

GEOLOGICAL REPORT
ON THE
CAMB 1-10 CLAIMS
NORTHERN BRITISH COLUMBIA
SKEENA MINING DIVISION
NTS 103 p/13E
Latitude 55°50'
Longitude 129°42'

Prepared For: Billikin Resources Inc.
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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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Calgary, Alberta

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SUMMARY

The Camb claims are located in the Bromley Glacier area about 15 kilometers due east of Stewart, British Columbia in the Skeena Mining Division. The property is underlain by Hazelton Group sediments and volcanoclastics intruded by dykes related to either the Portland Canal dyke swarm or plutons of the Coast Range Batholith.

Significant quantities of gold and silver associated with sphalerite, pyrite, pyrrhotite, galena and chalcopyrite mineralization occur within narrow but continuous quartz veins striking 320-335° and dipping steeply to the southwest.

During the period August-September 1983, Billikin Resources Inc. completed an exploration program on the project area including claim staking, brief geological mapping along chain and compass traverses, prospecting and trenching and sampling of mineralized showings.

Geological mapping indicated that the project area is underlain by thinly bedded argillites and andesitic volcanoclastics cut by a variety of intrusive dykes. These distinct and separate quartz vein systems are indicated as follows:

1. High grade gold-silver quartz veins cutting all the rock types observed. Weak flat lying quartz stockworks are locally associated with the above veins.
2. Quartz veinlets with siderite and calcite along fault zones forming the wall areas of andesite dykes as well as extending into the wall zones.
3. A strong stockwork in association with sulphide bearing yellow calcite within "crowded" feldspar porphyry dykes.

A total of 5 claims were staked surrounding the previous 5 claims staked in June and July 1983 resulting in 142 units held by the company. ✓

Grab and chip sampling on the mineralized zones has indicated assay values ranging from 0.001 - 12.24 oz Au/T, 0.002 - 34.20 oz Ag/T with 0.01 - 26.5% Zn, 0.01 - 7.15% Pb, 0.01 - 2.22% Cu and 0.001 - 1.197% Cd over widths from 2 cm - 2.43 m. Sampling has indicated three distinct veins labelled the Mandy, Handy and Middle veins.

The Mandy vein has been traced over a length of 330 m with sampling yielding three zones as follows:

1. 10 m in length averaging 1.978 oz Au/T and 8.82 oz Ag/T over a width of 0.203 m.
2. 111 m in length averaging 0.99 oz Au/T and 4.11 oz Ag/T over a width of 0.198 m.
3. a poorly exposed zone 65 m in length averaging 0.401 oz Au/T and 1.43 oz Ag/T over an average width of 0.167 m.

The Handy vein has been traced over a length of 800 m with sampling yielding the following zones:

1. a vein splayed from the Handy vein exposed over a length of 19.5 m averaging 1.95 oz Au/T and 7.80 oz Ag/T over a width of 0.10 m.
2. a poorly exposed zone at least 12 m in length averaging 0.542 oz Au/T and 2.519 oz Ag/T over a width of 0.15 m.
3. a poorly exposed zone at least 22 m in length averaging 0.281 oz Au/T and 1.70 oz Ag/T over a width of 1.21 m.
4. a zone at least 71.8 m in length averaging 1.967 oz Au/T and 5.46 oz Ag/T over a width of 0.15 m.

A vein between the Handy and Mandy veins called the Middle vein yielded assays averaging 0.603 oz Au/T and 3.01 oz Ag/T over a width of 0.11 m and a length of 38 m.

This zone is close to a fault zone which yielded an assay of 12.24 oz Au/T and 10.36 oz Ag/T from a quartz stringer.

Further work is recommended to more adequately evaluate the gold-silver potential of the claims. At present, the work has indicated narrow widths for quartz veining along distances up to 800 m. The presence of numerous sulphide bearing quartz veins along fracture trends of 320-335° over the above lengths indicates an extensive mineralizing event. Most of the veins are fairly narrow suggesting a "tight" fracture pattern during mineralization emplacement. Further exploration should be directed at locating areas where mineralization may have been concentrated, particularly at the intersection of cross fractures.

It is speculated that the gold-silver mineralization is related to the intrusion of a MOS_2 bearing quartz monzonite stock located approximately 1 kilometer north of the above veins. Work by previous workers on the stock have indicated significant quantities of gold occasionally associated with veins variably composed of quartz calcite, siderite, pyrite, pyrrhotite and minor sphalerite and chalcopyrite in the vicinity of the stock.

An exploration program that may aid in locating these areas would consist of the following:

1. gridding the area of mineralization to provide survey control
2. geological mapping utilizing the above grid
3. trenching in overburden areas along high grade Au/Ag quartz veins and newly discovered veins and mineralization
4. Shoot-back Crone EM survey suited for steep terrain
5. diamond drilling to test for continuity of surface mineralization

The program is estimated to cost approximately \$120,700.00.

INTRODUCTION

The gold-silver potential of the Camb property was evaluated during July - September 1983 by Billikin Resources Inc. Work completed included claim staking, prospecting, geological mapping and trenching and sampling.

The work was conducted by E.R. Kruckowski Consulting Ltd. personnel of Calgary, Alberta and Billikin Resources Inc. personnel of Vancouver, B.C.

A total of 123 samples were collected in August-September and 89 samples in July-August 1983 and analyses were performed by Acme Analytical Laboratories of Vancouver, British Columbia.

Location and Access

The Camb property is located at 55°50' latitude and 129°42' longitude approximately 15 kilometers due east of Stewart, B.C. in the Skeena Mining Division. Figure 1 shows the location of the mineral property.

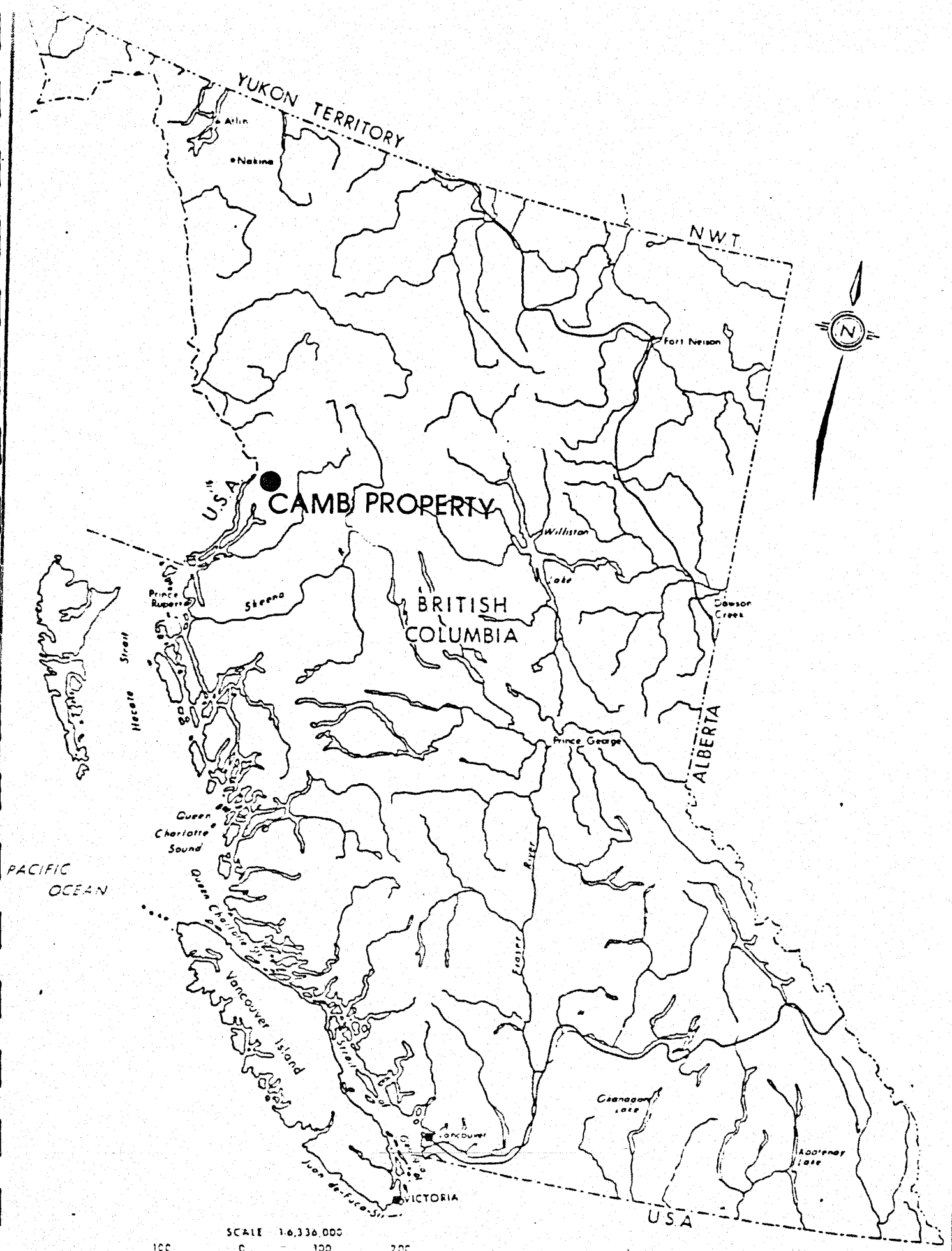
Access to the property is presently by Bell 206 Long Ranger helicopter based in Stewart.

A logging road presently washed out and connected with the Stewart-Cassiar highway is located along Bitter Creek approximately 3 kilometers N.W. of the property area.

At present, it is possible to build a road to within 1 kilometer of the nunatak with the high grade gold-silver showings.

Physiography and Topography

The Camp property area lies entirely within the Boundary Ranges of the Northern Coast Mountains and the region is one of complex mountainous topography at an early stage of maturity. The property is located at the head of Bromley Glacier with elevations ranging from 760-1500 m A.S.L. The east portion of the property extends over the crest of the plateau onto the Cambria Icefield, a large glacial complex encompassing approximately 1000 square kilometers.



CAMB PROPERTY

BRITISH COLUMBIA

SCALE 1:6,336,000

100 0 100 200
Kilometres Kilometres

Figure 1. Location Map
BRITISH COLUMBIA

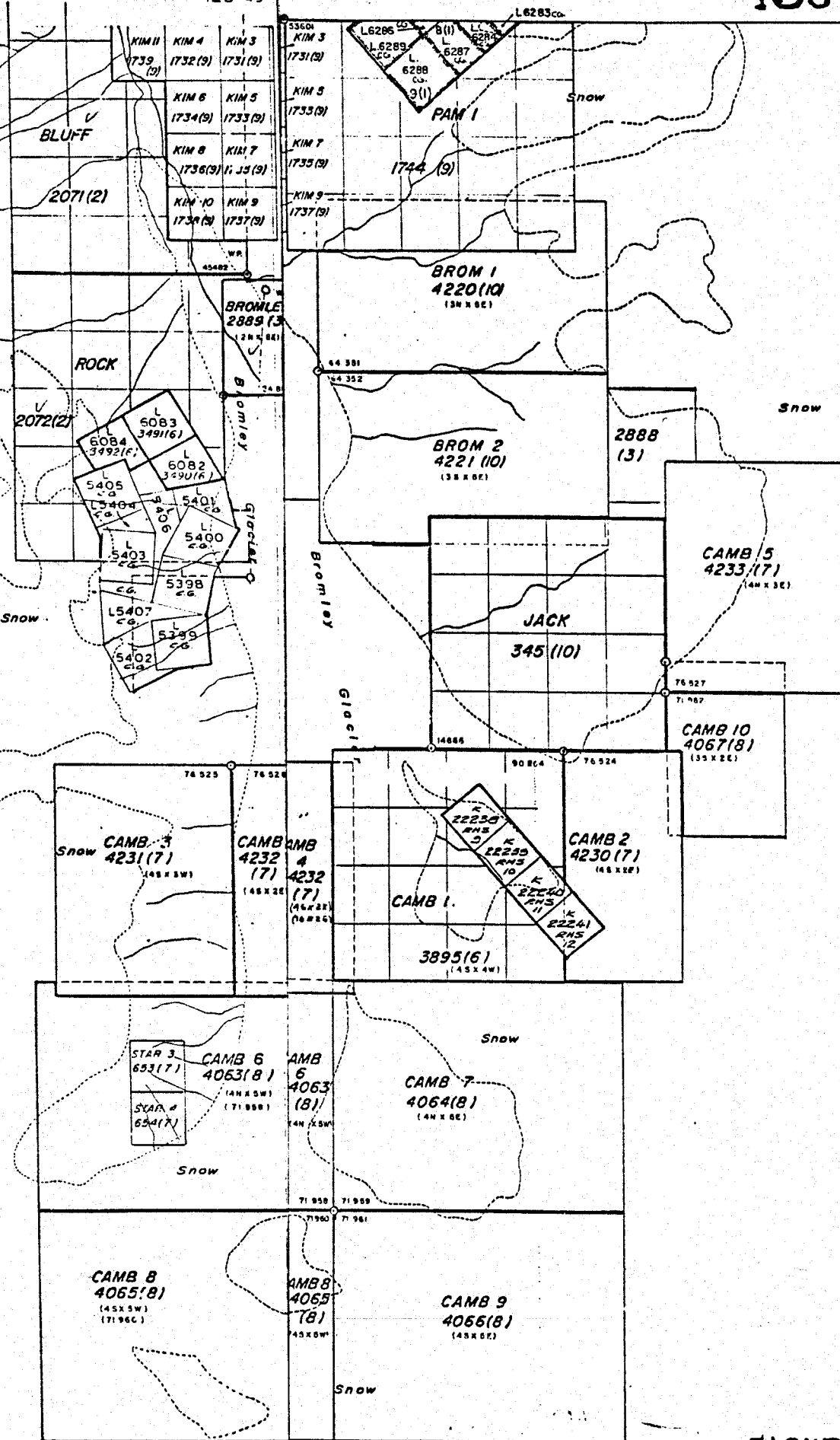
103 P 13 W

129°45'

129°45'

103 P 13E

TC



C
A
M
B
R
I

FIGURE 2

i a

field Cambria

Northward from the glacial area surrounding the claims, the topography becomes more gentle as the broad stream valley of Bitter Creek is approached.

The area of the high grade gold-silver quartz vein is located on a nunatak, on the east side of the main Bromley Glacier, locally known as Lost Mountain.

Property Ownership

The property consists of 10 MGS claims as follows:

	<u>Units</u>	<u>Record No.</u>
Camb 1	16	3895
Camb 2	8	4230
Camb 3	12	4231
Camb 4	8	4232
Camb 5	12	4233
Camb 6	20	4063
Camb 7	20	4064
Camb 8	20	4065
Camb 9	20	4066
Camb 10	<u>6</u>	4067
	142	

Figure 2 shows the claim disposition. Camb 1 encompasses 4 previously located two post claims, located northeast of the high grade gold-silver quartz vein, owned by Falconbridge. Billikin Resources Inc. owns a 100% undivided interest in the Camb claims. Camb 6 encompasses 2 previously located claims called the Star 3 and 4 and owned by J. Lehto, a Stewart prospector.

Personnel and Operations

Personnel involved during the program are as follows:

E.R. Kruckowski, Geologist, E.R. Kruckowski Consulting Ltd.
August 29 - September 11, 1983

M. Cloutier, Prospector and Director, Billikin Resources Inc.

August 29 - September 11, 1983

D. Pegg, Geologist, Independant Consultant

August 29 - September 11, 1983

A. Harmon, Prospector

July 12 - 20, 1983

M. Boulder, Helper

July 13 - 20, 1983

Personnel involved in the project were accomodated in a plywood frame tent camp located on Lost Mountain. The Bell 206 Long Ranger helicopter was utilized to transport personnel to and from other claims within the property.

Supplies and materials were purchased in Stewart, B.C. and ferried in via helicopter.

Previous Work

The first exploration activity in the Bitter Creek area probably occurred during early exploration for placer gold in the Stewart area in 1898. Old placer workings are apparently still visible along banks south of Bitter Creek. In 1899, the Roosevelt and other claims were staked along Bitter Creek to cover extensive gossans.

In the Lost Mountain area (Camb 1 claim), the earliest claims appear to have been located by Falconbridge Nickel Mines to encompass the area of the Mandy, Handy, and Middle veins. The RHS No. 1 to No. 6 claims were staked by Alex Smith on 22 July 1960. Subsequent to this, the RHS No. 7 to No. 12 claims were staked by E.D. Dodson and recorded 15 August 1963. Eventually a total of 16 RHS claims were staked to cover the nunatak.

During 1965, MOS_2 was discovered along the Bromley glacier immediately north of Lost Mountain. Events associated with the discovery and subsequent exploration of the property are as follows:

June 11, 1965 - Molybdenite mineralization was discovered by prospector J. Berkosha, R. Hutchings, and R. Gilroy and the " MOS_2 " group (50 claims) was staked.

July, 1965 - The "MOS₂" property was optioned to Hurley River Mines Ltd.

July 1965 to

October 1965 -Alrae Explorations Ltd. conducted the following explorations programme for Hurley River Mines Ltd:

1. prospecting
2. plane table mapping (1"=40 feet) in the vicinity of the discovery showings
3. rock trenching - 11 shallow trenches were excavated for a total length of 500 feet
4. drilling - 1 AX diamond drill hole was bored for a length of 229 feet

October 15, 1965 - Hurley River Mines forfeited their option.

The results of detailed work done by Alrae in an area 1000' x 500' along the intrusive contact are as follows:

1. The fractures which appear to control the MOS₂ mineralization have a preferred trend of N. to NNE.
2. Most of the significant mineralization is confined to within 75' of the intrusive contact.
3. Sampling: the numerical average of 85 chip and core samples, representing about 450 linear feet is 0.0475% MOS₂
The best 10 samples representing a length of 68 feet ranged from 0.283% to 0.078% MOS₂.

Gold assays of: 0.8 oz/T - 3'
0.9 oz/T - 2'
1.88 oz/T - 2'
were obtained from one trench.

The source of the placer gold in Bitter Creek was likely discovered in 1965 when J. Berkosha identified native gold bearing veins at MacAdam Point. This gold was probably discovered at or near the same time as the MOS₂ bearing outcrops.

In 1967, Berkosha, Hutchings and Gilroy formed a public company, Erin Explorations which optioned the ground for stock. The ground was examined by several majors but never optioned. During this period, Northgate Explorations funded the exploration program by buying stock in Erin Explorations. Results of this survey are not known.

While the work was being conducted on Red Mountain, Falconbridge was exploring the Lost Mountain ground. Work conducted by Falconbridge is summarized:

1. Located and drilled 1 AX core size diamond drill hole on what is presently known as the Mandy vein.
2. At least 4 drill holes on a fault zone containing massive pyrrhotite stringers.
3. Trenching and drilling on MOS_2 mineralization on the north side of Lost Mountain.

Results of the above work is unknown.

Subsequent to this, Falconbridge allowed the RHS claims to expire with the exception of RHS 9-12 covering the area of MOS_2 mineralization.

GEOLOGICAL SURVEYS

Regional Geology

The Camb property lies in the Stewart area which encompasses two main geological elements of northern British Columbia. It is east of the main Coast Crystalline Complex and is on the western edge of the Bowser Basin. Rocks in the area are apparently of Mesozoic age belonging to the Hazelton Group intruded by small plugs of diorite and syenodiorite.

Within the Stewart area, Lower Jurassic Hazelton Group rocks which include an extensive sequence of volcanic and sedimentary rocks, are unconformably overlain by Middle and Upper Jurassic Bowser rocks which are comprised of a series of non-marine and marine sediments with minor volcanics.

The oldest rocks in the project area as outlined by Grove's map titled Geology of the Unuk River - Salmon River - Anyox Map Area appears to be the Unuk River formation of Lower Jurassic age. These rocks vary in composition from green, red and purple volcanic breccia, conglomerate, sandstone and siltstone with minor crystal and lithic tuff, limestone, chert and coal. The formation appears to form a belt or zone of rocks extending from the Iskut River south to the Alice Arm area.

Grove indicates that in the Bromley Glacier area, the Unuk River formation is exposed in a window eroded in an extensive belt of rocks forming the Salmon River formation. This latter formation includes dark color banded siltstones, grey limestone and a variety of andesitic epiclastic and flow rocks. The Betty Creek formation which underlies the Salmon River formation is comprised of green, red, purple and black volcanic breccia, conglomerate, sandstone and siltstone with minor crystal and lithic tuffs, chert, limestone and lava appears to have been thinned out or eroded in the claim area.

The bulk of the Hazelton rocks were derived from a uniform sequence of andesitic volcanics which after erosion were deposited as lenticular overlapping beds.

Many units display lateral fragment size gradation from large breccia chunks through conglomerate to sandstone and siltstone.

Granodiorite is the dominant rock of the Coast Crystalline Batholith. Stocks and plutons generally varying from quartz monzonite, quartz diorite to granite are associated intrusive phases.

Numerous dyke swarms varying in composition from granite, quartz monzonite, granodiorite and quartz diorite are located in the Stewart area.

Structurally, the Stewart area lies on the west flank of the American Creek Anticline, a northerly trending, slightly arcuate regional structure truncated by intrusions of the Coast Crystalline Belt.

Regional metamorphism includes relatively low amphibolite facies minerals.

Local Geology

During the exploration program, mapping and sampling was predominantly concentrated on the Camb No. 1 claim. All showings located and sampled were surveyed using compass and chain traverses.

In the course of a traverse, brief observations were made on the geology, structural features and mineralization noted. Figure 3 and 4 shows the geology of the portion of the Camb No. 1 claim surveyed.

As well, reconnaissance traverses were conducted on the Camb No. 1, No. 2, No. 7 and No. 6 claims using a 1:50,000 map, NTS 103/P 13 Nass River for survey control. Figure 5 shows the geology of the above claims.

The main area examined on the Camb No. 1 claim is located on a nunatak on the east side of Bromley Glacier locally known as Lost Mountain. This area is predominantly underlain by black, grey to brown silicious argillite interbedded with minor adesitic

tuffs. The argillites are thinly bedded with individual beds from 5 mm to 10 cm in thickness. Minor pyrite occurs as blebs and grains along bedding planes usually less than 2-3% of the rock. Bedding measurements in the argillite indicate a strike of 040 - 045° with steep dips to the southwest.

Within the argillites a distinct volcaniclastic unit occurs along the east side of the nunatak. The unit may be up to 30 meters wide and consists of coarse dark grey limestone fragments in a dense, fine grained silicious andesitic tuff. These fragments which comprise 50% of the rock vary from 1 mm up to 0.5 m in width and are predominantly unsorted and angular. The matrix is a dark grey with up to 5% fine grained disseminated and fracture controlled pyrite. Due to the pyrite, this unit generally weathers a rusty brown color.

The sediments and volcanics are cut by a variety of dyke rocks, the most common being a coarse grained "crowded" feldspar porphyry. This rock is light purple to grey with subhedral to anhedral feldspar phenocrysts forming up to 80% of the rock. The matrix is light grey, fine grained and silicious appearing. Rounded quartz eyes may form up to 10% of the rock. A distinct feature of the dykes is the abundance of quartz lenses, stringers and pods forming stockworks within the rock. This dyke generally carries 1-2% pyrite as fine grains and along fractures. These feldspar porphyry dykes are from 1-5 m in width and weather a light rusty brown.

Andesitic dykes from 1-2 m in width were noted cutting the argillite and volcaniclastic rocks. The dykes are generally green-grey medium grained hornblende porphyry. These dykes may have wall zones consisting of crushed country rock with stringers of calcite, siderite and quartz with minor pyrite. These zones are discontinuous and rarely exceed 0.5 m in width.

The third type of dyke observed consisted of fine grained lamprophyre. This rock is green-grey with minor vesicles and typically composed of green acicular hornblende and plagioclase in a dense matrix. The rock contains fine pyrite up to 1-2% of the rock and weathers rusty with a blocky joint habit. The lamprophyre appears to cut the other types of dykes noted.

Numerous quartz veins were noted along shear fault and fracture zones striking generally 320 to 335° with steep dips to the west.

The brief observations on the geology noted on the Camb 2, 6 and 7 claim blocks indicates that for the most part, these claims are underlain by black fissile argillites cut by calcite veins trending 320 - 335°. A few quartz veins were noted on these claims generally with sparse sulphides. The most abundant veining appears to occur in close proximity to the nunatak on Camb No. 1 and the south side of Red Mountain. It is speculated that the gold-silver mineralization is related to the intrusion of a MOS_2 bearing quartz monzonite stock located under Bromley Glacier between Lost and Red mountains. Programs by previous workers on the stock have indicated significant quantities of gold occasionally associated with veins variably composed of quartz calcite, siderite, pyrite, pyrrhotite and minor chalcopyrite.

The monzonite and mineralization are described by E. Ostensoe as follows:

"Some of the rock is white quartz monzonite with biotite, molybdenite, brown sphalerite, chalcopyrite and pyrite. Pyrrhotite may also be present. It is cross cut by shears that are smeared with sooty molybdenite and by quartz and aplite veins. Sulphides are present in the veins and in the granite. Feldspar crystals up to 1½ inches in length are scattered through some specimens and other specimens are coarse grained (average diameter of feldspar is ¼ to 3/8 inches) and orange-green colored".

A wide zone of dykes is indicated for the area west of the Bromley Glacier but no mapping was conducted in this area.

Figure 5 shows the geology of the claim blocks prospected.

Mineralogy

The mineralizing event at the Camb property consists of an early stage of faulting and fracturing in a 320-335° direction with subsequent quartz and polymetallic mineral infusion.

The predominant sulphide and sulphsalt minerals identified are as follows:

- pyrite
- pyrrhotite
- sphalerite
- galena
- chalcopyrite
- arsenopyrite
- greenockite
- boulangerite
- tetrahedrite

This list represents the order of abundance of the sulphides and sulphsalts as determined from the mapping. Gold and silver minerals are not obvious and must be intimately mixed with the sulphides. No native gold has been identified to date.

Generally in the high grade gold-silver sections, the sulphides, pyrite and pyrrhotite may form 50 percent of the massive mineralization with sphalerite forming the other 50 percent. Galena and chalcopyrite are minor constituents of these massive sections. Greenockite, the cadmium sulphide occurs as bright green coatings on massive crystalline sphalerite.

Arsenopyrite was noted in only 3 samples, namely 82-84 where it occurs as massive stringers and disseminated grains in an argillite breccia with coarse massive pyrite filling the voids.

Boulangerite occurs as blue-black hairlike masses in voids within a quartz breccia at sample sites 48 and 49. It appears to be associated with yellow calcite rich sections carrying sphalerite within the above breccia.

Trace amounts of tetrahedrite have been identified in several areas but does not appear to have a widespread distribution.

The main quartz gold-silver polymetallic phase has produced quartz material having seams and fracture fillings of massive pyrite and pyrrhotite as well as massive pyrite, pyrrhotite, sphalerite, galena and chalcopyrite. The rock generally has a brecciated appearance with fractures from hairline size up to massive 10-15 cm seams filled with the above mentioned mineral assemblages. Low gold and silver values have been obtained on most of the pyrite and pyrrhotite bearing sections except in areas carrying arsenopyrite. The one exception is a massive pyrrhotite vein in the northeast corner of Camb No. 1. High gold and silver values are associated with high sphalerite content with lesser amounts of galena and chalcopyrite. However, high sphalerite content does not always mean high gold and silver values. High grade gold and silver intersections carry from 15-80 percent sulphides with the average around 30 percent.

The quartz veins are locally banded with thin films of argillite and/or graphite giving a banded appearance. The method by which this occurred probably involved the formation of small fissures filled with quartz. This was followed by subsequent parallel openings between the quartz sheet and argillite and further precipitation of quartz in the new openings. Films of argillite adhering to the quartz forming the wall of the new fissure would then become incorporated in the vein material.

A succession of such events could produce the banded nature of some of the quartz noted.

In addition to the narrow quartz veins, a stockwork of quartz with associated yellow calcite occurs within the "crowded" feldspar porphyry dykes. Coarse crystalline sphalerite and galena generally occurs in the yellow calcite as stringers and coarse blebs. The sulphides rarely comprise greater than 5% of the stockwork. Low gold and silver values appear to be associated with this early phase of mineralization (fault zones with later quartz veins cut these dykes).

A third type of quartz veins occurs usually in close proximity to the andesitic dykes. This vein type consists of quartz veinlets with siderite and calcite along fault zones forming the wall areas of the dykes as well as along stringers extending into the wall rocks. These veins do not appear to have any obvious sulphide associated with them.

Economic Geology

The main mineralized veins consist of narrow but continuous quartz veins with pyrite, pyrrhotite, sphalerite, galena and chalcopryite forming from 10-80% of the rock. Two veins have been delineated; one with an exposed length of 330 m and the other traced over a length of 800 m. These two veins have been labelled as the Mandy and Handy veins respectively.

The Mandy vein varies from 5 cm to 60 cm in width and generally strikes 325° with an overall dip of 70° southwest. Local narrow quartz-calcite stringers in a weakly sericitized rock within wall zones of the above vein give rise to zones reaching widths of 1 m. This vein has been traced over a strike length of 330 m and may well have greater dimensions. Overburden cover obscures any extensions to the northwest while flexuring in the vein with an associated change in strike and dip to the southeast complicates the vein structure. The southeast end of the Mandy vein has overall dips of 45° with local flat flexures giving the impression of thick vein sections. It is continuous with a vein 20 m south containing sulphide lenses but having a strike of 005° and a vertical dip. The vein splays into narrow veinlets with

an associated flat lying quartz veinlet stockwork extending up to 2 m into the wall rock from the main vein. The vein narrows into a thin fissure without any apparent quartz forming the wall to a crowded feldspar porphyry dyke. Due to the steepness of the hillside, the vein was not traced further to the south. This vein may well carry further quartz higher up the hillside.

Deep overburden to the northwest in association with infusion of barren quartz related to nearby andesite dykes makes tracing the vein in this area difficult. A narrow quartz vein 60 m to the northwest with pyrrhotite and sphalerite may well represent extension of the vein in this direction.

The lower portions or northwest end of the vein carries predominantly pyrite and pyrrhotite with associated low gold and silver values. The southeast portion of the vein carries pyrite, pyrrhotite, sphalerite, galena and chalcopyrite with associated high gold and silver values.

The Handy vein varies from 2 cm to 1.2 m in width and strikes parallel to and is located approximately 150 m north of the Mandy vein. The vein has been traced over a length of 800 m with the southeast end disappearing under the Cambria Icefield and the northwest end being obscured by overburden.

The main vein may contain mineralized associated veins splaying into the wall rocks for distances up to 60-70 meters.

The Handy vein has numerous areas where weak flat lying stockworks extend from the main vein into the wall rocks over distances of 3 m. This stockwork consists of quartz veinlets carrying abundant sulphides from 2-10 cm thick separated by 15-30 cm of wall rock.

The most northwesterly exposure of the vein carries abundant pyrite, pyrrhotite and sphalerite. Traversing to the southeast indicates an extensive length of vein carrying only pyrite and pyrrhotite. The southeast end of the vein carries abundant sulphides, locally massive, consisting of sphalerite, pyrrhotite, pyrite, galena and chalcopyrite. In several areas, this vein narrows down to narrow fracture or fissure zones 2-5 cm wide but is generally continuous over the 800 length traced.

Grab and chip sampling on the mineralized zones has indicated assay values ranging from 0.001 - 12.24 oz Au/T, 0.02 - 34.20 oz Ag/T with 0.01 - 26.5% Zn, 0.01 - 7.15% Pb, 0.01 - 2.22% Cu and 0.001 - 1.197% Cd over widths from 2 cm - 2.43 m.

During June, July and September 1983, the Mandy vein has been sampled every 3 m where possible with some checks on the assays obtained. This work verified the vein as being over 330 m in length and outlined a series of gold bearing zones within the vein. The zones outlined are as follows:

1. 10 m in length at the south end of the vein averaging 1.978 oz Au/T and 8.82 oz Ag/T over a width of 0.198 m
2. 111 m in length north of the first zone averaging 0.99 oz Au/T and 4.11 oz Ag/T over a width of 0.198 m
3. a poorly exposed zone north of the second zone 65 m in length averaging 0.401 oz Au/T and 1.43 oz Ag/T over a width of 0.167 m

Massive sphalerite, galena and pyrite stringers approximately 25 m south of the 10 m zone yielded assays of 1.324 - 1.126 oz Au/T (sample 119 - 120 respectively) over widths of 2-3 cm. Although very narrow widths are indicated, sampling indicates that gold and silver values continue to the south.

The assays and zones are shown on figure 5.

Sampling on the Handy vein has indicated a series of zones within the 800 m length as follows:

1. a vein splayed from the Handy vein exposed over a length of 19.5 m averaging 1.95 oz Au/T and 7.80 oz Ag/T over a width of 0.10 m
2. a poorly exposed zone at least 12 m in length averaging 0.542 oz Au/T and 2.519 oz Ag/T over a width of 0.15 m
3. a poorly exposed zone at least 22 m in length averaging 0.281 oz Au/T and 1.70 oz Ag/T over a width of 1.21 m
4. a zone at least 71.8 m in length averaging 1.967 oz Au/T and 5.46 oz Ag/T over a width of 0.15 m. Figure 6 shows the assays and zones for the Handy vein

A third vein system appears to be present between the Mandy and Handy vein with the best section showing 38 m of 0.603 oz Au/T and 3.01 oz Ag/T over a width of 0.11 m. This zone labelled the Middle vein is close to a fault zone where one sample assayed 12.24 oz Au/T and 10.36 oz Ag/T. Approximately 200 m southeast, narrow quartz stringers yielded assays of 0.306 and 0.282 oz Au/T over widths of 5-10 cm (samples 110 and 111 respectively). This indicates the possibility of finding a further gold-silver bearing zone.

Several areas of faulting with quartz veining has been drilled on the Camb No. 1 claim. One hole has been drilled on the Mandy vein at approximately trench 0 + 07 NW. This hole was drilled beneath a section assaying 2.174 oz Au/T but results for this drilling are unavailable.

As well, at least 4 holes were drilled approximately 400 m northeast of the first drill hole. It is not readily apparent what target these holes were testing. However, the brief examination revealed a wide fault zone with lenses of massive pyrrhotite up to 0.3 m in width along this zone.

As with the first hole, no results for this drilling are available. Sampling on one of these massive stringers (sample 113, 114) yielded low gold and silver assays.

On the Falconbridge claims (RHS 9-12) a series of quartz veins are present within fault zones striking 320. Sampling by Harman near the ice on the northwest portion of their ground yielded assays of 1.16 - 2.25 oz Au/T and 3.40 - 4.95 oz Ag/T in two samples. Sampling further southeast by the writer indicated assays of 0.372 oz Au/T and 4.32 oz Ag/T over a width of 0.23 m.

In addition to the main mineralized veins, a series of stockwork veins were noted within the "crowded" feldspar porphyry dykes. These vein systems appear to be from 1-2 m in width and consist of individual discontinuous quartz lenses from 0.3 - 0.5 m in thickness generally oblique or at right angles to the overall strike of the dykes. The quartz lenses carry sparse pyrite but are within a pyritiferous dyke rock. Pyrite may form up to 5% of the rock. These types of quartz lenses occasionally are reported to carry native gold in the Bromley Glacier area (personal communication - A. Barton).

Beside the quartz, these veins carry coarse crystalline sphalerite and galena within yellow calcite associated with the above veins. This calcite may occur as lenses within the vein or stringers in the wall rock paralleling the dyke contact. Low gold and silver values were obtained on the limited sampling conducted on this mineralization.

With the exception of a massive pyrrhotite stringer near the northwest corner of the Camb No. 1 claim which carried 0.018 and 1.588 oz Au/T (sample 99 and 100 respectively) over widths of 15-45 cm sampling on sulphide bearing quartz on other parts of the claim carried low gold and silver assays.

Sampling on the Camb No. 1 claim has indicated high grade Au-Ag values associated with sphalerite, pyrrhotite, pyrite, galena and chalcopyrite mineralization. The presence of numerous sulphide bearing quartz veins along a northwest trending fracture, fissure and fault pattern over lengths of 800 m indicates an extensive mineralizing event. Because most of the veins are fairly narrow, it is postulated that the mineralization is forced under high pressure into the numerous fracture zones. Exploration should be directed at locating areas where mineralization could have been concentrated particularly at the intersection of cross fractures: ie. low pressure areas.

The occurrence of flat lying quartz stockworks along the high grade veins offers the potential for defining appreciable widths of lower grade mineralization. These stockworks generally extend into the footwall over lengths up to 3 m. Due to their flat lying nature, no sampling or testing has been conducted on these stockworks.

The numerous joints and fractures striking 320-335° parallel to high grade veins also offer exploration targets particularly in overburden covered areas.

Significant gold assays have been obtained over a vertical range of at least 300 m (elevation difference from the top of the Handy vein to a mineralized vein on the Falconbridge ground) and at least 200 m above the MOS_2 bearing intrusion plug. The large vertical range has important implications for defining appreciable quantities of mineralization. It is also conceivable as the source of the mineralization is approached (at depth) that the veins may widen.

The presence of numerous, continuous high grade Au-Ag quartz veins offer an excellent exploration target for further Au-Ag mineralization. Further work is recommended to more adequately evaluate the Camb property. This work would involve gridding, geological mapping, and prospecting, and trenching, crone Shoot-back EM and diamond drilling.

CONCLUSIONS

- a) The Billikin Resources Inc. claim blocks in the Camb property area are underlain by favourable geology. The presence of several batholiths and stocks, fault zones and dyke swarms in the area give rise to potential gold and silver mineralization.
- b) Geological mapping has indicated that the project area is underlain by Hazelton argillite with minor andesitic volcanoclastic rocks intruded by feldspar porphyry, andesite and lamprophyre dykes.
- c) Sulphide bearing quartz veins are associated with shears, fractures and faults in a northwesterly (320-335°) direction. These are similar trends for mineralization in the Stewart area.
- d) Three distinct and separate quartz vein systems have been developed on the property as follows:
 1. high grade gold-silver quartz veins cutting all the rock types observed. Weak flat-lying quartz stockworks are locally associated with the above veins.
 2. quartz veinlets with siderite and calcite along fault zones forming the wall areas of andesitic dykes as well as extending into the wall zones.
 3. a strong stockwork in association with sulphide bearing yellow calcite within crowded feldspar porphyry dykes.
- e) Mineralization consisting of sphalerite, pyrite, pyrrhotite, galena and chalcopryite occurs with gold and silver in the high grade quartz veins. Gold and silver values are notably higher in areas of abundant sphalerite galena and chalcopryite as compared to areas with only pyrite and pyrrhotite.

f) Grab and chip sampling on the mineralized zones has indicated assay values ranging from 0.001 to 12.24 oz Au/T, 0.02 - 34.2 oz Ag/T with 0.01 - 26.5% Zn, 0.01 - 7.15 Pb, 0.01 - 2.22% Cu and 0.001 - 1.197% Cd.

Sampling has indicated three distinct veins labelled the Mandy, Handy and Middle veins.

The Mandy vein has been traced over a length of 330 m with sampling yielding the following zones:

1. 10 m in length averaging 1.978 oz Au and 8.82 oz Ag/T over a width of 0.203
2. 111 m in length averaging 0.99 oz Au/T and 4.11 oz Ag/T over a width of 0.198 m
3. a poorly exposed zone 65 m in length averaging 0.401 oz Au and 1.43 oz Ag/T over an average width of 0.167 m

The Handy vein has been traced over a length of 800 m with sampling yielding the following zones:

1. a vein splayed from the Handy vein exposed over a length of 19.5 m averaging 1.95 oz Au/T and 7.80 oz Ag/T over a width of 0.10 m
2. a poorly exposed zone at least 12 m in length averaging 0.542 oz Au/T and 2.519 oz Ag/T over a width of 0.15 m
3. a poorly exposed zone at least 22 m in length averaging 0.281 oz Au/T and 1.70 oz Ag/T over a width of 1.21 m
4. a zone at least 71.8 m in length averaging 1.967 oz Au/T and 5.46 oz Ag/T over a width of 0.15 m

A third vein called the Middle vein with values averaging 0.603 oz Au/T and 3.01 oz Ag/T over a width of 0.11 m and a length of 38 m. This vein is close to a zone that yielded an assay of 12.24 oz Au and 10.36 oz Ag/T.

- g) The property has an excellent potential for developing further quartz veins with significant gold and silver values.
- h) The mineralization is probably related to the intrusion of a MOS_2 bearing quartz monzonite stock approximately 1 kilometer north of the Handy, Mandy and Middle veins.
- i) Further work consisting of gridding, geological mapping, trenching, Crone Shoot-back EM and diamond drilling is recommended on the property.

RECOMMENDATIONS

a) Gridding

A grid would be established on the area of mineralization to provide better control for all mineralization discovered to date as well as all structural and geological features noted.

b) Geological Mapping

This program would be carried out in conjunction with the prospecting. It would involve sampling of newly discovered mineralization and correlating to the previously interpreted geology.

c) Prospecting

Detailed prospecting can be conducted in the areas surrounding the previously located mineralization. Traverses will be based on structural interpretations and will likely follow gulleys, lineaments and creek beds.

d) Trenching

All newly and previously discovered mineralization should be blasted in order to obtain fresh and representative samples for assaying. Sampling should be conducted not only across the vein but along it to obtain an accurate idea of assay values.

e) Crone Shoot-Back EM Survey

This survey would utilize the grid and attempt to locate any mineralized zones at depth. The shoot-back survey is suited for the steep terrain typical on the Camb No. 1 claim. Spacings of the readings would be determined on the property after some spacing tests in order to determine the most suitable ones.

f) Diamond Drilling

Diamond drilling would provide information on depth extend for the high grade veins as well as provide assays for calculating possible tonnages and grade.

Estimated costs of the above program is as follows:

1.	Mobilization/Demobilization	
	Personnel	\$2400.00
	Gear	500.00
2.	Mapping and Prospecting	
	Geologist - 10 days @ \$300.00/day	3000.00
3.	Crone EM	
	Geophysicist Technician - 7 days @ \$250.00	
	/day	1750.00
	Assistant - 7 days @ \$150.00/day	1050.00
4.	Gridding	
	2 Assistants - 5 days @ \$150.00/day	1500.00
5.	Analysis	
	400 samples @ \$15.00/sample	6000.00
6.	Equipment Rentals	
7.	Trenching	
	Blaster - 10 days @ \$300.00/day	3000.00
	Geologist 10 days @ \$300.00/day	3000.00
8.	Consumables, fuel, dynamite	2000.00
9.	Subsistence 4 men for 20 days @ \$25.00/ man day	2000.00
10.	Report preparation 10 days @ \$300.00/day	3000.00
11.	Drafting	2000.00
12.	Helicopter 40 hrs @ \$650.00/hr	26000.00
13.	Diamond drilling 1,500 feet all inclusive \$35.00/foot	52500.00
	Total	\$109700.00
	Contingency	11000.00
	GRAND TOTAL	<u>\$120700.00</u>

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Memorandum - Erin Explorations Ltd. - Bitter Creek Molybdenite Prospect, Stewart, B.C.

CERTIFICATE

I, Edward R. Kruckowski, Geologist residing at 23 Templeside Bay, N.E. in the city of Calgary in the province of Alberta, hereby certify that:

1. I received a Bachelor of Science degree in Geology from the University of Alberta in 1972.
2. I have been practising my profession continuously since graduation.
3. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
4. I am a consulting geologist working of behalf of Billikin Resources Inc.
5. This report is based on a review of data and maps supplied by Billikin Resources Inc. and my experience and knowledge of the area obtained during August - September 1983.
6. I hold no direct or indirect in the Camb property or securities of Billikin and do not expect to receive any such interest.
7. I consent to the use of the accompanying report in a prospectus or information circular issued by Billikin Resources Inc.

May 15 / 84

Date

E. R. Kruckowski

E.R. Kruckowski, B. Sc.

STATEMENT OF EXPENDITURES

Assaying	\$4222.05
- sample bags \$106.45	106.45
Helicopter Transportation	3994.10
Camp Supplies (plywood, lumber, fuel)	1529.50
Subsistence and Accomodation	704.19
Explosives	1083.28
Equipment Rented (drill)	390.00
Travel (truck rental, fuel)	1477.55
Consulting and Consulting Expenses	12857.18
Freight on Samples	149.90
Labour	7960.80
Miscellaneous (maps, sample bags, telephone)	<u>687.30</u>
TOTAL	35162.30

90% of Expenditures on Camb 1 and Camb 5

90% of \$35162.30 = \$31646.07

APPENDIX I
ASSAY SAMPLE DESCRIPTIONS

DESCRIPTION OF SAMPLES

CAMB I - Area of High Grade Vein

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
1.	5 cm	Quartz with pyrrhotite, galena, sphalerite ~ 5-7%.
2.	15 cm	Quartz with pyrite, minor sphalerite and galena ~ 15%.
3.	10 cm	Same as above.
4.	13 cm	Quartz with 60% sphalerite, pyrite, minor galena and chalcopyrite.
5.	8 cm	Quartz with 50% pyrite and sphalerite.
6.	5 cm	Quartz with 30% pyrite, sphalerite, minor chalcopyrite.
7.	8 cm	Quartz with 10% pyrite, trace sphalerite galena, chalcopyrite.
8.	13 cm	Quartz with 10% pyrite, trace sphalerite and chalcopyrite.
9.	13 cm	2.5 cm quartz with 15% pyrite and sphalerite plus 10 cm of siliceous wall rock.
10.	2.5 cm	Quartz with pyrrhotite, pyrite, sphalerite, galena, chalcopyrite ~ 15%.
11.	2.5 cm	Same, sulphides ~ 15-20%.
12.	23 cm	Quartz with massive sphalerite, pyrite minor galena ~ 30%.
13.	30 cm	Same, sulphides ~ 50%.
14.	8 cm	Same, sulphides ~ 35%.
15.	8 cm	Quartz with pyrite, sphalerite, minor pyrrhotite and chalcopyrite ~ 10%.
16.	5 cm	Quartz with argillite bands - minor pyrite, traces sphalerite ~ 5%.
17.	13 cm	Quartz with massive sphalerite, pyrite with minor chalcopyrite and galena 40%.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
18.	9 cm	Same, sulphides ~ 30%.
19.	13 cm	Quartz with fracture controlled pyrite, sphalerite, minor chalcopyrite and galena ~ 25%.
20.	46 cm	Quartz with sphalerite, pyrite, minor galena and chalcopyrite with inclusions of argillite sulphides ~ 10%.
21.	8 cm	Quartz with coarse pyrite and sphalerite minor galena and chalcopyrite, sulphides ~ 20%.
22.	15 cm	Same, sulphides ~ 35%.
23.	10 cm	Quartz stringer in wall of zone - pyrrhotite, pyrite, galena, sphalerite ~ 10%.
24.	10 cm	Quartz with 60% massive sphalerite, pyrite, pyrrhotite, galena, minor chalcopyrite.
25.	8 cm	Same as above.
26.	2.5 cm	Quartz with pyrrhotite, minor sphalerite galena, chalcopyrite ~ 10%.
27.	2.5 cm	Quartz vein with massive pyrrhotite, sphalerite, galena ~ 60%.
28.	8 cm	Quartz with sphalerite, pyrite, minor galena and chalcopyrite ~ 25%.
29.	25 cm	Same, quartz as above with argillite and barren quartz wall zones.
30.	10 cm	Quartz with massive sphalerite, pyrite minor chalcopyrite, trace galena ~ 70%.
31.	10 cm	Same as above, sulphides ~ 15%.
32.	Float Grab	Quartz with massive sphalerite, pyrite, minor galena and chalcopyrite.
33.	Float Grab	Quartz with sphalerite, pyrite, galena and chalcopyrite ~ 20%.
34.	1.22 m	Quartz vein (barren) and altered feldspar porphyry with minor pyrrhotite.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
35.	1.19 m	Barren quartz and minor altered dyke, abundant calcite with galena, sphalerite and pyrite ~ 3%.
36.	1.45 m	Barren quartz and altered dyke, minor calcite and arhillite breccia abundant mariposite along wall of dyke, galena and sphalerite less than 1%.
37.	1.47 m	Argillite with pyrite along fractures, fine quartz veinlets with pyrrhotite, 15 cm quartz and argillite breccia with galena and sphalerite on E wall.
38.	1.72 m	Barren quartz and porphyry minor pyrrhotite, trace galena and sphalerite.
39.	1.62 m	Quartz with calcite and siderite with coarse blebs of galena and sphalerite ~ 3-4%, minor dyke material.
40.	1.34 m	Argillite with minor quartz veinlets, pyrite along fractures.
41.	Grab	Massive sphalerite, galena and pyrite.
42.	2.44 m	Bleached volcanic agglomerate with pyrrhotite along fractures - strong quartz veinlet stockwork with massive sphalerite, galena and pyrite lense.
43.	1.46 m	Argillite with coarse cuke pyrite along fractures strong quartz veinlet stockwork with minor sphalerite and galena.
44.	2.13 m	Altered volcanic with quartz veinlet stockwork, minor galena, sphalerite, chalcopryite ~ 1-2% along veinlets, trace tetrahedrite - minor coarse pyrite stringers up to 5 cm.
45.	Grab	Massive pyrite in above trench.
46.	Grab	Quartz with sphalerite and acicular black crystals.
47.	0.41 m	Fault zone with crushed argillite and blue quartz and calcite, minor pyrite trace sphalerite and galena.
48.	0.91 m	Quartz stockwork with coarse sphalerite, trace galena, tetrahedrite, minor black acicular mineral, sulphides ~ 3%.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
49.	0.61	Quartz vein with sparse coarse sphalerite and galena - minor black acicular mineral.
50.	1.22 m	Quartz with coarse pyrrhotite and pyrite, minor chalcopyrite ~ 10% Falconbridge ground.
51.	23 cm	Graphitic pyritic black argillite with narrow quartz veins 2-15 cm over width of 23 cm - quartz veins have massive pyrrhotite, minor galena, sphalerite pyrite, chalcopyrite ~ 15%.
52.	10 cm	Quartz and calcite with pyrrhotite, pyrite, chalcopyrite, trace sphalerite.
53.	15 cm	Resample 2+46 N.W. site - quartz with massive pyrrhotite and sphalerite, minor pyrite.
54.	8 cm	Quartz with coarse pyrite, minor pyrrhotite and chalcopyrite ~ 20%.
55.	10 cm	Quartz with coarse pyrite and sphalerite, minor chalcopyrite and pyrite ~ 15%.
56.	8 cm	Quartz with coarse pyrite and pyrrhotite ~ 10%.
57.	5 cm	Quartz with minor pyrite and pyrrhotite blebs ~ 5%.
58.	10 cm	Same, sulphides ~ 15%.
59.	8 cm	Quartz with pyrrhotite and pyrite, trace galena and chalcopyrite.
60.	20 cm	Quartz with pyrite, minor pyrrhotite ~ 5%.
61.	15 cm	Quartz with coarse pyrrhotite, minor pyrite, trace galena and chalcopyrite ~ 5%.
62.	25 cm	Coarse pyrrhotite, minor pyrite, galena, chalcopyrite ~ 50% in quartz vein.
63.	30 cm	Same
64.	20 cm	Same, sulphides ~ 20%.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
65.	25 cm	Quartz with high weathered pyrite and pyrrhotite.
66.	20 cm	Quartz with massive pyrrhotite, minor chalcopyrite.
67.	10 cm	Quartz with high weathered pyrite and sphalerite.
68.	2.5 cm	Quartz with coarse pyrrhotite, sphalerite, trace chalcopyrite ~ 15%.
69.	10 cm	Quartz with massive sphalerite, pyrrhotite, minor chalcopyrite ~ 30%.
70.	20 cm	Quartz with massive pyrrhotite, minor sphalerite ~ 25%.
71.	8 cm	Quartz with coarse pyrrhotite and sphalerite ~ 30%.
72.	2.5 cm	Quartz with massive sphalerite, pyrrhotite, minor chalcopyrite ~ 30%.
73.	4 cm	Massive pyrrhotite, trace galena.
74.	15 cm	Quartz with pyrite, chalcopyrite, trace galena ~ 15%.
75.	15 cm	Graphitic argillite breccia with quartz, calcite stockwork carrying sphalerite, pyrite, galena, chalcopyrite ~ 10%.
76.	8 cm	Quartz with sphalerite, galena, chalcopyrite, pyrite, pyrrhotite.
77.	15 cm	Quartz with coarse sphalerite and pyrite ~ 10%.
78.	10 cm	Quartz vein out of 2 foot wide shear zone - samples is vuggy quartz with pyrite and sphalerite ~ 15%.
79.	13 cm	Quartz with coarse sphalerite and pyrite, minor pyrrhotite, galena and chalcopyrite ~ 25%.
80.	8 cm	Quartz with coarse sphalerite, pyrrhotite, pyrite, minor chalcopyrite and galena ~ 20%.
81.	Grab	Argillite breccia with coarse pyrite along fractures - sample is quartz

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
81. (cont.)		stringer with coarse pyrite, arsenopyrite, sphalerite.
82.	38 cm	Massive pyrite.
83.	30 cm	Massive pyrite.
84.	Grab	Massive 1.21 m wide zone of pyritic argillite - sample is coarse arsenopyrite, pyrite, trace sphalerite and galena.
85.	25 cm	Quartz and calcite vein coarse pyrrhotite, trace chalcopyrite 5%.
86.	5 cm	Quartz-calcite with coarse sphalerite, galena bands, minor pyrite.
87.	10 cm	Quartz with massive sphalerite, galena pyrrhotite and chalcopyrite 60%.
88.	35 cm	Shear zone with narrow quartz veinlets with galena, sphalerite, pyrite and chalcopyrite.
89.	15 cm	Argillite breccia with quartz-calcite stockwork, minor sphalerite, galena and pyrite.
90.	8 cm	Quartz with massive sphalerite, galena and pyrite 15%.
91.	5 cm	Quartz with massive sphalerite, galena, pyrite 40%.
92.	30 cm	Quartz stockwork with narrow galena, sphalerite, pyrite stringer.
93.	Grab	Massive sphalerite, galena and pyrite in quartz 25%.
94.	45 cm	Silicious volcanic with massive pyrite stringers.
		<u>CAMB 2,5,10 and 1</u>
95.	Grab	Small quartz vein with massive pyrrhotite stringer.
96.	Grab - Float	Argillite breccia with quartz stockwork and galena 5%.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
97.	Grab (10 cm vein)	Quartz vein in 0.61 m shear - vein has pyrite and pyrrhotite.
98.	15 cm	Massive pyrrhotite.
99.	45 cm	Massive pyrrhotite.
100.	10 cm	Massive pyrrhotite.
101.	Grab (1-1.4 m wide zone)	Argillite breccia with quartz-calcite stockwork with local massive sphalerite, minor galena.
<u>CAMB 7</u>		
102.	Grab	Quartz lense with coarse pyrite and sphalerite.
103.	Grab (float)	Quartz with coarse cuke pyrite ~ 20%.
<u>CAMB 1</u>		
104.	15 cm	Quartz with coarse pyrite ~ 10%.
105.	15 cm	Quartz with massive sphalerite, pyrite, pyrrhotite ~ 30%.
106.	10 cm	Siliceous argillite with 5 cm massive sphalerite, pyrite and pyrrhotite band.
<u>CAMB 6</u>		
107.	Grab	Quartz vein above adit with coarse chalcopryrite 4%.
108.	Grab	Pyritic argillite.
109.	Grab (float)	Pyritic argillite.
<u>CAMB 1</u>		
110.	5 cm	Quartz veinlet with coarse pyrite, minor sphalerite, galena, trace chalcopryrite.
111.	10 cm	Argillite breccia with massive pyrite in quartz stockwork.
112.	15 cm	Quartz vein with pyrite, sphalerite, galena 10%.

<u>Sample No.</u>	<u>Width</u>	<u>Description</u>
113.	30 cm	Massive pyrrhotite.
114.	45 cm	Massive pyrrhotite.
115.	Grab	Same site as 0+06 N.W. - massive sphalerite.
116.	Grab	Pyritic wall rock (argillite) of above sample.
117.	30 cm	Massive sphalerite, minor galena at 0+06 N.W.
118.	20 cm	Quartz with coarse blebs of pyrrhotite, minor pyrite ~ 5%.
119.	2.5 cm	Quartz with coarse sphalerite, pyrite and minor galena and chalcopryite.
120.	2.5 cm	Massive galena, sphalerite, pyrite stringer on footwalk of 45 cm zone.

APPENDIX II
ASSAY RESULTS

Aug 13/83

ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PRULVERIZED TO -100 MESH.
AG* AND AU* BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE, CERTIFIED B.C. ASSAYER

BILLIKIN RES PROJECT # BITTER CREEK FILE # 83-1534

PAGE# 1

SAMPLE	AG* OZ/TON	AU* OZ/TON
0+00NW	.49	.038
0+01NW	.51	.034
0+03NW	7.29	.812
0+04NW	12.26	3.642
0+06NW	16.48	3.751
0+07NW	9.88	2.174
0+08NW	4.33	.948
0+10NW	4.62	.473
0+13NW	3.68	1.316
0+17NW	.54	.104
0+20ANW	.21	.011
0+20BNW	3.27	.044
0+23NW	.76	.169
0+26NW	.74	.075
0+29NW	.05	.003
0+32NW	.33	.025
0+35NW	.09	.021
0+38NW	.42	.312
0+41NW	.58	.024
0+44NW	.39	.010
0+47NW	3.08	.023
0+50NW	.29	.022
0+53NW	.15	.064
0+56NW	.98	.782
0+59NW	1.37	.443
0+62NW	7.26	2.726
0+65NW	1.58	.492
0+68NW	3.59	1.265
0+71NW	4.32	.982
0+74NW	4.28	1.260
0+77NW	5.08	2.364
0+80NW	2.90	.564
0+83NW	5.27	.684
0+86NW	2.35	.473
0+89NW	3.48	.976
0+92NW	5.52	1.732
0+95NW	2.48	.601

SAMPLE	AG*	AU*
	OZ/TON	OZ/TON
0+98NW	2.58	.628
1+01NW	7.54	2.972
1+04NW	4.79	.914
1+07NW	3.22	.493
1+10NW	2.37	.552
1+13NW	4.58	.824
1+16NW	4.20	.470
1+19NW	5.28	.921
1+22NW	.13	.003
1+25NW	1.86	.062
1+28NW	.94	.136
1+31NW	6.32	1.162
1+34NW	4.73	.384
1+37NW	4.74	.396
1+49NW	4.02	.174
1+52NW	3.48	.360
1+55NW	1.27	.365
1+64NW	1.39	.268
1+67NW	2.34	.114
1+85NW	.83	.022
1+88NW	1.23	.162
1+91NW	1.02	.015
1+94NW	3.48	.142
1+97NW	1.97	.280
2NW	.75	.029
2+06NW	1.28	.180
2+28NW	2.97	2.771
2+32NW	.46	.226
2+37NW	.08	.017
2+40NW	.28	.006
2+43NW	.27	.003
2+46NW	.54	.012
2+49NW	.74	.028
2+52NW	.19	.005
2+55NW	.12	.007
2+58NW	.40	.022
2+61NW	.36	.007

SAMPLE	AG*	AU*
	OZ/TON	OZ/TON
2+67NW	.50	.004
2+70NW	.19	.001
2+73NW	.01	.001
2+76NW	.03	.001
2+88ANW	.19	.001
2+88BNW	.01	.001
2+91NW	.25	.002
NW POINT FACE	.04	.001
200 DOWN NW	.70	.004
CAMB MB1	5.04	.136
1N-2+97NW	.39	.001
NW FLOAT	1.39	.005
NW 1	3.40	1.160
NW 2	4.95	2.250
300 SE - NW	.36	.001

lenses seen
Falsely bridged

ICP REGULAR ASSAY ANALYSIS

A 1.00 GRAM SAMPLE IS DIGESTED WITH 50 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR. THE SAMPLE IS DILUTED TO 100 MLS WITH WATER.

AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. SAMPLE TYPE - ROCK CHIPS

DATE RECEIVED SEPT 14 1983 DATE REPORTS MAILED Sept 20/83 ASSAYER D. Toye DEAN TOYE, CERTIFIED B.C. ASSAYER

SAMPLE #	BILLIKIN RES FILE # 83-2140					
	CU %	FB %	ZN %	AG oz/t	CD %	Au o/t
1	.03	.43	.19	.77	.005	.189
2	.27	.67	4.39	4.31	.105	.223
3	.51	.68	1.59	5.32	.036	1.642
4	.23	1.86	8.79	11.79	.232	1.241
5	.34	1.48	6.83	11.02	.184	5.882
6	.09	.81	4.85	8.41	.073	3.620
7	.05	.39	.13	1.41	.003	.102
8	.40	.38	.56	3.22	.007	.014
9	.03	.07	.68	.29	.015	.025
10	.27	.38	2.35	2.08	.026	.005
11	.02	1.69	.77	2.78	.010	.029
12	.13	.56	5.33	3.45	.090	.601
13	.15	.58	6.12	2.18	.137	.562
14	.03	.18	3.57	.94	.066	.568
15	.29	.22	2.82	2.11	.049	.012
16	.32	.19	7.14	2.24	.149	.923
17	.00	.00	.08	.05	.001	.079
18	.53	1.13	4.90	6.64	.120	.789
19	.32	1.09	4.46	4.92	.115	1.362
20	.09	.56	1.35	1.76	.034	.783
21	.24	.20	.12	3.90	.002	.039
22	.56	4.18	5.98	15.30	.149	3.983
23	.15	.81	1.24	2.30	.030	.534
24	.35	4.63	7.57	11.02	.217	9.522
25	.44	1.61	12.30	5.84	.298	1.182
26	.11	.43	2.77	1.13	.070	.051
27	.22	1.06	3.30	4.31	.079	.349
28	.04	.20	1.81	.71	.035	.035
29	.03	.10	.80	.40	.015	.006
30	.17	1.38	17.40	5.39	.510	.229
31	.16	.78	1.48	2.37	.037	.011
32	.52	1.14	4.46	6.06	.105	.038
33	.32	1.10	5.04	4.15	.122	.063
34	.00	.02	.06	.18	.001	.002
35	.01	.81	.37	1.73	.004	.003
36	.00	.03	.33	.16	.003	.001
37	.01	.06	.86	.11	.007	.001
38	.00	.00	.01	.02	.001	.001

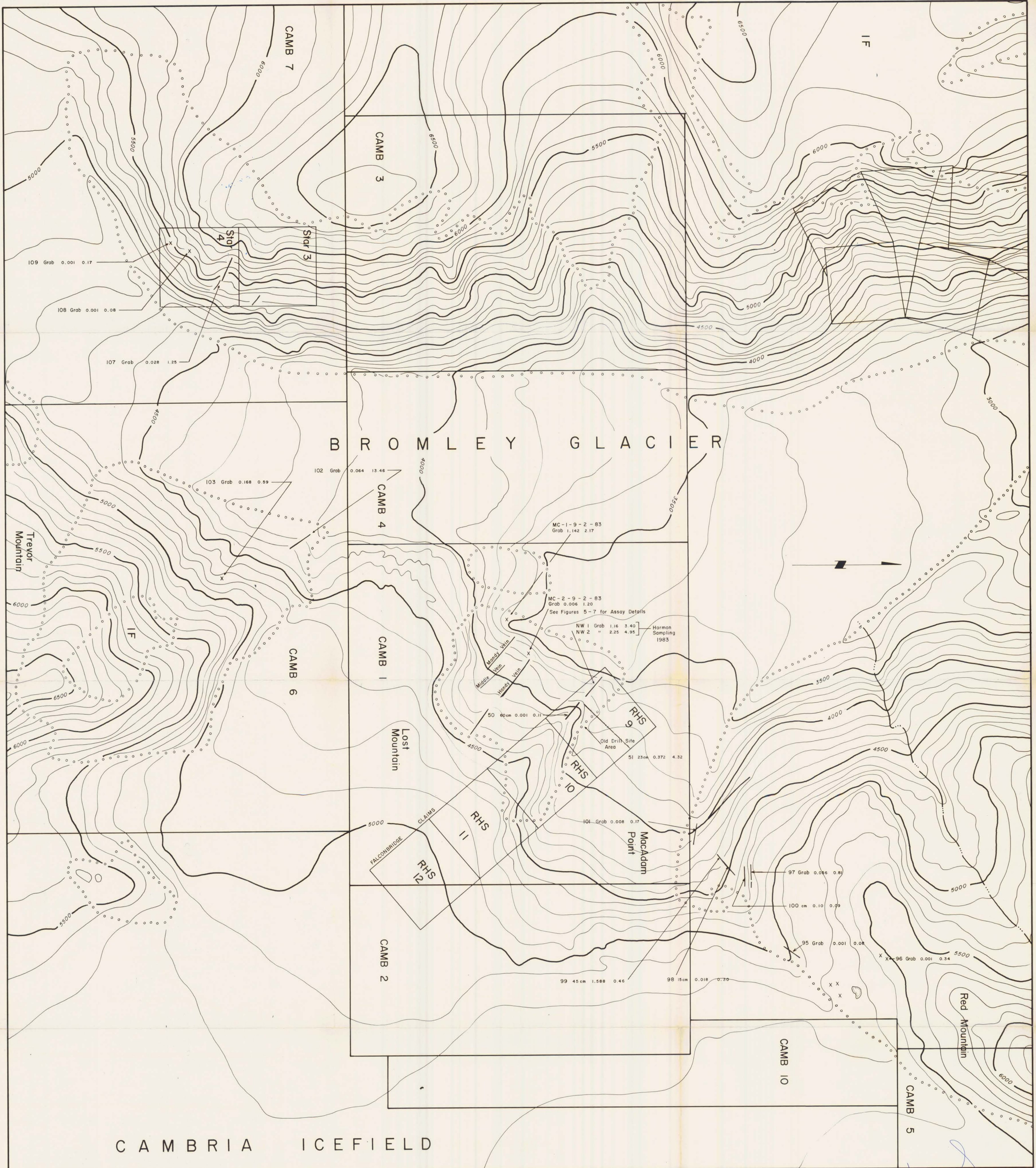
SAMPLE #	CU %	PB %	ZN %	AG oz/t	CD %	Au o/t
39	.00	.53	.86	1.56	.008	.001
40	.01	.00	.01	.04	.001	.001
41	.01	5.35	12.74	4.61	.220	.002
42	.03	1.36	2.42	1.26	.034	.001
43	.01	.82	.47	1.23	.005	.023
44	.02	.07	.03	.52	.001	.005
45	.06	.13	.07	2.23	.002	.072
46	.00	.35	1.85	.42	.020	.001
47	.00	.08	.08	.43	.001	.001
48	.01	.21	1.54	1.13	.017	.001
49	.00	.31	.41	.79	.005	.001
50	.04	.00	.01	.11	.001	.001
51	.36	.33	.04	4.32	.001	.372
52	.11	.00	.06	.26	.002	.001
53	.11	.78	1.76	1.26	.034	.034
54	.06	.48	.44	4.08	.007	.534
55	.43	.33	6.31	2.68	.103	.292
56	.06	.05	.06	.60	.001	.118
57	.02	.01	.17	.11	.003	.002
58	.01	.00	.00	.09	.001	.031
59	.03	.03	.04	.18	.001	.002
60	.05	.09	.01	1.46	.001	.009
61	.06	.03	.04	.31	.001	.022
62	.21	.33	.10	1.06	.002	.018
63	.07	.02	.00	.21	.001	.004
64	.01	.07	.04	.37	.001	.008
65	.01	.02	.00	.42	.001	.042
66	.15	.00	.01	.37	.001	.002
67	.12	.55	1.59	7.34	.033	.632
68	.06	.14	1.04	1.10	.026	.042
69	.13	.36	6.03	3.27	.170	.248
70	.12	.61	.60	4.98	.016	.598
71	.10	1.43	10.52	5.21	.337	.784
72	.22	.43	2.81	2.80	.077	.558
73	.04	2.05	.06	15.16	.003	.026
74	.41	.69	1.23	10.36	.019	12.240
75	.03	.06	2.36	.44	.023	.024

SAMPLE #	CU %	PB %	ZN %	AG oz/t	CD %	Au o/t
76	.02	.34	1.35	.53	.019	.042
77	.09	.45	3.55	2.84	.091	.722
78	.13	.35	5.52	2.17	.097	.122
79	.18	.58	3.68	3.67	.115	1.068
80	.27	1.07	4.72	3.36	.132	.232
81	.05	.10	.77	.70	.015	.274
82	.01	.19	.07	1.20	.003	.308
83	.01	.42	.04	1.93	.002	.272
84	.03	.06	.01	1.99	.001	.262
85	.02	.01	.04	.12	.001	.004
86	.07	.23	.76	.46	.009	.039
87	.40	5.21	7.20	6.66	.094	.358
88	.05	2.13	1.43	2.17	.024	.058
89	.01	.05	.06	.08	.001	.002
90	.07	3.43	2.59	9.39	.051	.032
91	.12	7.15	4.01	34.20	.071	.092
92	.00	.23	.05	.72	.001	.001
93	.10	3.04	7.56	4.16	.123	.056
94	.05	.02	.11	.28	.002	.029
95	.01	.03	.05	.08	.001	.001
96	.00	.49	.85	.34	.003	.001
97	.12	.03	.01	.81	.001	.056
98	.26	.04	.00	.30	.001	.018
99	.25	.00	.14	.46	.003	1.588
100	.14	.00	5.46	.09	.039	.010
101	.15	.00	8.54	.17	.111	.008
102	.02	.59	3.29	.83	.034	.068
103	.00	.03	.12	.59	.002	.168
104	.01	.04	.28	.46	.005	.050
105	.07	.27	2.11	1.22	.040	.014
106	.04	3.84	2.52	13.46	.051	.064
107	1.59	.01	.06	1.25	.001	.028
108	.00	.02	.01	.08	.001	.001
109	.13	.00	.00	.17	.001	.001
110	.16	.57	3.79	7.10	.037	.306
111	.09	.20	1.09	2.55	.012	.282

BILLIKIN RES FILE # 83-2140

PAGE# 4

SAMPLE #	CU %	PB %	ZN %	AG oz/t	CD %	Au o/t
112	.16	.62	4.36	3.30	.049	.011
113	.04	.00	.01	.07	.001	.002
114	2.22	.01	.11	2.34	.002	.006
115	.07	2.19	26.50	5.19	1.197	.334
116	.03	.01	.19	.04	.004	.002
117	.12	2.22	20.80	4.32	.851	.522
118	.05	.11	.07	.72	.002	.015
119	.02	1.90	10.40	3.79	.373	1.324
120	.19	2.15	5.51	4.83	.171	1.126
MC-1-9-2-83	.02	.78	1.16	2.17	.019	1.142
MC-2-9-2-83	.38	.03	.05	1.20	.002	.006



LEGEND

▨ QUARTZ VEIN

SAMPLE No.	Width	Au oz/T	Ag oz/T
107	Grab	0.028	1.25

Symbols

- o-o-o-o Ice Edge
- IF Ice Field
- Claim Line
- x Float Boulders

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,275

Scale 1:10,000

BILLIKIN RESOURCES INC.

**CAMB PROPERTY
ASSAY MAP**

To accompany report by: E. R. KRUCKOWSKI
Drawn by: c.i.c. NTS 103P/13E

Figure 9



GEOLOGICAL BRANCH
ASSESSMENT REPORT
12,275

LEGEND

HAZELTON ROCKS	Symbols
BA BLACK ARGILLITE	— Creek
AP ANDESITE PYROCLASTIC	— Fault Zone
INTRUSIVE ROCKS	— Outcrop
FP FELDSPAR PORPHYRY	— Geological Contact
A ANDESITE DYKES	— Strike, Dip, Inclined, Vertical
L LAMPORPHYRE DYKES	○ Drill Hole
▬ QUARTZ VEIN	— Trench
	Zns Sphalerite
	Pbs Galena
	Py Pyrite
	Cpy Chalcopyrite
	Po Pyrrhotite
	Aspy Arsenopyrite
	Tetra Tetrahedrite
	Boul Boulangerite

Scale 1:500

BILLIKIN RESOURCES INC.

CAMB PROPERTY
GEOLOGICAL MAP - CAMB I
SOUTHWESTERN SECTION

To accompany report by: E. R. KRUCHKOWSKI
Drawn by: c.i.c. NTS 103P/13E Figure 4



CAMBRIA ICEFIELD

LEGEND

- HAZELTON VOLCANICS
- QUARTZ MONZONITE
- QUARTZ VEIN

Symbols

- Ice Edge
- Ice Field
- Claim Line
- Float Boulders
- Molybdenite
- Pyrite
- Pyrrhotite
- Sphalerite
- Galena
- Chalcoprite
- Bedding inclined, vertical
- Adit

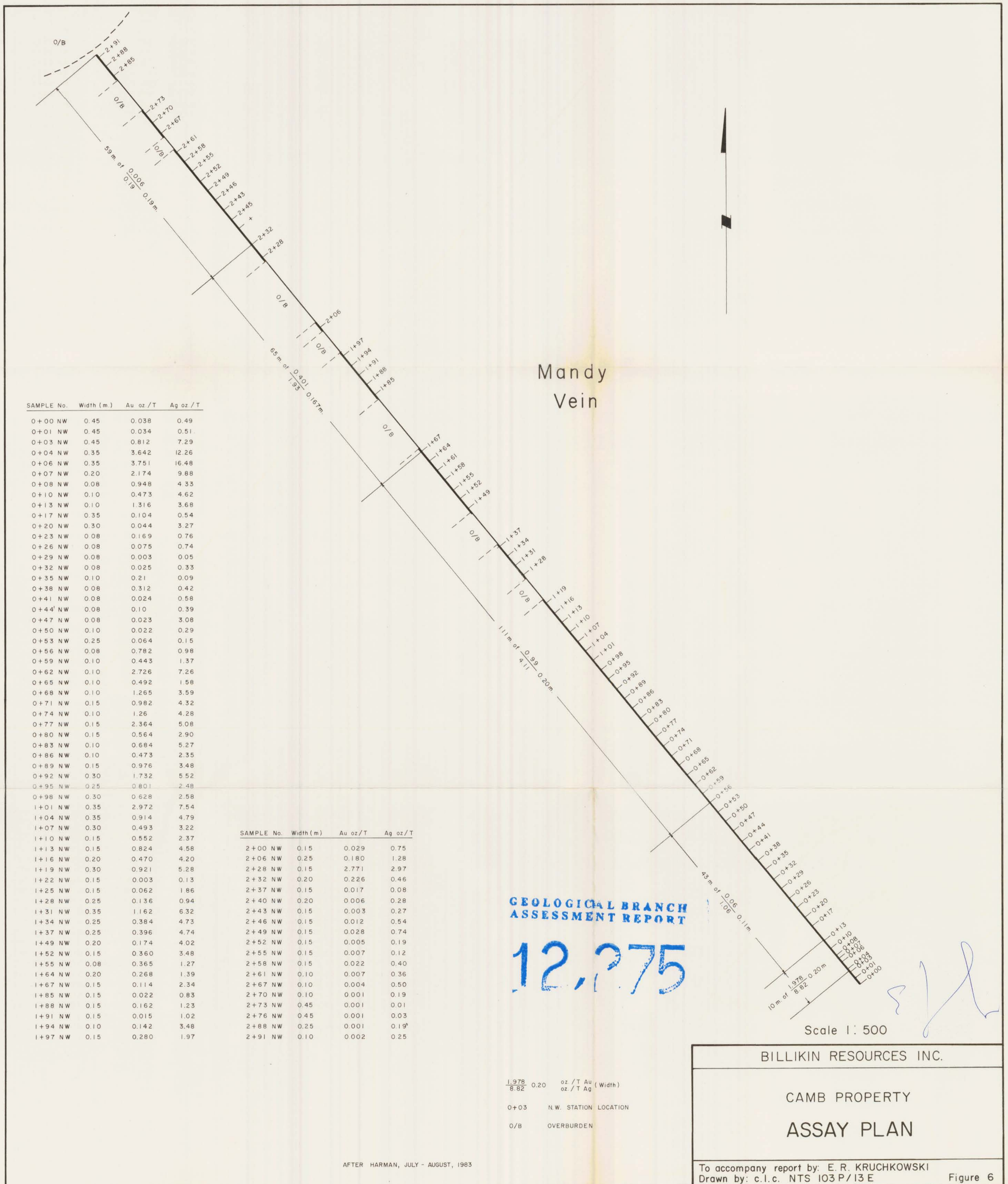
Scale 1:10,000

BILLIKIN RESOURCES INC.

CAMB PROPERTY
GEOLOGY MAP

To accompany report by: E. R. KRUCKOWSKI
Drawn by: c.i.c. NTS 103P/13E Figure 5

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
12,275



SAMPLE No.	Width (m.)	Au oz./T	Ag oz./T
0+00 NW	0.45	0.038	0.49
0+01 NW	0.45	0.034	0.51
0+03 NW	0.45	0.812	7.29
0+04 NW	0.35	3.642	12.26
0+06 NW	0.35	3.751	16.48
0+07 NW	0.20	2.174	9.88
0+08 NW	0.08	0.948	4.33
0+10 NW	0.10	0.473	4.62
0+13 NW	0.10	1.316	3.68
0+17 NW	0.35	0.104	0.54
0+20 NW	0.30	0.044	3.27
0+23 NW	0.08	0.169	0.76
0+26 NW	0.08	0.075	0.74
0+29 NW	0.08	0.003	0.05
0+32 NW	0.08	0.025	0.33
0+35 NW	0.10	0.21	0.09
0+38 NW	0.08	0.312	0.42
0+41 NW	0.08	0.024	0.58
0+44 NW	0.08	0.10	0.39
0+47 NW	0.08	0.023	3.08
0+50 NW	0.10	0.022	0.29
0+53 NW	0.25	0.064	0.15
0+56 NW	0.08	0.782	0.98
0+59 NW	0.10	0.443	1.37
0+62 NW	0.10	2.726	7.26
0+65 NW	0.10	0.492	1.58
0+68 NW	0.10	1.265	3.59
0+71 NW	0.15	0.982	4.32
0+74 NW	0.10	1.26	4.28
0+77 NW	0.15	2.364	5.08
0+80 NW	0.15	0.564	2.90
0+83 NW	0.10	0.684	5.27
0+86 NW	0.10	0.473	2.35
0+89 NW	0.15	0.976	3.48
0+92 NW	0.30	1.732	5.52
0+95 NW	0.25	0.801	2.48
0+98 NW	0.30	0.628	2.58
1+01 NW	0.35	2.972	7.54
1+04 NW	0.35	0.914	4.79
1+07 NW	0.30	0.493	3.22
1+10 NW	0.15	0.552	2.37
1+13 NW	0.15	0.824	4.58
1+16 NW	0.20	0.470	4.20
1+19 NW	0.30	0.921	5.28
1+22 NW	0.15	0.003	0.13
1+25 NW	0.15	0.062	1.86
1+28 NW	0.25	0.136	0.94
1+31 NW	0.35	1.162	6.32
1+34 NW	0.25	0.384	4.73
1+37 NW	0.25	0.396	4.74
1+49 NW	0.20	0.174	4.02
1+52 NW	0.15	0.360	3.48
1+55 NW	0.08	0.365	1.27
1+64 NW	0.20	0.268	1.39
1+67 NW	0.15	0.114	2.34
1+85 NW	0.15	0.022	0.83
1+88 NW	0.15	0.162	1.23
1+91 NW	0.15	0.015	1.02
1+94 NW	0.10	0.142	3.48
1+97 NW	0.15	0.280	1.97

SAMPLE No.	Width (m)	Au oz./T	Ag oz./T
2+00 NW	0.15	0.029	0.75
2+06 NW	0.25	0.180	1.28
2+28 NW	0.15	2.771	2.97
2+32 NW	0.20	0.226	0.46
2+37 NW	0.15	0.017	0.08
2+40 NW	0.20	0.006	0.28
2+43 NW	0.15	0.003	0.27
2+46 NW	0.15	0.012	0.54
2+49 NW	0.15	0.028	0.74
2+52 NW	0.15	0.005	0.19
2+55 NW	0.15	0.007	0.12
2+58 NW	0.15	0.022	0.40
2+61 NW	0.10	0.007	0.36
2+67 NW	0.10	0.004	0.50
2+70 NW	0.10	0.001	0.19
2+73 NW	0.45	0.001	0.01
2+76 NW	0.45	0.001	0.03
2+88 NW	0.25	0.001	0.19
2+91 NW	0.10	0.002	0.25

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,275

1.978 0.20 oz./T Au (Width)
8.82 oz./T Ag
0+03 N.W. STATION LOCATION
O/B OVERBURDEN

Scale 1: 500

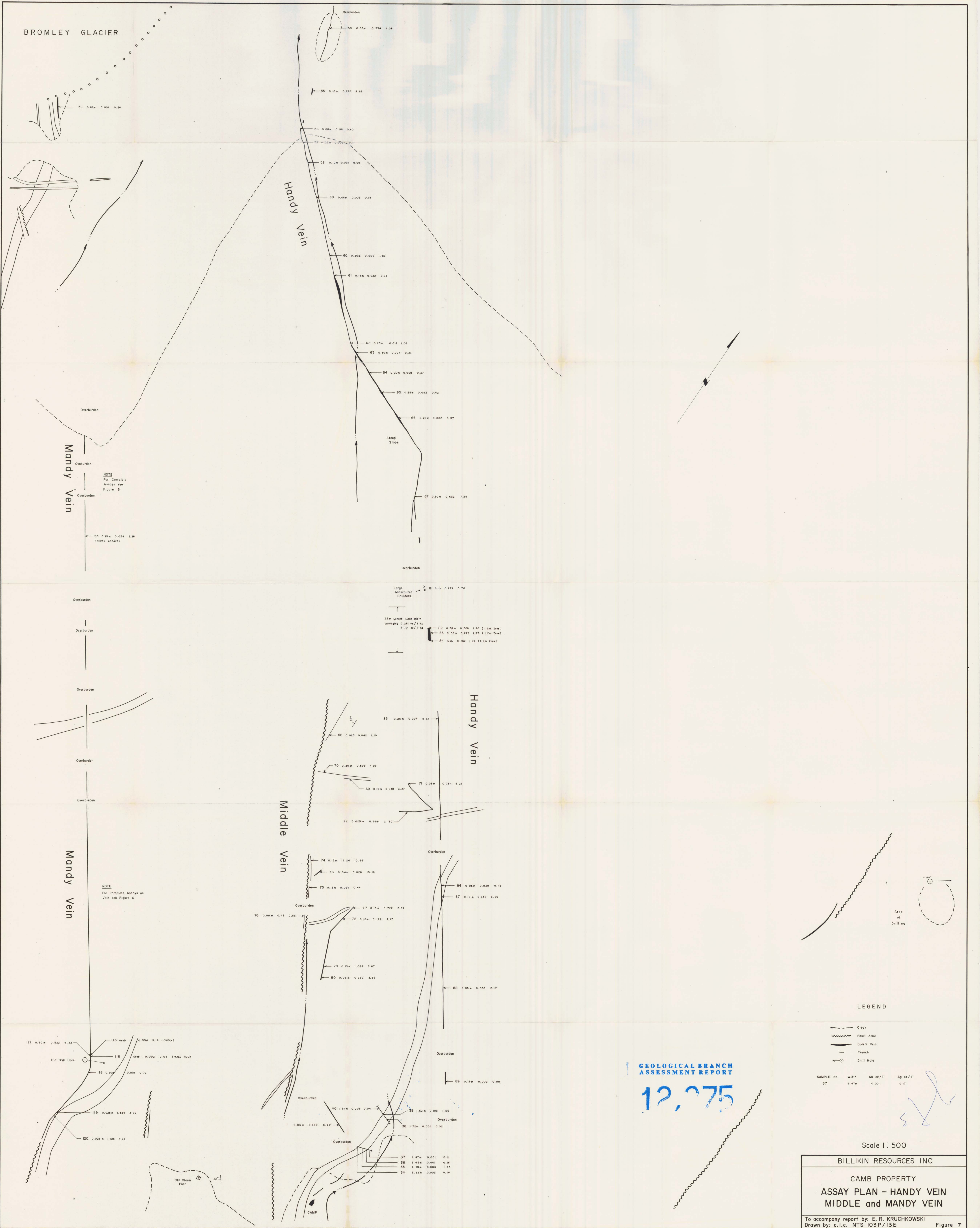
BILLIKIN RESOURCES INC.

CAMB PROPERTY
ASSAY PLAN

To accompany report by: E. R. KRUCKOWSKI
Drawn by: c.l.c. NTS 103 P/13 E

Figure 6

BROMLEY GLACIER



NOTE
For Complete Assays see Figure 6

NOTE
For Complete Assays on Vein see Figure 6

Large Mineralized Boulder
22m Length 1.25m width
Average 0.28 Au/T Ag
1.70 Ag/T Ag

82 0.38m 0.300 (1.2m Zone)
83 0.20m 0.252 (1.2m Zone)
84 0.08m 0.282 (1.2m Zone)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,275

LEGEND

- Creek
- Fault Zone
- Quartz Vein
- Trench
- Drill Hole

SAMPLE No	Width	Au oz/T	Ag oz/T
37	1.47m	0.001	0.17

Scale 1 : 500

BILLIKIN RESOURCES INC.

CAMB PROPERTY
ASSAY PLAN - HANDY VEIN
MIDDLE and MANDY VEIN

To accompany report by: E. R. KRUCHKOWSKI
Drawn by: c.l.c. NTS 103P/13E

Figure 7



LEGEND

- Creek
- Fault Zone
- Quartz Vein
- Trench
- Drill Hole

SAMPLE No	Width	Au oz/T	Ag oz/T
75	0.15m	12.24	10.36

GEOLOGICAL BRANCH
ASSESSMENT REPORT

12,275

Scale 1 : 500

BILLIKIN RESOURCES INC.

CAMB PROPERTY
ASSAY PLAN - HANDY and
MIDDLE VEIN

To accompany report by: E. R. KRUCKOWSKI
Drawn by: c.l.c. NTS 103P/13E Figure 8