

# SUMMARY REPORT

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# **TOPLEY RICHFIELD GOLD- SILVER PROPERTY**

Smithers Area Omineca Mining Division British Columbia

NTS 93L/9W Latitude: 53 35.5' North Longitude: 126 15.5 West

> N.C. Carter January, 2000

#### SUMMARY

Initial work at Topley Richfield included 1600 metres of underground workings designed to test two parallel zones of gold-silver mineralization which are conformable with a quartz-carbonate-sericite unit thought to have been derived from a felsic tuff. Some 70000 tonnes grading 8.22 g/t gold and 660 g/t silver are estimated to be present in one of the zones within the underground workings. Both zones and the host quartz-carbonate-sericite unit are open along strike and to depth.

A relatively untested, 1 - 2 metre wide, polymetallic structure is exposed in overgrown trenches and in a shallow shaft and short drifts some 200 metres east of the main workings. A 1941 bulk sample returned grades of 22.29 g/t gold and 913 g/t silver plus copper, lead and zinc values. The full extent of this zone remains to be determined.

# LOCATION, ACCESS, INFRASTRUCTURE

The Topley Richfield gold-silver property is situated midway between Prince George and Prince Rupert in west-cantral British Columbia (Figure 1). The property is 10 km north of highway 16 and 60 km east-southeast of Smithers (Figure 2) and is in relatively subdued topography southwest of Tachek Mountain (Figure 3). Elevations within the property area range from 1120 to 1180 metres above sea level.

Access to the property from highway 16 at Topley (100 highway km from Smithers) is by way of 13 km of paved highway and a secondary road which is suitable for automobiles. Partly overgrown roads and trails provide access to most parts of the property.

As noted, the property is immediately north of highway 16 and the northern CN rail line, both of which connect Prince George with Prince Rupert. A power line is 1.5 km west of the claims (Figure 3). Smithers, with a population of 5,000, has daily scheduled airline service and offers most supplies and services.

#### **MINERAL PROPERTY**

The Topley Richfield property currently consists of two 2-post mineral claims (Figure 4). Details are as follows:

<u>Claim Name</u>	<u>Units</u>	Record Number	Date of Record
DUMP 1	1	346697	June 13,1996
DUMP 2	1	346698	June 13,1996

Recorded claims owner is Lorne B. Warren of Smithers, B.C.; N.C. Carter holds a 50% interest.

#### **PREVIOUS WORK**

Gold-silver mineralization was discovered at Topley Richfield on 1926. Subsequent work through 1929 included 1600 metres of underground development on two levels accessed by an inclined shaft plus surface and underground diamond drilling. No mining was undertaken. New owners in the 1930's discovered a gold-bearing structure a few hundred metres east of the main workings and undertook surface stripping, limited (50 metres) underground work and shipped a bulk sample to a Provincial government sample plant in Prince Rupert. No further work was reported until the early 1950's when some attempts were made to dewater the main underground workings and to complete a few surface diamond drill holes.

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Various geochemical and geophysical surveys and limited drilling was carried out between 1967 and 1975. A Vancouver junior company acquired the property in 1979 and work through 1988, both by the junior and by way of farmouts with two major companies, consisted of magnetic, electromagnetic, Induced Polarization surveys, 7000 metres of diamond drilling and 1000 metres of reverse circulation drilling. All of this work was directed to the area of the main workings and possible extensions.

The current DUMP 2-post claims were acquired by the present owners in 1996. Limited work in 1998 consisted of the collection of several rock samples from the "East Vein" structure a few hundred metres east of the principal workings.

## **GEOLOGICAL SETTING**

The Topley Richfield property and environs are underlain by volcanic and lesser sedimentary rocks of late Triassic - early Jurassic age. These are intruded by coeval granitic rocks a few km north of the main workings and are overlain by Tertiary basalts to the south.

This part of British Columbia is well known for its number and diversity of mineral deposits. Polymetallic vein deposits are known in the immediate area of Topley Richfield and three major, formerly producing mines include Granisle and Bell Copper, both porphyry copper deposits situated at Babine Lake, and Equity Silver, possibly related to a porphyry system or perhaps a remobilized volcanogenic massive sulphide deposit southeast of Houston (Figure 2). Production statistics for these three deposits are as follows:

	<b>Tonnes Milled</b>	Copper(%)	Gold(g/t)	Silver(g/t)
Bell Copper	77200000	0.47	0.26	1.0
Granisle	57200000	0.47	0.20	2.0
Equity Silver	32600000	0.26	0. <b>48</b>	67.3

Dome Mountain, a mesothermal vein deposit 25 km northwest of Topley Richfield (Figure 2), hosts a resource of 200000 tonnes grading 14.90 g/t gold. Limited production in the early 1990's totaled 40000 tonnes of similar grade.

# **PROPERTY GEOLOGY AND STYLES OF MINERALIZATION**

Bedrock in the vicinity of Topley Richfield is mainly obscured by overburden which is locally 20 to 50 metres thick. The few bedrock exposures, coupled with drilling and underground information indicates that the claims area is underlain mainly by andesitic crystal and lithic tuffs with lesser interbedded greywackes and argillaceous siltstones. The volcanic - sedimentary sequence strikes north-northwesterly and dips moderately to the east (Figure 5).

Conformable with the regional bedding is a +100 metres wide zone of quartz-carbonate (calcite+ dolomite+ ankerite)- sericite which has been referred to in the past as "Topleyite" and variously interpreted as being a product of hydrothermal alteration of fragmental andesite. This unit, which may be an altered felsic tuff, is the principal host for gold-silver mineralization within the main workings. Initial descriptions of the mineralized zones, based on underground work, referred to two parallel veins including an upper arsenic-rich vein and a lower contact vein (Figure 6). Observations from 1980's drilling suggested "bedded pyrite-sphalerite-galena-tetrahedrite-arsenopyrite layers" (B-C and D lenses - Figure 7) conformable to the quartz-carbonate-sericite and locally, argillaceous siltstone host rocks. The prospective "Topleyite" unit, which is reflected by coincident magnetic and IP chargeability lows, continues north and south of the main workings and is offset some 100 metres by a right-lateral east-northeast fault to the north (Figure 5).

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A character sample collected from the dump near the shaft (Figure 5) returned 46.93 g/t gold, 454.0 g/t silver plus low copper, lead and zinc values and +10000 ppm arsenic.

Results of detailed underground sampling indicated a number of areas with significant gold-silver values. Locations of these are numbered 1 through 14 on Figure 6 and weighted average results are as follows:

- Upper ("As-rich Vein")						
1 (2) 0.66 24.4 4.90 204.0						
1 62 0.66 34.4 4.80 294.9						
2 32 1.10 18.3 6.86 229.7						
3 34 1.16 33.5 7.40 113.1						
4 16 0.79 (raise samples) 6.51 552.0						
5 8 0.94 (foot of raise) 8.23 2300.6						
6 13 0.91 4.6 22.29 685.7						
7 95 0.70 45.7 10.97 438.9						
<b>8</b> 28 0.76 18.3 8.91 425.1						
9 12 0.46 N/A 6.17 291.4						
10 8 0.30 N/A 7.89 342.9						
- Lower ("Contact Vein")						
11 27 0.73 30.0 tr. 72.0						
12 14 0.27 13.7 tr. 20.6						
- "East Vein"						
13 50 0.34 35.6 1.92 202.6						
14 3 0.40 N/A 6.75 116.6						

The "East Vein" system, 200 metres east of the main workings and hosted by fragmental andesites, is exposed in two partially overgrown trenched areas (Figure 5). The northernmost of these includes a north-northeast-striking, vertical to steeply east-dipping, +1 metro wide zone of pyrite-chalcopyrite-galena-sphalerite-tetrahedrite in a quartz-carbonate gangue exposed over a 50 metres length. The vein explored by underground drifting (Figures 5 and 6 and reported in the above table) may not be the same structure. The southern exposure, explored in the past by shallow underground workings, is similar in character and has a strike length of at least 100 metres. A 0.41 tonne bulk sample from this zone yielded recovered grades of 22.29 g/t gold, 913 g/t silver, 4.6% copper, 3.2% lead and 5.5% zinc.

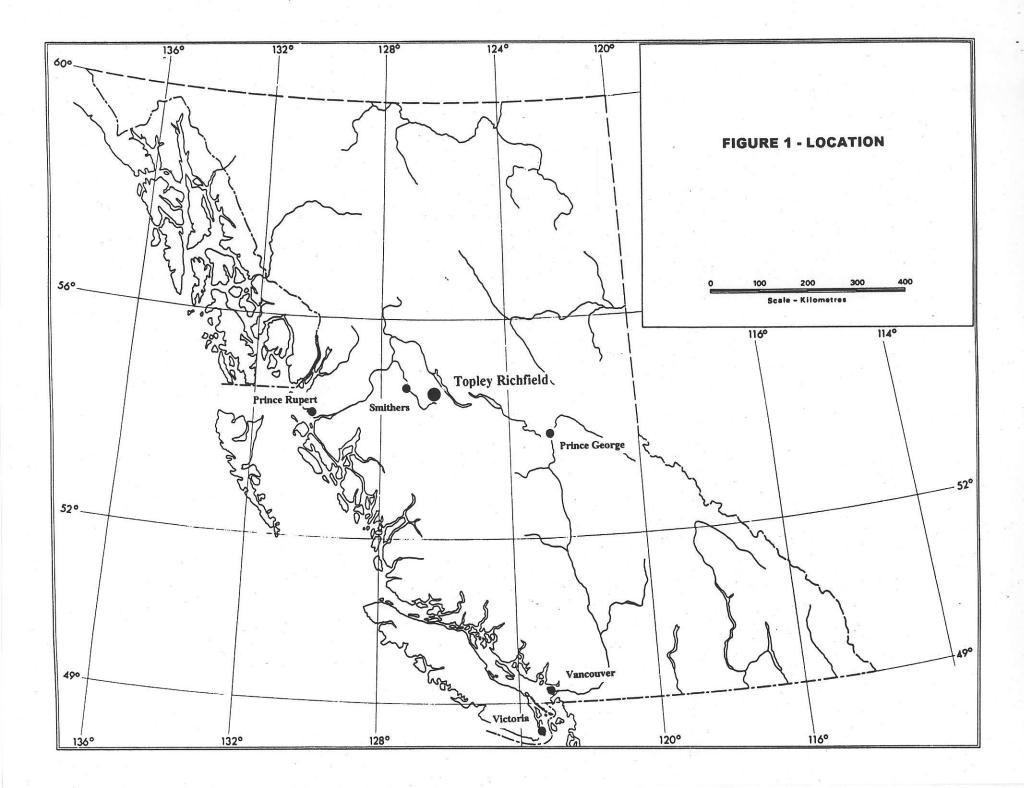
Character samples collected from the "East Vein" in 1998 (locations on Figure 5) returned the following results:

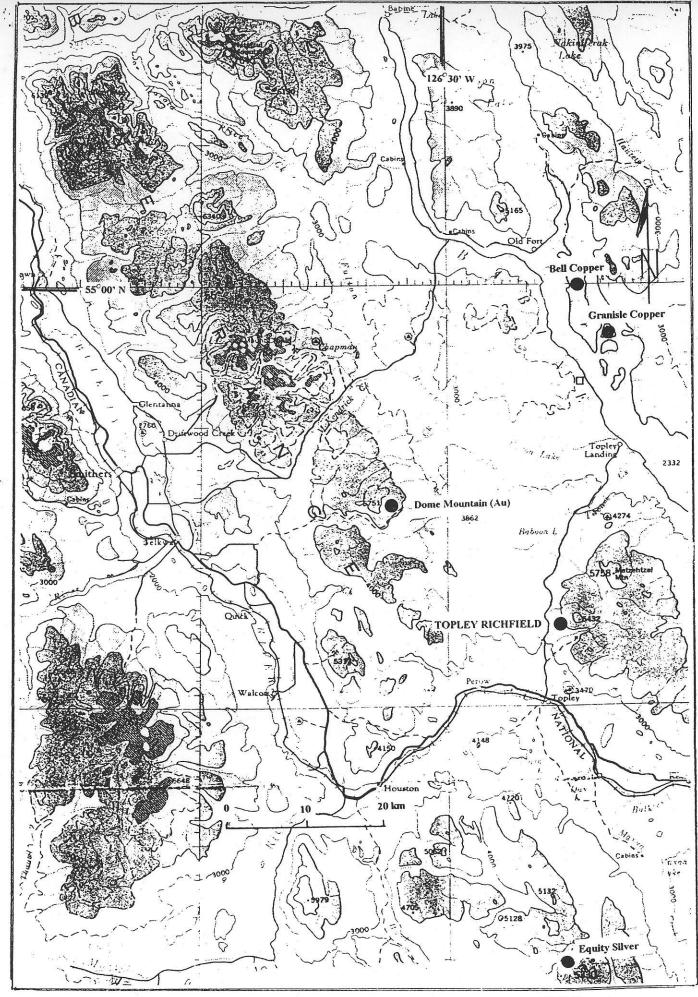
<u>Sample No.</u> 0-61371 0-61372	<u>Au(g/t)</u> 18.33 0.42	Ag(g/t) 660.0 31.0	<u>Cu(%)</u> 1.58 0.16	Pb(%) 1.33 0.07	Zn(%) 5,40 1.04	<u>As(ppm)</u> 1645 195
0-61373	0.86	252.0	0.47	0.44	0.86	530
0-61374	9.13	1050.0	4.29	2.25	8.05	2820

#### **RESOURCE ESTIMATES**

A published resource estimate for Topley Richfield, incorporating 1980's drilling information, is 181420 tonnes grading 4.25 g/t gold and 192.9 g/t silver. This includes the underground workings and the down-dip continuation immediately west of the current DUMP claims (Figures 6 and 7). As noted on the foregoing table, significantly higher grades are present between surface and the 200 level which is within the current claims (Figures 6 and 7). An estimated 70000 tonnes grading 8.23 g/t gold and 661.7 silver is contained within the upper "arsenic-rich vein" zone.

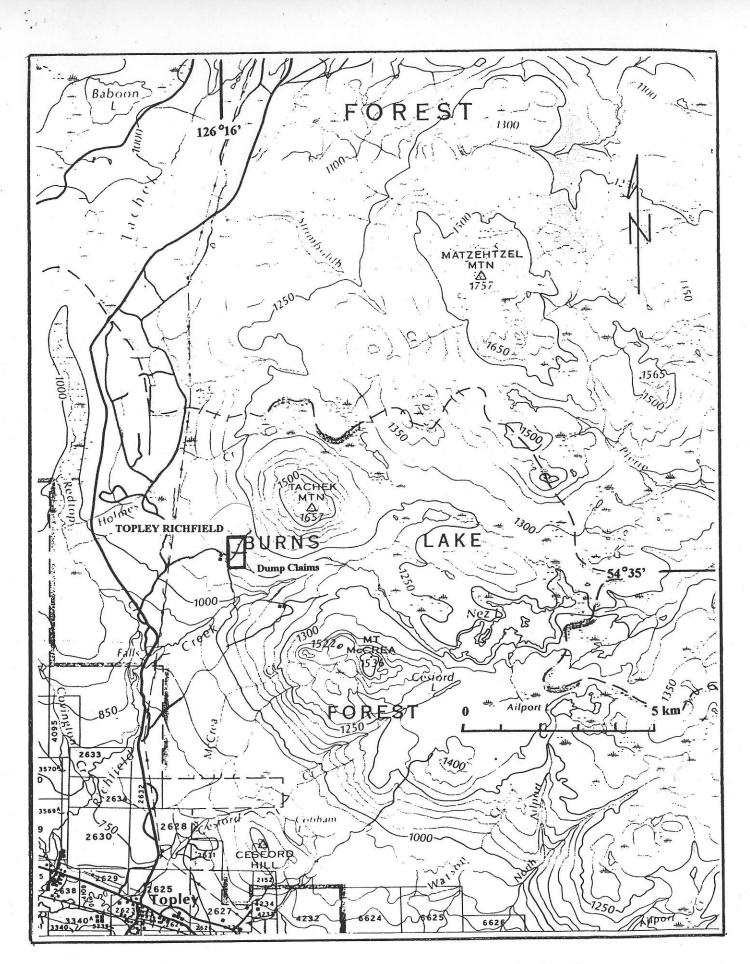
Some 20000 tonnes of dump material of unknown grade is also within the boundary of the DUMP claims.





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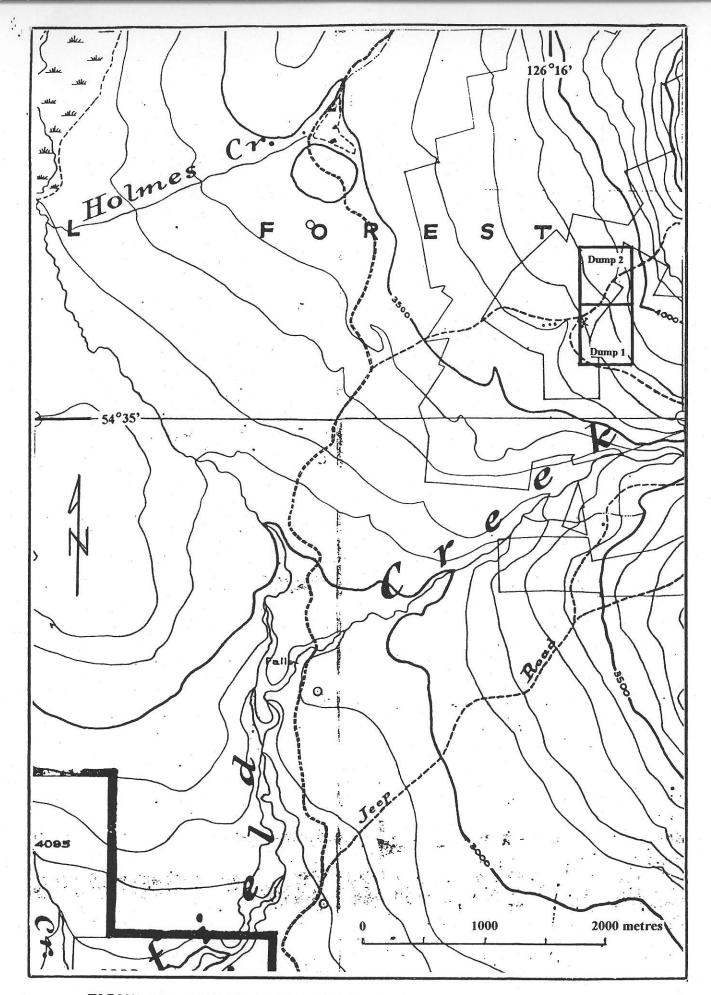
FIGURE 2 - LOCATION - TOPLEY RICHFIELD PROPERTY

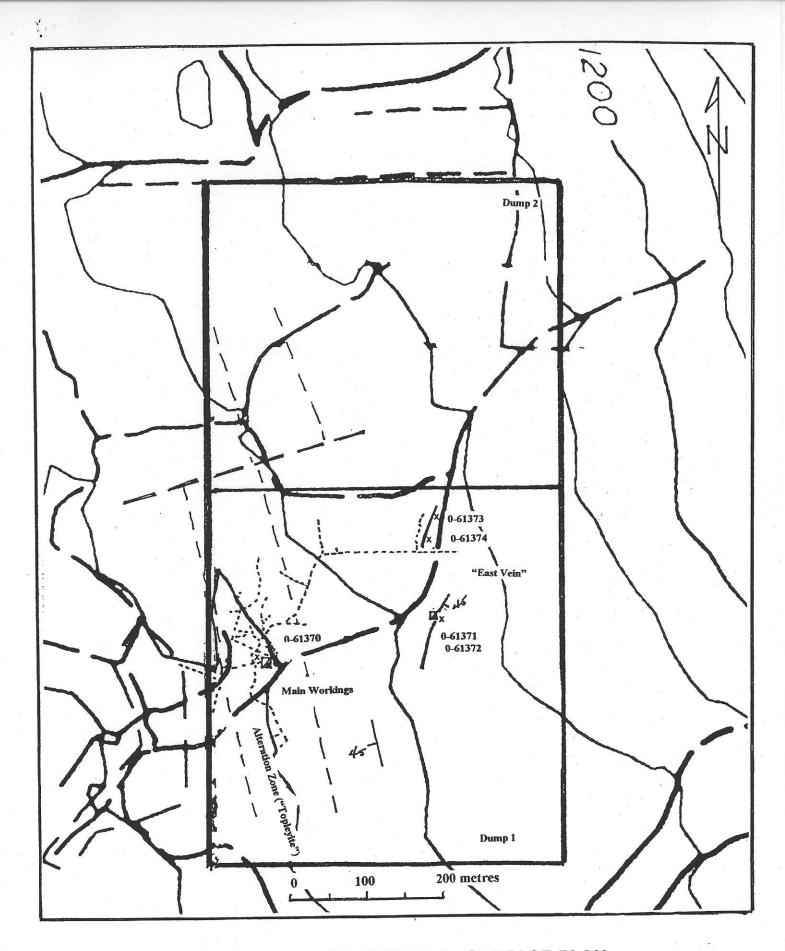


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FIGURE 3 - TOPLEY RICHFIELD - DUMP CLAIMS







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FIGURE 5 - TOPLEY RICHFIELD - SURFACE PLAN

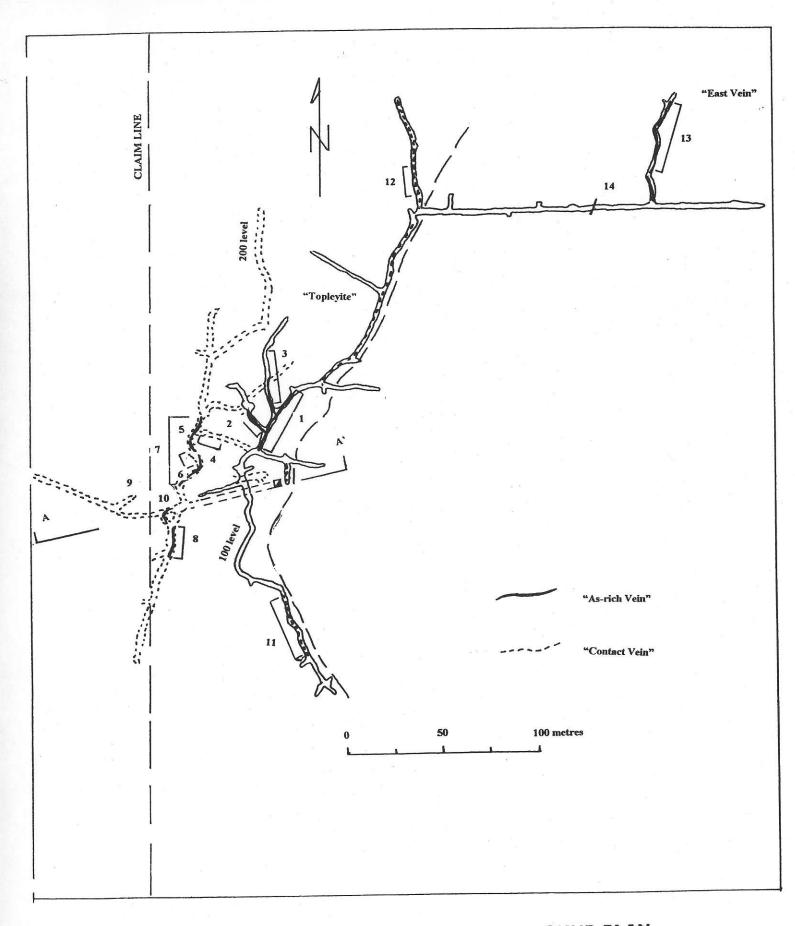


FIGURE 6 - TOPLEY RICHFIELD - UNDERGROUND PLAN

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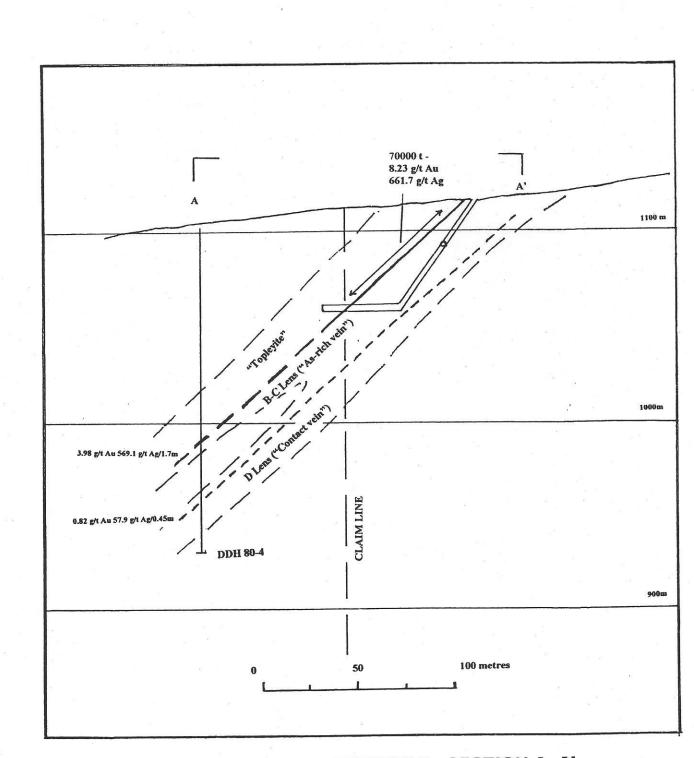


FIGURE 7 - TOPLEY RICHFIELD - SECTION A -A'