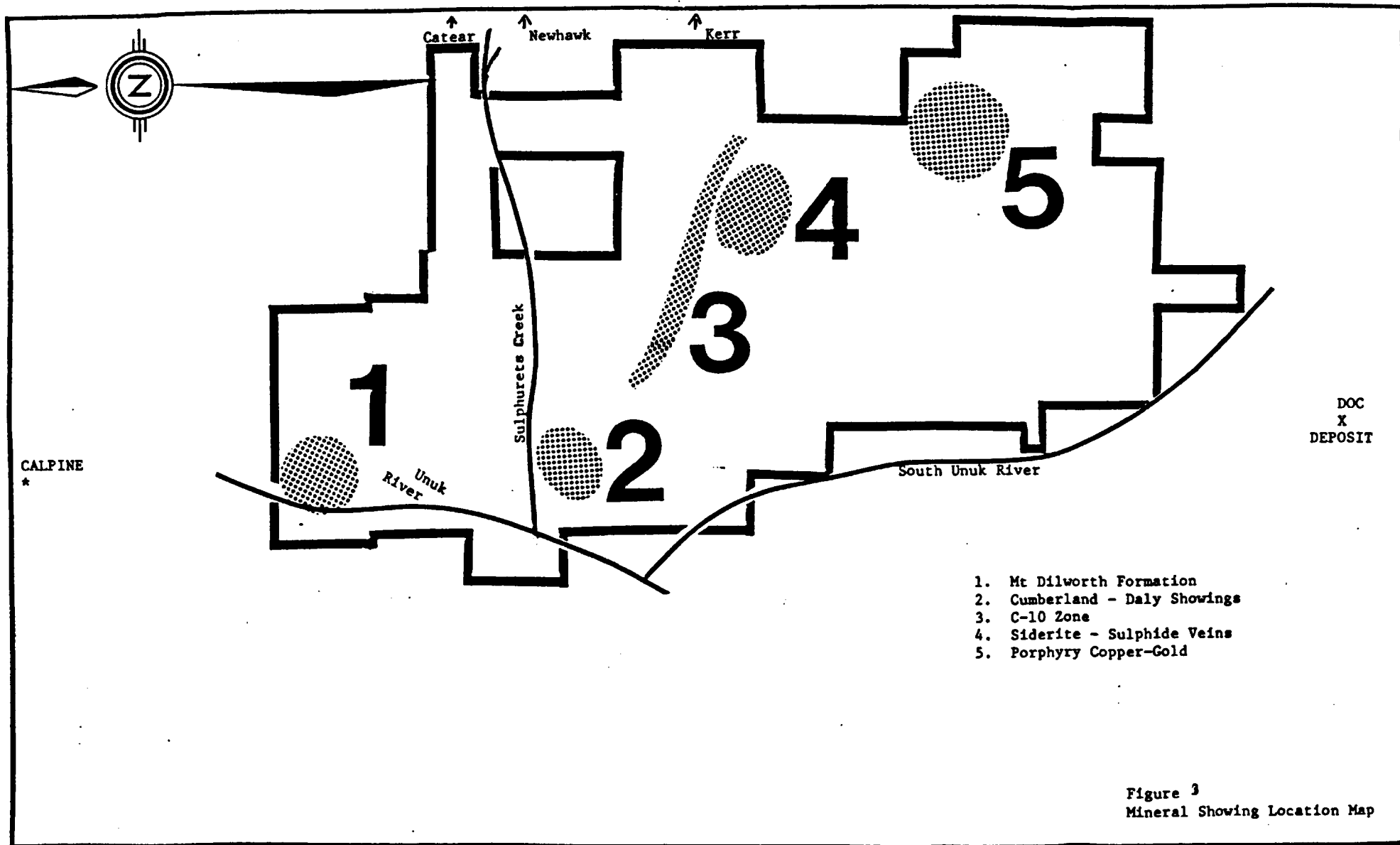
A coarse native gold bearing boulder has been located in glacial debris below the above zone. This boulder consisted of siderite and gold.

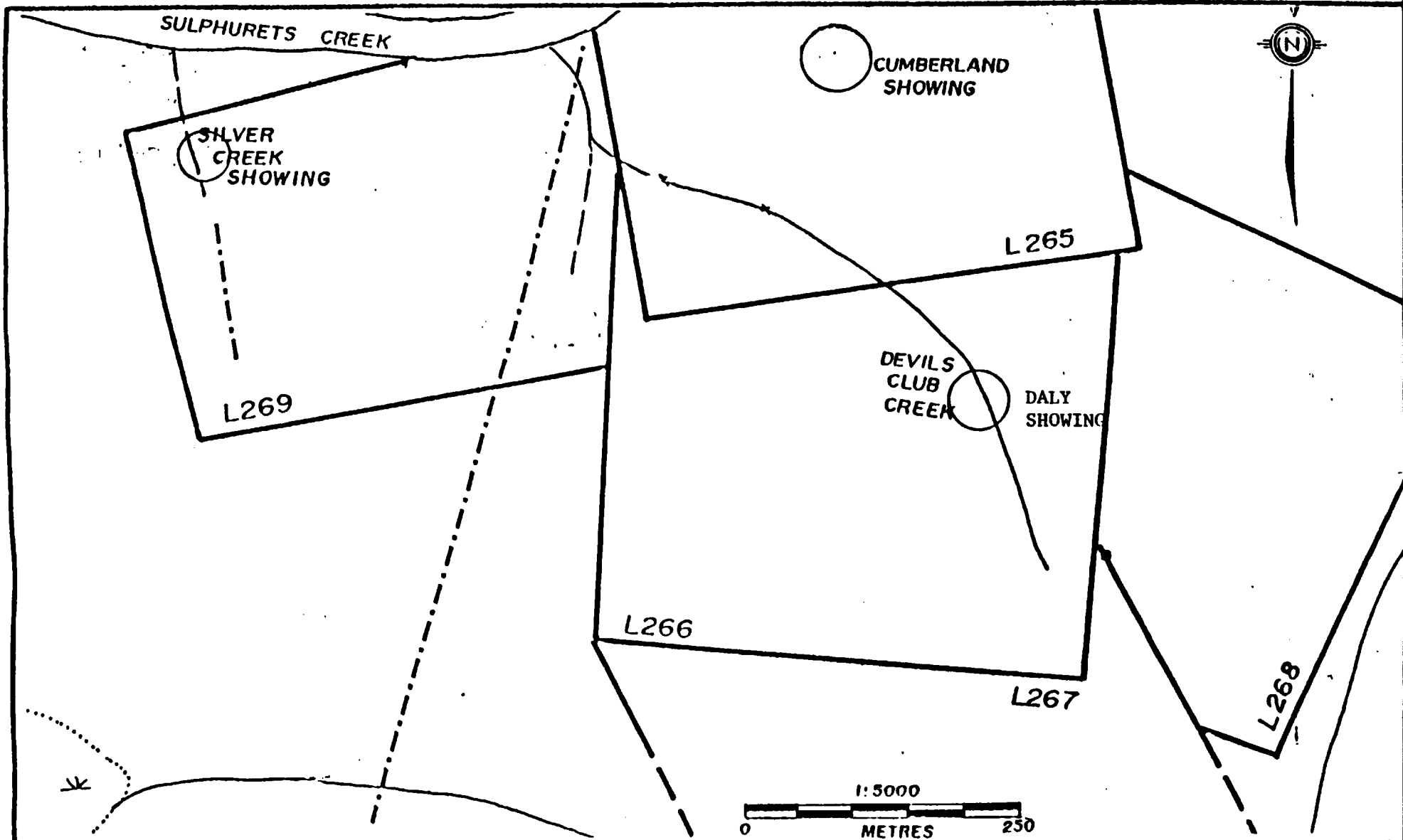
Sampling of boulders and outcrops has shown values up to 3.534 opt gold. In addition, a pyrite-molybdenum? bearing boulder has yielded high gold assays indicating a potentially second gold bearing source.

The above veins have been observed along both the west and east flanks of the ridge indicating an extensive area of mineralization.

The peripheral areas to the Le Brant Batholith offers the potential for a porphyry copper-gold situation. Numerous copper showings are present along the southeast corner of the claim block. These showings are in an area of high geochemical gold in rocks over a large area. Rock values range up to a high of 950 ppb gold.

This southeastern portion of the area also has report of boulders of massive copper-zinc mineralization along a glacial moraine. The potential source is indicated as a nunatak in Corey 18 claim. Figures 3, 4 and 5 show the mineralized locations.





SULPHURETS CREEK AREA
 LOTS 265 to 269

LOCATION OF SHOWINGS

BIGHORN DEVELOPMENT
 CORPORATION

SCALE: 1:5,000

NTS 104B/8
 SKEENA M.D.

FIGURE 5

GEOCHEMICAL SURVEYS

Rock Geochemistry

During the period 1986 - 1988 a total of 516 samples were collected and analyzed as follows: 516 gold, 516 silver, 15 copper, 20 lead, 22 zinc, 1 nickel, 1 arsenic, 1 platinum and 1 palladium. The samples were taken from both outcrop and float boulders. They generally consisted of 3-4 pounds of unweathered material and were selected on the basis of mineralization or alteration.

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

<u>Metal</u>	<u>Background</u>	<u>Anomalous</u>
Gold	30 ppb	105 ppb
Silver	1.0 ppm	2.6 ppm

In comparison to the 1974 - 1976 Granduc Surveys on their Sulphurets property; the Bighorn results were remarkably 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 2.6 ppm silver and 105 ppb gold for the Bighorn survey.

Using the above values, the rock geochemical program indicates numerous gold and silver anomalies ranging from weak to strong in the Corey 7 and 8 claims. These claims are underlain by the C-10 zone, a large alteration zone with associated gold values and the sulphide bearing siderite veins.

Another area with anomalous gold and silver in rocks is found on the Corey 32 and to a lesser degree Corey 35. This appears to be related to a northwest continuation of the C-10 zone.

Anomalous gold in rocks are associated with copper mineralization on the

Corey 3 claim. Anomalies on Corey 5 and 6 claims is associated with the C-10 zone and siderite sulphide veins.

Corey 36 claim block has one location with anomalous gold in rocks and is related to pyrite in a narrow shear.

Anomalous gold in rocks is indicated in the vicinity of the Cumberland Showing. Approximately 1000 feet southwest of the showing, a rock geochem on a rusty volcanic rock returned 830 ppb gold and 24.3 ppm silver. A silicious cherty outcrop approximately 2000 feet southwest of the Cumberland yielded 270 ppb gold and 5.3 ppm silver.

Silt Geochemistry

In the period 1986 - 1988 a total of 802 silt samples have been collected from streams across most the the area and analyzed for gold and silver.

The results are plotted on cumulative frequency graph paper with the straight line plot considered the normal distribution. Using these plots indicates the following background and threshold volumes:

<u>Metal</u>	<u>Background</u>	<u>Threshold</u>
Gold	15 ppb	80 ppb
Silver	0.3 ppm	1.7 ppm

The National Geochemical Reconnaissance program by the Geological Survey of Canada and B.C. Ministry of Energy Mines and Petroleum Resources in the area indicated that values over 59 ppb gold were anomalous.

The silt sampling program basically highlighted the mineralization in the area of the C-10 grid. Numerous highly anomalous gold and anomalous silver were detected on Corey 8. Anomalous values were also obtained in Corey 32 which is just west of Corey 8.

Corey 37 had interesting gold anomalies near some gossans at the top of some creeks draining the mountain pass between Mt Madge and Unuk Finger Mountain.

In addition another area worthy of follow-up is the junction of Corey 4, Corey 1 and Corey 16 which had highly anomalous values over a gossaned area. This is near the contact of the Le Brant Batholith with Unuk River volcanics.

The National Geochemical Reconnaissance program indicates a value of 145 ppb in the area of the Mt Dilworth formation in the northwest corner of the claims. This compares very favourably with maximum values of 493 ppb for the Brucejack Lake area and 288 ppb for the area of the Calpine Discovery.

Silt sampling in the area of the Cumberland showings detected high values for silver along one creek. Values ranging from 0.2 ppm to 2.47 opt silver were obtained. Sphalerite, galena and tetrahedrite float boulders assaying up to 346.4 opt silver were obtained along the creek, indicating the source for the high values. The ultimate source was determined as the Daly workings which has reported high silver values.

Soil Geochemistry

Soil sampling was done at two locations which include the Silver Creek soils grid (28 samples) and Cumberland soils grid (174 samples). In the case of the Silver Creek soils grid background values for gold is 5 to 10 ppb and for silver is 0.1 ppm. Anomalous values for gold is in the order of 85 ppb (one sample) with numerous anomalous silver samples (+1.0 ppm). The soils sampled at this location consisted of dark brown "B" horizon at depths of 20 cm - 30 cm (10 cm sample interval). In the case of the Cumberland soils grid, background values for gold is in the order of nil to 10 ppb with anomalous values of +25 ppb which occurs in the following localities:

- adit area. Baseline 0+00 to 0+30 south
- in the vicinity of the baseline and 0+75 to 1+00 south
- in the vicinity of 0+50 south and 20 west
- in the vicinity of 0+50 to 0+75 south and 20 east.

The highest soils value taken directly above the upper adit returned +1000 ppb or 0.140 opt. Background values for silver in the Cumberland grid is nil to 0.2. Anomalous silver values were considered to be +1.0 ppm. The localities for anomalous values the highest of which were 6.8, 7.7 and 8.2 ppm do not line up, show continuity or appear to be associated with anomalous gold areas.

The soil samples were taken on a leached greyish "C" horizon at depths of +20 cm. In some localities organic A and B horizon material only was present. The survey had difficulty in obtaining good soil samples and this may have resulted in weaker anomalies.

TRENCHING

Trenching was done on the Cumberland showing in the area of the upper adit and lower adit. A total of 77 feet of trenching was carried out in 5 separate locations. Trenching on the Daly Showing included 85 feet in 3 separate locations.

The trenching on the Cumberland indicated that high gold and silver values were associated with massive sulphide mineralization in both adit areas. On the Cumberland showing the mineralization consists of 0.5 to 0.75 metre wide zones half of which contains 50% sulphide mineralization and half of which contain a weathered porous sericite schist with 20% sulphides. One zone is bounded to the east by an envelope of disseminated pyritic andesite (subtle stockwork). The massive sulphide zone contains the following mineralization; sphalerite (30%), pyrite (20%), chalcopyrite (5%), galena (1.0%), gangue (44%). The disseminated envelope contains 5-15% pyrite and 1-5% chalcopyrite. Some sphalerite and galena were also noted. The second zone is present in the lower adit area.

Overall the trench sampling indicated that low gold values could be encountered with moderate frequency even though no high grade massive sulphide was encountered in the trenches and that this high grade zone showed a discontinuous nature from the mapping that was done in the upper adit.

Results of high grade samples taken from the upper adit area returned high gold values of 0.118 opt (50 cm) and 0.88 opt (40cm). Subsequent resampling of this main zone returned values from 0.180 to 0.422 opt gold over widths of 80 cm. Silver was ubiquitous in the high grade area of the upper adit with values varying from 1.09 to 16.58 opt.

Sampling of float below the lower adit indicated .9 opt gold and 2.55 opt silver in sphalerite, galena and barite bearing rocks.

Significant results of the sampling are shown below:

Upper Adit Samples

Type	Interval	OPT					Rock Type
		Au	Ag	Cu %	Pb %	Zn %	
Chip	50 cm	.118	8.62	.58	3.01	9.03	20% massive sulphides
Chip	50 cm	.054	9.77	Not assayed			Rusty silicified gossan
Chip	40 cm	.804	5.70	.32	11.4	12.22	20% massive sulphides
Chip	100 cm	.036	1.09	.29	.18	2.83	Fractured andesite
Grab	High Grade Grab	.044	4.84	.30	10.8	22.20	Massive sulphides
Chip	50 cm	.034	5.4 ppm				
Chip	50 cm	.116	7.3 ppm				Andeiste/dacite with
Chip	50 cm	.048	12.0				quartz hairline
Chip	100 cm	.032	7.5 ppm				fractures & carbonate
Chip	100 cm	0.36	8.3 ppm				alteration over 15-20%
							of rock. 5% pyrite
							10% sulphides py, cpy,
							sphalerite & galena.
Chip	30 cm	.422	4.58	.73	6.31	23.35	5 & 20% massive sulphides
Chip	50 cm	.393	16.58	.54	3.52	28.39	20% massive sulphides
Chip	50 cm	.350	7.79	.34	3.58	5.70	Rusty gossan
Chip	30 cm	.180	7.38	1.42	10.73	14.61	Massive sulphides

Lower Adit Samples

Type	Interval	Au (ppb)	Ag (ppm)	Cu %	Pb %	Zn %	Rock Type
Chip	15 cm	0.03 opt	nil				Rusty fracture andesite,
Chip	70 cm	0.032 opt	1.01				carbonate alteration,
Chip	110 cm	930	3.05 opt				trace malachite
Chip	80 cm	870	2.55 opt				from lower adit
Grab		30	110				
Grab (float)		0.52 opt	3.05 opt				20% massive sphalerite
Grab (float)		0.90 opt	2.55 opt				barite & minor galena
							in fractured dacitic rock

Trenching on the Daly Showing was conducted in order to find the source of the high grade, silver bearing sulphide float along Devils Club Creek. This float assayed up to a high of 346.4 opt silver. The sulphide consisted of generally pyrite, sphalerite, galena, tetrahedrite and/or proustite.

Trenching indicated that 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 N0007'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.

The best results from the trenching effort was obtained from Trench #3. 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 trenching on the Daly Showing certainly did not test all the structures or necessarily the best mineralization. Further work could include opening of the previous adit.

DIAMOND DRILLING

Diamond drilling was completed on two separate areas in 1987 and 1988 using a JK Smit 300 drill. In 1987, a fall program consisting of 1936 feet of core drilling in 6 holes was completed in the upper adit area of the Cumberland showings.

Results of this program are as follows:

<u>CORE HOLE & ZONES</u>	<u>FOOTAGE</u>	<u>INTERVAL FEET</u>	<u>ASSAY GOLD</u>	<u>OZ/TON SILVER</u>	<u>GRADE ESTIMATED TRUE WIDTH</u>
BH-1	86.0 - 89.0	3.0	.043	9.60	0.157 5.35
	89.0 - 92.0	3.0	.353	2.97	
ZONE 1 (Barite Zone)	92.0 - 94.0	2.0	.034	2.56	5.6'
	94.0 - 97.0	5.0	.016	.96	0.025 0.92
	97.0 - 102.0	5.0	.034	.88	
					7.1'
ZONE 2 (Copper Zone)	171.0 - 174.0	3.0	.013	.83	
	174.0 - 180.0	6.0	.006	.09	0.013 0.35
	180.0 - 185.0	5.0	.015	.44	
	185.0 - 189.5	4.5	.002	.01	
	189.5 - 192.0	2.5	.042	.87	14.8'
ZONE 3 (New Zone)	271.0 - 274.0	3.0	0.152	--	0.152 -- 2.1'
	<hr/>				
BH-2	112.0 - 115.0	3.0	.034	.38	0.034 0.39
ZONE 1 (Barite Zone)	115.0 - 118.0	3.0	.035	.30	
	118.0 - 120.0	2.0	.033	.54	4.0'
ZONE 3 (New Zone)	304.0 - 309.0	5.0	.032	--	0.032 -- 2.5'
	<hr/>				
BH-6	82.0 - 84.0	2.0	.034	.85	0.031 1.02
ZONE 1 (Barite Zone)	84.0 - 86.0	2.0	.028	1.18	
					2.8'
ZONE 2 (Copper Zone) &	122.5 - 124.5	2.0	.015	.59	0.014 0.46
	124.5 - 128.0	3.5	.013	.38	
					3.9'
ZONE 2	147.0 - 149.5	2.5	.036	.92	0.036 0.92 1.8'

Noteworthy base metal results for the holes are as follows:

<u>HOLE & SAMPLE NO.</u>	<u>FOOTAGE</u>	<u>CuZ</u>	<u>PbZ</u>	<u>ZnZ</u>	<u>SbZ</u>	<u>BaZ</u>
BH-1						
30418	86.0 - 89.0	0.5	1.31	7.41	0.02	41.33
30419	89.0 - 92.0	0.23	3.62	6.08	0.02	46.02
30420	92.0 - 94.0	0.49	0.168	3.59	NOT ASSAYED	
30421	94.0 - 97.0	0.17	NOT ASSAYED		NOT ASSAYED	
30422	97.0 - 102.0	0.01	0.06	0.24	NOT ASSAYED	
BH-6						
30518	79.0 - 81.5	.06	.13	.60	NOT ASSAYED	
30519	82.0 - 84.0	.15	.18	2.50	NOT ASSAYED	
30520	84.9 - 86.0	.17	.23	1.65	Platinum	
30521	86.0 - 89.0	.02	.02	.17	-30 ppb	
30522	89.0 - 90.5	.02	.03	.26	-30 ppb	

Drilling verified the fact that the higher gold values were associated with the massive sulphide-barite horizons. However the drilling indicated values of .152 opt and 0.032 opt gold in sulphide bearing hematite and siliceous tuffs. This sampling was random and does not represent the true nature of the intersections.

In 1988, a total of 6 holes were drilled to test a select portion of the C-10 zone. The drilling tested an area of geochemically anomalous gold in rocks with a maximum value of 1000 ppb.

This drilling intersected finely laminated, well sheared calcareous ash flow tuff units with a variably but generally high pyrite content. Weakly silicified sericite schist and quartz stockwork zones were present but did not form a large percentage of the rock.

Significant results are as follows:

<u>DDH</u>	<u>(feet) Intersection</u>	<u>(feet) Width</u>	<u>Au opt</u>	<u>Ag ppm</u>
88-02	215.0 - 218.9	3.9	.032	1.1
	308.4 - 310.7	2.3	.05	1.1
88-03	209.9 - 213.9	4.0	.011	0.4 opt
88-04	51.5 - 55.5	4.0	.024	0.1 opt
88-05	46.5 - 49.8	3.3	.032	1.0
	63.0 - 65.0	2.0	.048	1.4

This drilling indicated that the C-10 zone was geochemically anomalous and required further exploration work with possibly some deep drill holes. Significant gold values appeared to be related to areas of quartz injection.

CONCLUSION

1. The claims lie within a belt of rocks referred to as B.C.'s "Golden Triangle" which encompasses the Iskut River Gold Camp to the west, the Unuk River Camp to the east, and the Stewart Gold Belt to the south. Besides the recent Eskay Creek area, the "Triangle" has two producing gold mines and at least three more in the process and a recently discovered porphyry copper-gold deposit.

2. It is underlain by an area of volcanic tuffs, sandstones and conglomerates of the Unuk River formation as well as Mt Dilworth formation tuffs variably altered and intruded by a variety of plugs related to the Coast Range Batholith.

3. Mineralized zones are numerous and varied on the claims. Areas of interest include:
 - A. A thick sequence of pyritiferous Mt Dilworth formation in the northwest corner of the claim.

 - B. A second area of interest is the Cumberland and Daly showings on the reverted Crown Grants. The Cumberland showing consists of a wide section of pyritiferous, dacitic or rhyolitic tuffs containing narrow lenses and pods of massive barite, sphalerite, galena and chalcopyrite with associated gold and silver values. The Daly showing consists of narrow carbonate altered zones with associated galena, sphalerite and tetrahedrite veins carrying high silver values but no significant gold values. Narrow high grade silver bearing pyrrhotite and tetrahedrite? lenses are present 2000 feet west of the Cumberland showings.

 - C. A third area of interest consists of the C-10 zone. This is a long alteration zone consisting of a quartz and calcite injected sericite schist with abundant disseminated pyrite and locally traces of arsenopyrite and sphalerite. The zone is fault offset in several locations but has been traced for approximately 4 miles across the

Corey claims. Within this zone up to one half mile wide, several locations contain pyrite with sphalerite and chalcopyrite bearing quartz stockworks. The weak stockworks generally show a marked increase in gold values relative to the sericite schist.

D. Another area of interest consists of flat lying to gently dipping siderite, pyrite, sphalerite, galena and arsenopyrite veins, lenses, pods and stringers found along the southeast edge of the C-10 zone. One boulder from the above veins contained spectacular coarse native gold.

E. Another area includes the peripheral areas to the Le Brant Batholith, particularly in the extreme southeast corner of the property. In this area copper and gold mineralization are present in altered volcanics.

4. The Mt Dilworth formation host of Calpine deposit (reported as 4,000,000 ounces of gold equivalent) trends on to the Mt Madge property.

5. Bighorn and its partners have conducted the following work:

A. Silt sampling in many of the creeks on the properties. A total of 802 sample sites were tested for gold and silver.

B. Soil sampling on several small grids; one over the Cumberland showing and the second over Silver Creek. A total of 28 samples on the Silver Creek grid and 174 samples on the Cumberland grid were analyzed for gold and silver.

C. Rock geochemistry on gossaned outcrops and mineralized float boulders. Rock samples were analyzed as follows: 516 gold, 516 silver, 15 copper, 20 lead, 22 zinc, 1 nickel, 1 arsenic, 1 platinum and 1 palladium.

D. Diamond drilling in two locations:

a) 1936 feet in 6 holes on the Cumberland,

b) 2124 feet in 6 holes on the northwestern portion of the C-10 zone.

E. Trenching in two locations:

- a) 77 feet in 5 locations on the Cumberland showing,
- b) 85 feet in 3 locations on the Daly showing.

6. The results of the rock and silt geochemistry indicate numerous anomalies throughout the entire claim block area. The geochemistry is particularly anomalous for gold and silver along the C-10 zone in both rocks and silts. In addition anomalous gold in silts are present along the southeast portion of the claims. Anomalous gold in rocks is present in the area of the Cumberland showings as well as in siliceous rocks southwest of the Cumberland.

7. The rock geochemistry also indicated an area of gold bearing siderite, pyrite, sphalerite, galena and arsenopyrite veins, lenses, pods and stringers along the northeast flank of Unuk Finger Mountain. This work indicated numerous sulphide veins with gold values up to 3.534 opt gold and 19.75 opt silver across widths up to 3 feet. Silver in silts is extremely anomalous along a creek named "Devils Club" which drains the area of the Daly showings.

8. Soil sampling on the Cumberland showings indicated weak gold and silver anomalies along the zone. However, the survey had difficulty in obtaining good soil samples and this may have resulted in the weaker anomalies.

9. Drilling on the Cumberland indicated several intersections of strong galena, sphalerite and bafite mineralization over narrow width with spotty gold-silver values. The host rock for the mineralization appears to be of siliceous dacitic tuff variably mineralized with pyrite and pyrrhotite. Sulphide content is from 2-5% with local massive seams of pyrrhotite. The above dacitic rock appears to be in contact with a hematitic siliceous tuff with abundant pyrite and pyrrhotite. The two units appear to be in excess of several hundred feet wide. The best intersection in DDH-1 yielded 0.157 opt gold and 5.35 opt silver over a true width of 5.6 feet with copper-lead-zinc values of .396%, 1.89% and 5.96% respectively.

10. The limited core sampling from the program also indicated gold values in pyriforous hematite rich tuffs. Several intersections; one in DDH-1 yielded

.152 opt gold over 2.1 feet while one in DDH-2 yielded 0.032 opt gold over 2.5 feet. Both intersections were from random sampling and do not represent the true nature of gold values in these rocks.

11. Drilling on the C-10 zone intersected highly sheared calcareous ash flow tuff units with a variable pyrite content. The best values obtained included .024 opt gold in DDH 88-04 and .032 opt gold in DDH 88-05 over narrow intersections. However drilling indicated that the C-10 zone was geochemically highly anomalous in gold and would require further work.

12. Trenching on the Cumberland zone indicated two areas of galena-sphalerite-barite mineralization. Sampling along the upper adit indicated values up to .804 opt gold, 5.70 opt silver, .32% copper, 11.4% lead and 12.22% zinc in massive barite. Sampling of float below the lower adit indicated .9 opt gold and 2.55 opt silver in sphalerite, galena and barite bearing rocks.

13. Trenching on the Daly showing indicated narrow galena, sphalerite, pyrite, pyrrhotite and tetrahedrite veins in carbonate altered zones. The veins appear to be up to a maximum width of 2 feet and locally carry silver values up to 200 opt silver. The best trenching results were obtained from a 2 foot wide vein assaying 11.4 opt silver.

14. Based on the encouraging results to date from the geochemical and drilling programs, a large exploration effort is recommended. This program would include airborne and ground geophysics, prospecting, geological mapping and diamond drilling.

RECOMMENDATIONS

The recommended program should consist of airborne and ground geophysics, prospecting, geological mapping and diamond drilling.

Cost of the program is as follows:

Orthophoto for ground control	10,000
Airborne geophysics including mobilization, interpretation 1000 line km @ 160/line km	160,000
Ground geophysics (EM & IP Surveys)	50,000
Mob/demob geological crew	30,000
Personnel	
3 geologists - 120 days @ \$300/day each	108,000
6 assistants - 120 days @ \$200/day each	144,000
1 cook - 120 days @ \$150/day	18,000
Equipment rentals	39,000
120 days @ \$25/day per man (includes 4 drillers for 60 days and 4 people in geophysical crew for 30 days)	
Subsistence	39,000
1560 mandays @ \$25/day	
Helicopter support	250,000
400 hours @ \$625/hr	
Diamond drilling	375,000
includes mob/demob - 15,000 @ \$25/ft	
Assaying	30,000
2000 samples @ \$15/sample	
Consumables	50,000
includes fuel, explosives, building materials etc.	
Freight, etc.	10,000
Report writing	20,000
4 reports @ \$5,000 each	
Drafting	10,000
Expediting	15,000
	<u>\$1,358,000</u>
Contingency	142,000
TOTAL	<u>\$1,500,000</u>

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