

REPORT  
ON THE  
MARBLE ARCH CLAIM

800366

82F 14E  
LATITUDE  $49^{\circ} 59' N$   
LONGITUDE  $117^{\circ} 05' W$

SLOCAN MINING DIVISION  
ON TWELVE MILE CREEK, A TRIBUTARY OF THE KASLO RIVER

FOR

ALMINE RESOURCES LTD.,  
#600-885 DUNSMUIR STREET  
VANCOUVER, B.C., V6C 1N5

BY

ALEX BURTON, P.ENG.  
BURTON CONSULTING INC.,  
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MARCH, 1983

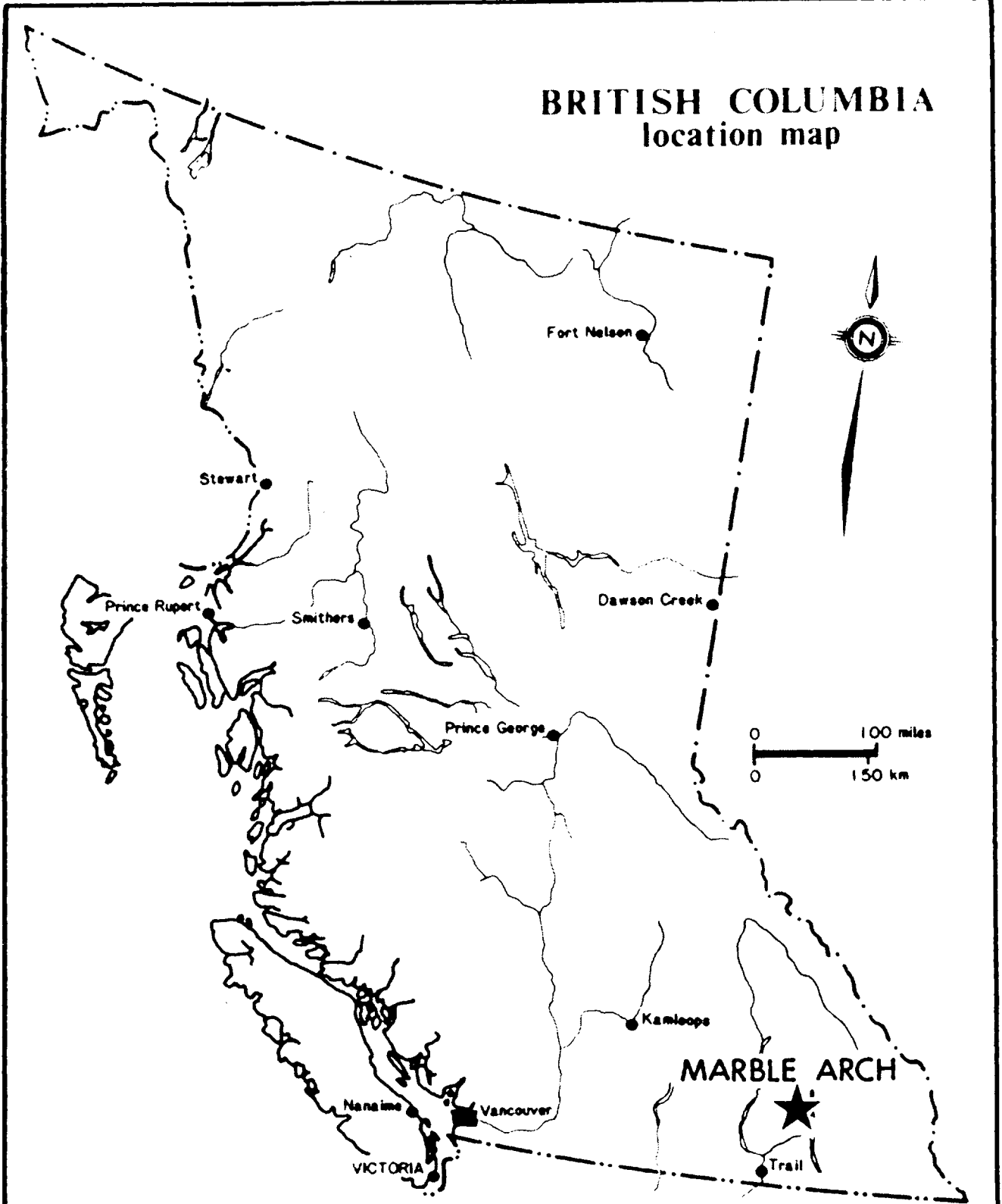
L.C. BIRNBAUM  
685-6779

BURTON CONSULTING INC.

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# BRITISH COLUMBIA location map



ALMINE RESOURCES LTD.

## MARBLE ARCH PROPERTY

N.T.S. : 82F/14 (E)

SCALE : 1 : 7,500,000

M.D. : SLOCAN

DATE : February 1983

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Vancouver, B.C. V6B 1V9

FIG. No.

## INTRODUCTION

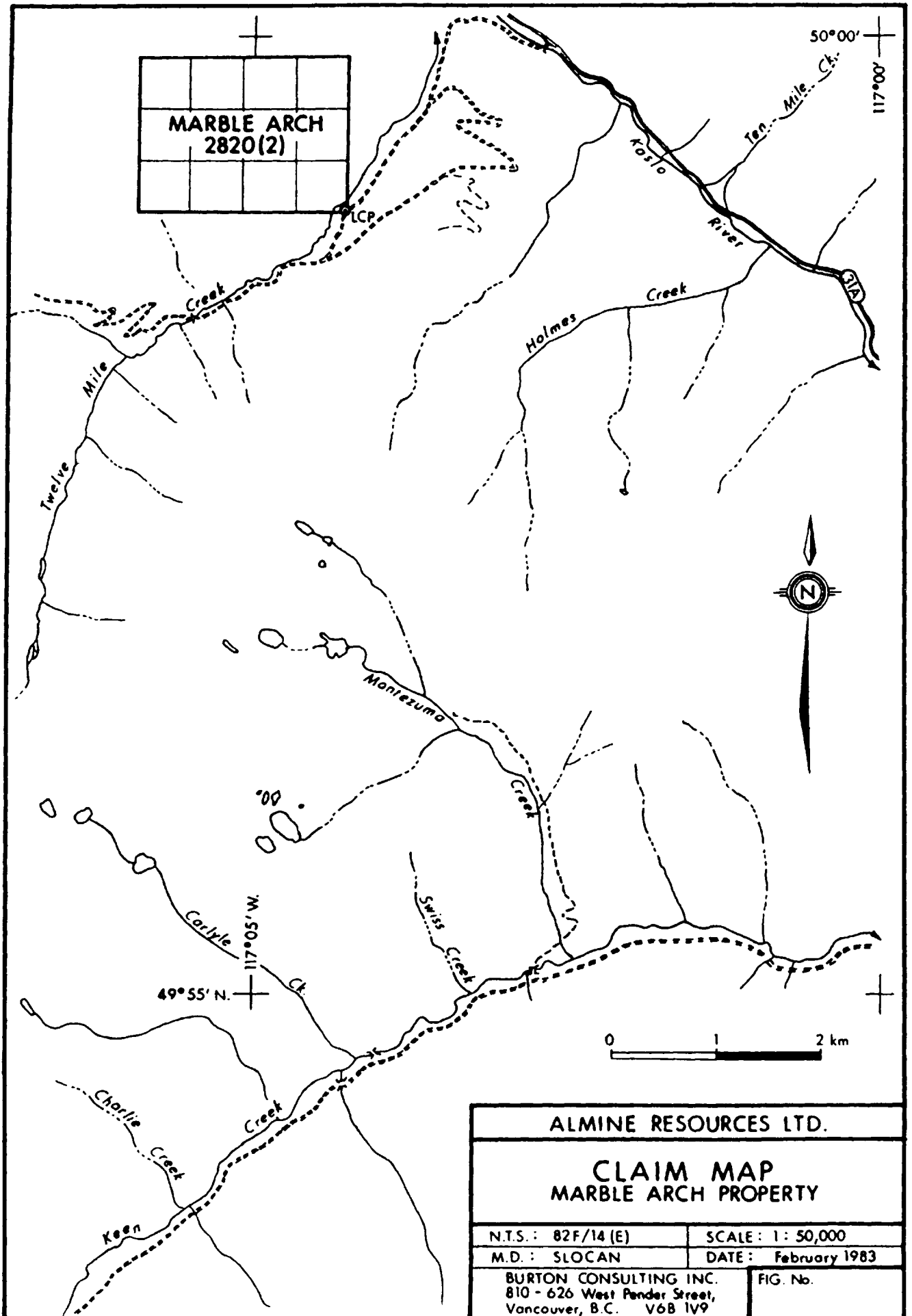
The Marble Arch Claim No. 2820(2) is the successor claim to the abandoned and restaked Walley Too 1710(2) Claim, both staked by the same person.

The Marble Arch Claim is in the "slate belt" in the basal part of the Slocan series. Within this belt are several old silver-lead producers and numerous partially tested silver-lead occurrences. The Marble Arch under a series of names consists of several silver-lead-zinc occurrences discovered about the turn of the century, which have been partially explored by a series of trenches and adits. Difficulty of access, timber cover and recessive weathering of the slates hindered exploration. Although the "veins" discovered so far are narrow grades have been excellent with three to five ounces of silver present for each percent of lead contained in the ore. Assays and small shipments with sixty - seventy percent lead have carried 150 - 400 ounces of silver per ton. Because of the high silver values and modern exploration techniques this kind of property is now an attractive exploration bet.

## LOCATION AND ACCESS

The Marble Arch Claims are in the Slocan Mining Division of B.C. The claim is 13 miles (21 km) west of Kalso, B.C.

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MARBLE ARCH  
2820(2)



0 1 2 km

ALMINE RESOURCES LTD.	
<b>CLAIM MAP</b> MARBLE ARCH PROPERTY	
N.T.S. : 82F/14 (E)	SCALE : 1 : 50,000
M.D. : SLOCAN	DATE : February 1983
BURTON CONSULTING INC. 810 - 626 West Pender Street, Vancouver, B.C. V6B 1V9	FIG. No.

roughly a mile in elevation on the northwest side of Twelve Mile Creek, a tributary on the south side of the Kaslo River. Normally access to the old showings is up the Utica Mine Road on the east side of Twelve Mile Creek to the point where the road crosses to the west side of Twelve Mile Creek, from this point old trails lead northwesterly to the showings. There is another road that reaches nearly to the north boundary of the Marble Arch Claim. It starts at a point 21 km west of Kaslo on Highway No. 31A after the Kaslo River is forded a right hand route is taken through the logging slash, follow a bulldozer road 2.5 km up to the west and then southerly to slightly over 1,000 metres elevation (3,500 feet) to the end of the road and the old workings on the Hillside No. 1 Mineral Claim.

The lower slopes of the property are steep and fully timbered with thick underbrush including Devil's Club. Outcrops are scarce on the lower slopes.

### CLAIMS

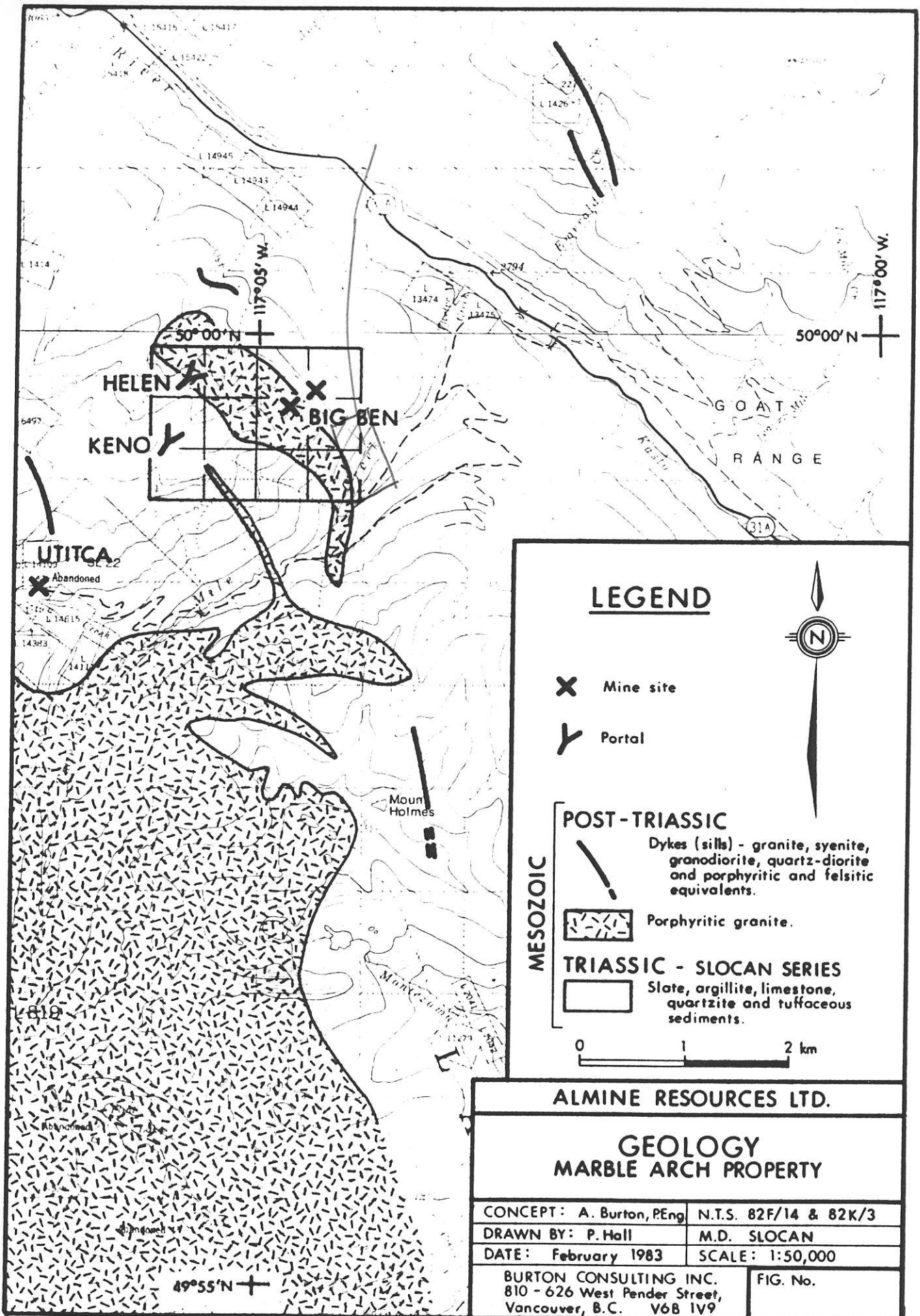
The property consists of the Marble Arch Metric Mineral Claim No. 2820(2). It is a restaking of the now nonexistent Walley Too 1710(2) which does however, still show on the Claim Map. The Marble Arch consists of twelve units; three

north and four west, from the legal corner post standing at the side of the Utica Mine road. The post had been seen by Mr. Barry Ziegler, Field Assistant for Burton Consulting Inc. and appeared to be properly staked.

### HISTORY

Exact date of discovery of showings is unknown but believed to be around the turn of the century. The Marble Arch has been grouped with the Big Ben and California Properties in most descriptions. From most accounts the Big Ben, Marble Arch and the California are three separate, but adjoining properties which may have several interconnected veins.

The Helen Group is shown on Cairnes Map about a half-mile west northwesterly from the Big Ben, It has not yet been accurately been located in the field but does appear to be within the boundaries of the Marble Arch Claim. Similarly, the Keno Property on Cairnes' Map is southwest of the Big Ben and plots within the boundaries of the Marble Arch Claim. It's location on the ground is still unknown. There are reported to be at least three shafts and two adits plus several cuts, pits and trenches. In 1915 a shipment of 6 tons of ore from the Helen Group is recorded to have averaged 178 ounces of silver to the ton and 61%





lead. This is about 3 ounces of silver per each percent of lead.

### GEOLOGY

Triassic and possibly lower Jurassic to Permian (?) of the Kaslo Group and the Slocan Group have been intruded by lower Cretaceous Nelson Plutonic Rocks and Valhalla Plutonic Rocks. The Slocan Group consists mainly of slate, argillite, quartzite, limestone, conglomerate and tuff.

The Marble Arch silver-lead mineralization like the "White-water" and "Lucky Jim" mines are in the "slate belt" more fissile basal part of the Slocan series. There are a number of distinct limestone bands and some calcareous and quartzitic bands. The slates are cut by many light coloured granitic rocks usually in the form of sills and which are most likely porphyritic lava flows extruded within the basin at the time of the deposition of the shale beds. Generally the slates and associated limestones strike northwest and dip to the southwest. Drag folding and contortion in the beds confuse the structural picture.

Most of the known mineralization is within the sediments, but some of the workings are in an apophysis of the Nelson batholith.

From west to east along the Kalso Rver properties of similar character to the Marble Arch are:

The Whitewater Camp  
Doherty and Iron Duke  
Caledonia  
Blaylock  
Contact  
Hillside (just north of the Marble Arch)  
Crown Point  
Kootenay Belle

On the Marble Arch the slates, argillites and limestones generally strike northwesterly and dip to the northeast. Mineralization includes disseminated galena, sphalerite and pyrite, infractured limestones and limy argillites. There are also stringers and masses of "clean galena associated with iron pyrites and small amounts of quartz in a granitic gangue". Grey copper is also reported in with galena.

On the California mineralized outcrops are partly oxidized and may be the source "float" which first drew attention to the property.

#### GEOCHEMISTRY

There are two main soil types, one type is a thinly developed soil on decomposed argillites, the other type is transported

developed on glacial clays. Argillites weather and decompose easily to form a "C" horizon soil with a minor "A" horizon and a thin organic cover. Glacial tills and silts form a "gley" horizon covered with a thin "A" horizon overlain by an organic layer.

In areas of glacial materials geochemical soil sampling will not pick up underlying mineralization in bedrock. Any anomalies in glacial covered areas represent downslope float traces from outcropping mineralization. In areas of residual soil formation geochemical soil anomalies represent both downslope migration of outcropping mineralization in the underlying bedrock. Hydromorphic anomalies for zinc are not common. Background soil zinc values range from 40 p.p.m. to 80 p.p.m. zinc. Areas of interest are often outlined by the 100 or 125 p.p.m. contour with true anomalies starting at about 150 - 200 p.p.m.

Geochemical silver values in the soils may have significantly higher background than normal sometimes close to 1.0 p.p.m. Ag. Areas of interest are often defined by the 1.5 p.p.m. Ag contour with anomalies above 2 p.p.m.

Using the above guidelines a moderately widely spaced sampling grid can be used for the initial reconnaissance geochemical soil survey. Once areas of interest have been outlined

a more detailed sampling grid of the "C" horizon can be used to very closely define anomalies so they can be trenched.

#### DESCRIPTION OF SHOWINGS

In the Fall of 1982 Mr. Barry Zeigler was sent to the property to find the old claim posts and tie in the upper, middle and lower workings. Early snowfall somewhat hampered this work, but he did locate all three sets of workings. Most of the trenches were sluffed in and all the adits were caved.

Galena mineralization was noted in place in the upper workings as well as in the dumps. The lower workings by the cabin are caved and no mineralization in place was seen. By his survey the old workings can be related to the descriptions in the literature.

#### CONCLUSIONS

There are known occurrences of high silver, content lead mineralization on the Marble Arch Claim. The total number of veins, mineral occurrences and workings has not been properly mapped or recorded. The mineralization is similar to that which has been profitably mined in this district.

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RECOMMENDATION

The Marble Arch showings warrant an exploration program. The program should consist of relocating and cleaning out the old workings so they can be properly evaluated. This should be followed by a program of geological mapping, prospecting and a geochemical soil sampling survey. Geochemical anomalies and prospecting discoveries should then be fully delineated with a detailed geochemical "C" horizon soil sampling survey.

The next step should be a trenching program to test anomalies and showings.

When this work is completed the merits of the property can be evaluated by a Professional Engineer to see whether the remainder of the claims should be tested in the above manner and also decide upon a diamond drilling program on the discoveries and anomalies.

BUDGET

Survey and grid	\$ 3,000
Prospecting and cleaning out old workings	4,000
Geological mapping	2,000
Geochemical soil surveying	5,000
Detailed geochemistry	3,000

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Balance brought forward	\$17,000
Trenching and sampling	5,000
Engineering	2,000
Contingency	<u>1,000</u>
TOTAL	<u><u>\$25,000</u></u>



REFERENCES

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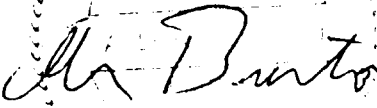
CERTIFICATE

I, Alex Burton do hereby certify that I am an independent consulting geologist with offices at #810-626 West Pender Street, Vancouver, B.C., V6B 1V9.

I further certify that:

1. I am a geology graduate of the University of British Columbia and am a Registered Professional Engineer in B.C. with Certificate No. 6262.
2. I have practised my profession for 25 years both as an independent consultant and in senior managerial capacity for major mining companies in Canada and other countries.
3. I have no interest or holdings of any sort in the Marble Arch Claim.
4. I consent to the use of this report by Almine Resources Ltd. in any statement of material facts or prospectus on the Marble Arch Claim, and the filing of such a report with the Vancouver Stock Exchange and/or Superintendent of Brokers for British Columbia.

Dated this 22nd day of March, 1983 in Vancouver, British Columbia.

  
Alex Burton, P.Eng.  
Consulting Geologist

**BURTON CONSULTING INC.**