

179-#539-# 7706

ASSESSMENT REPORT

Geology of the
The Ben Ali Claim Group
Claims covered by this Report
are

Ben Ali L4283, Ben Ali No. 2 L4470
Sunbeam Fraction L4469, Ben Ali 3-1 unit No. 1698

Located in the
Skeena Mining Division
Maps 104A 4W and 103P/13W

Latitude 56°00'

Longitude 130°00'

Claim owner

TOURNIGAN MINING EXPLORATIONS LTD.

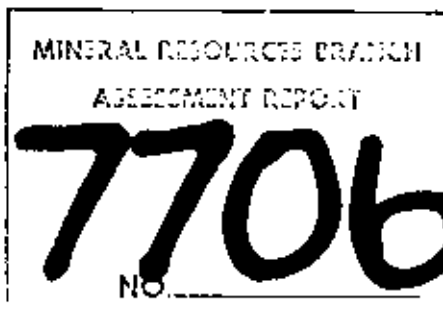
Field work in August 1979

and financed by

Tournigan Mining Explorations Ltd.

Under the Supervision of

John DeLeen, P. Eng.
Consulting Geologist



Report by
John DeLeen, P. Eng.

Submitted October 31, 1979.

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Introduction

- i. The Ben Ali claims are located 10 kilometers north of Stewart, B.C. Access to the property is by vehicle from the Stewart Cassiar Highway.
- ii. The Ben Ali claim group covers the Ben Ali L4283, Ben Ali No.2 L4470, Sunbeam Fraction L4469 and Ben Ali No.3 record No.1698. The first three claims are reverted Crown granted mineral claims and the Ben Ali No.3 is one unit of a staked claim.

The current owner and operator of these claims is Tournigan Mining Explorations Ltd. of 535 Thurlow Street, Vancouver, B.C.

The property contains narrow gold veins which have produced about 5,000 tons of 0.60 ounces per ton of gold ore. This ore was trucked to and treated at the old Dunwell mill.

- iii. The work completed on the property was as follows:

Geochemical Survey - owing to the poor soil development only 6 soil samples were taken.

Geological Survey - The Ben Ali vein was mapped on the surface on a scale of 1:1,000. The underground workings were mapped on a scale of 1:300. About 4,000 square meters were mapped by tape and compass.

Four prospecting traverses were completed and about 14,000 square meters were investigated.

The underground workings and the 2 surface pits were channel sampled and 25 chip samples were sent for assay.

The two trenches which were blasted in bedrock on the Ben Ali vein were of the following dimensions:

Trench No.1 showing 2.0 x 2.0 x 1.0m for the removal of
4.0 cu. meters of rock.

Trench No.2 showing 0.5 x 0.5 x 1m for the removal of
.25 cu. meters of rock.

BEN ALI CLAIMS

Location and Access

The Ben Ali claims are located about 10 kilometers north of Stewart, B.C. Access to property is by vehicle. A road, now partly overgrown, has been built to the base of the old Ben Ali tramline. The old tram cables were followed up the mountain, a distance of 315 meters to the old workings on the Ben Ali group.

Property (Figure 1)

The two Ben Ali claims, Ben Ali and Ben Ali No. 2, were purchased from a prospector. These claims were reverted Crown Grants; lots 4283 and 4470 respectively. The Sunbeam fraction No. 4469 and the Dunwell No. 3 L4288 were leased from the Crown. The Ben Ali No. 3 was staked by Tournigan Mining Explorations Ltd. in September, 1979. The claims of this group are as follows:

<u>Claim Name</u>	<u>Lot No.</u>	<u>Record No.</u>	<u>Acres</u>	<u>Expiry Date</u>
Ben Ali	4283	835	50.66	November 17, 1979
Ben Ali No. 2	4470	836	49.71	November 17, 1979
Sunbeam Fr.	4469	1019	39.15	February 8, 1980
Ben Ali No. 3		1698		September 12, 1980

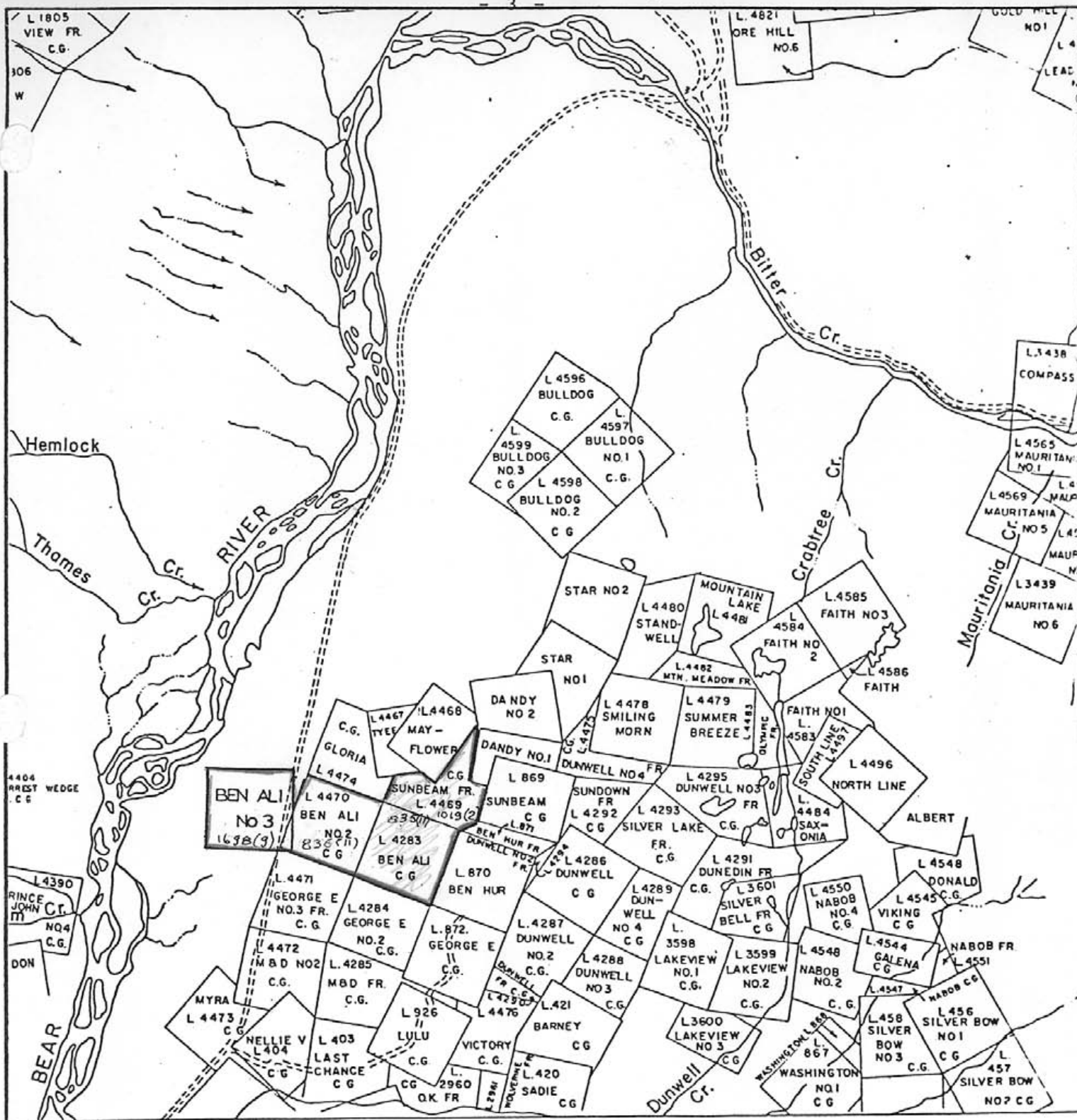
Total: 4 claims or units

History of the Ben Ali Claims

The Crown Grants were formerly a part of the holdings of the old Dunwell mines. The Ben Ali vein had been mined by Dunwell mines prior to 1949. The ore was taken by a tramline to the Bear River flats and then by truck to the Dunwell mill, a distance of about 3 miles. The property had been developed by 5 levels. The ore above Lower level (183 m) was stoped to the surface and the old workings are now caved.

An examination of the Ben Ali claims was completed by J.W. Young* in 1949 for Hedley Mascot Gold Mines. Young reports that the production to 1949 had been about 5,000 tons of 0.6 ounces of gold per ton. Young reports that three x-ray drill holes were completed on the property. One hole located just north of the Lower tunnel (183 m) intersected the vein but did not contain any ore. Two holes were completed to the southeast of old open stopes. One hole is reported to have intersected 6 inches of 5 ounce gold ore. The second hole located further to the southeast did not contain any ore.

* "Ben Ali Mine, Portland Canal District B.C." J.W. Young, 1949



TOURNIGAN MINING EXPLORATIONS Ltd.

BEN ALI CLAIMS

Date: Sept. 1979

SCALE 1:31,680

Fig. 1

Geology (Figure 2)

The only rock types observed during the traverse from the base of the tramline to the old workings was a quartz monzonite. The old workings are in this monzonite. The geological survey report* that the monzonite is part of the Hyder quartz monzonite which is reported to be of Cenozoic age. The main quartz vein exposed in the old workings and surface trenches varies from 30 to 300 centimeters in width. In southeastern 50 meters of the Lower tunnel the vein has a width of less than 0.5 meters. In general, the vein has a width less than one meter. The vein has a length in excess of 250 meters. There are no exposures of the Ben Ali vein to the southeast beyond the old stopes. As noted in Young's report some drilling had been completed for the southeastern extension of the vein. The old drill sites were not located and the core was not available.

The vein contains precious metals, pyrite and chalcopyrite. No free gold was noted in any of the samples taken during the examination.

The vein has a strike of about 140 degrees and dips to the south 75 to 80 degrees. It has been developed and mined out to surface on the levels above the 210 meter level. The only open tunnel is the Lower tunnel. It has been driven about a distance of 100 meters on the vein. A cave-in at 62 meters made the examination of the face of the tunnel difficult. At 52 meters from the portal a narrow cross-vein striking 040 degrees has been mined. The vein is about 60 centimeters in width and has been stoped for a distance of about 15 meters on the level. The back of the stope is about 10 meters above the drift. The cross-vein has been explored for a distance of 20 meters.

Soil Sampling

The usual soil profile has not been developed on the Ben Ali claims. The soil is composed of moss and black organic material. Four traverses were completed, two to the north and two to the south of the Ben Ali vein. In six locations only a poor "B" horizon was found and sampled. The results of these samples are plotted on figure 2. Samples 1, 3, 5 and 6 contained back ground values in silver, arsenic and gold. Sample 2 contained anomalous values in gold. These values are thought to be due to talus derived from the No. 2 showing. Sample 4 contained anomalous arsenic and gold values in an area of soil and humus cover. Additional prospecting and soil sampling should be carried out in the area 50 to 300 meters to the north of the open stope.

Vein Sampling

The Ben Ali vein was sampled in the tunnel and on the surface. The results of these samples are shown on figures 2 and 3. A silicified zone about 3.0 meters in width, located about 350 meters north of the Ben Ali vein was also sampled (see figure 2). This zone contained trace values in precious metals.

Twenty-five chip samples were taken from the Lower tunnel (figure 3), three chip samples were taken from the two outcrops located below the Lower tunnel (see

* Bulletin 58 - B.C. Department of Mines

figure 3) and two grab samples were taken from the dump of the Lower tunnel (figure 2).

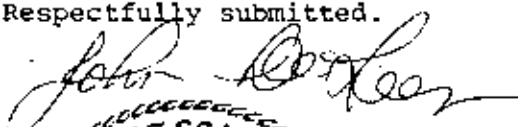
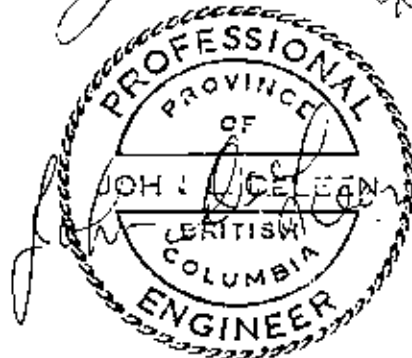
The vein samples contained low values in gold and silver for the first 50 meters from the portal and for the last 25 meters to the face of the tunnel. There was a pick up in the gold content from 50 to 75 meters. This area, however, does not represent a mineable block of ore as the vein has a width of less than 0.5 meters. A cross-vein located at 50 meters was stoped above the level. This cross-vein appears to represent the vein filling of a tension fracture. One 0.3 meter sample No. 78636 taken from the mineralization located at the northern end of the drift on the cross-vein contained Ag 0.06 and Au 0.08.

In summary, it appears that the Ben Ali oreshoot has a width of less than 0.5 meters and a length of about 25 meters in the Lower tunnel. The width of the oreshoot of the cross-vein was about 0.5 meters and the length about 16 meters.

Conclusion

The samples from the Lower tunnel indicated that the oreshoot, which was mined through to the surface on the upper levels, continues down through the Lower tunnel. It appears to plunge at a high angle to the west. However the oreshoot is thin and narrow and no additional work is warranted on the vein in the Lower tunnel at the present time. Some prospecting and soil sampling should be completed in the area of the No. 4 soil sample and in the area to the southeast of the open stope.

Respectfully submitted.

The seal is circular with a double-line border. The outer ring contains the text "PROFESSIONAL ENGINEER" at the top and "BRITISH COLUMBIA" at the bottom. The inner circle contains the text "PROVINCE OF" at the top and "JOHN DELEEN" in the center. A signature is written across the seal.

October, 1979

John DeLeen, P. Eng.

Statement of Costs

Wages

J. DeLeen	6 days @ \$300/day	\$ 1,800
J. Hembling	1 " @ 150/day	150
M. Wei	4 " @ 50/day	200
D. Duncan	3 " @ 70/day	210

Trenching

Drill @ \$30/day for 2 days	60
Steel Powder, caps & fuses	50
Samples - Soil 6 samples Au, Ag, As	49
Rock 25 samples @ \$9/sample	225
Air freight on samples	165
Rent of vehicle 5 days @ \$30/day	150
Hotel, total 10 days @ \$30/day	300
Meals, 12 man days @ \$17.50/day	210
Drafting 10 hrs @ \$15/hr.	<u>150</u>
Total	<u>\$ 3,719</u>

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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Sunbeam Fr. L 4469
Ben Ali No L 4283

Bear River Valley Flats

250 meters to
Stewart - Cassiar Highway

Ben Ali No 3 (Record No 1698)

L.C.P.

85
0.5 m Ag 0.02, Au <0.003
1.5 m Ag 0.02, Au <0.003
1.5 m Ag 0.02, Au <0.003
No.6 SS
Ag 0.8
As 1.5
Au <10

No.5 SS
Ag 0.4
As 1.5
Au <10

No. 1 SS
Ag 0.1
As 2.0
Au 20.0

No. 2 Showing
0.3 m Ag 0.90, Au 0.04

No. 2 SS
Ag 4.8
As 0.5
Au <10

No. 1 Showing first sampling
0.6 m vein Ag 0.14, Au 0.016

No. 1 Showing after blasting
1.5 m Ag 0.24, Au 0.003
0.5 m Ag 0.10, Au 0.003

No. 4 SS
Ag 0.1
As 11
Au 20

Old drill hole
reported by
J. Young in 1949 -
Northwest of
tunnel - cut vein
but no ore.

Dump Sample
grab - Ag 1.40, Au 0.51
1 piece with Chalcopryrite
Ag 0.28, Au 0.12

No. 3 SS
Ag 0.6
As 5.0
Au <10

209 m Elev. of Track of Caved Portal

183 m Elev. of Track of Lower Tunnel

All worked into this point

vein stopped through to surface
slope partially caved

Old Trench - no Vein material

Monzonite boulders
and outcrop

Remains of
old flume

LEGEND

- OUTCROP
- MONZONITE
- ANDESITE
- QUARTZ VEIN

NOTE:

Tape and Compass Survey
Contours in Meters

J. Young, 1949 reports 2 x-ray holes
completed to the southeast of the slope.
One hole is reported to cut 6 inches
of 5 ounces gold ore, second hole
found no ore.



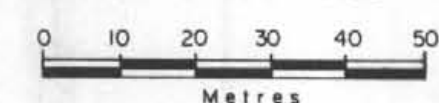
TOURNIGAN MINING EXPLORATIONS LTD

GEOLOGY

BEN ALI VEIN

STEWART AREA, BRITISH COLUMBIA

Scale = 1:1000



- ⊗ SOIL SAMPLE LOCATION (SS)
- Ag — ppm
- As — ppm
- Au — ppb

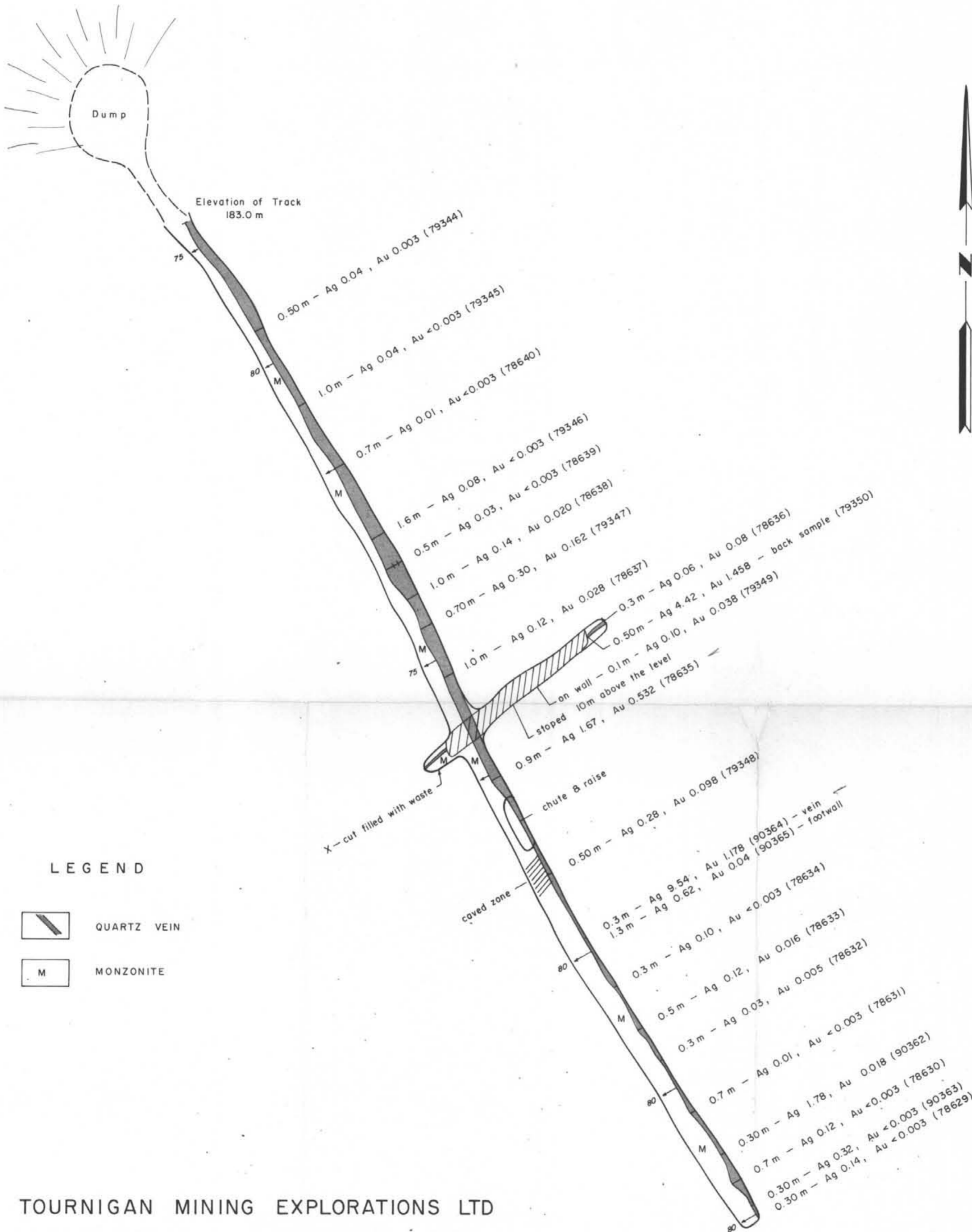
Note: Location of crown grants believed to be correct—
However, survey was not tied into legal corner posts

Tape and compass survey
the locations of workings etc have been located in reference
to the Lower Tunnel

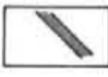
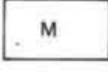
To accompany report by John DeLeen, Oct. 1979

SEPTEMBER 1979

FIGURE 2



LEGEND

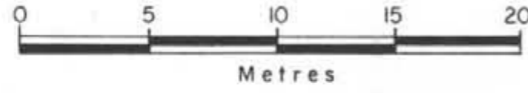
-  QUARTZ VEIN
-  MONZONITE

TOURNIGAN MINING EXPLORATIONS LTD
 ASSAY PLAN - LOWER TUNNEL

BEN ALI GROUP

STEWART AREA, BRITISH COLUMBIA

Scale = 1:300



SEPTEMBER 1979

FIGURE 3

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