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PROSPECTING. REPORT

for the

EPI # 2,3,4 Mineral Claims

Clinton Mining Division

British Columbia

**08'36"** Latitude 51\*09" North Longitude 120\*52" West 51'48" Map 92 P 2w

Claims prospected includes:

Claim	Record No.	Units
EPI #2	2028	8
EPI #3	2029	* 15
EPI #4	2030	2

\*6 westernmost units only included in this report

FILMED

Report submitted 6 Oct., 1987

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Michael Dickens-claim owner, operator

GEOLOGICAL BRANCH ASSESSMENT REPORT

# TABLE OF CONTENTS

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Title page	1.
Table of contents	2.
The property	3.
Location map	4.
Introduction	5.
Location, access & topography	5.
Work summary	6.
Property geology	
Rock formations	7.&8.
Alteration & mineralization	811.
Geology map	12.
Geology of the 'window'	13.
Conclusions	14.
Statement of expenditures	15.
Statement of qualifications	15.

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#### THE PROPERTY

This prospecting report is based on the following claims, owned by Michael Dickens of Savona, British Columbia.

Claim	name	Record No.	Units	Expiry Date
Epi #	2.	2028	8	11 July,1987
Epi #	3	2029	15	11 July,1987
Epi #	4	2030	2	11 July,1987

The Epi # 2, Epi # 4 and the westernmost 6 units of Epi # 3 claims which are the subject of this report were formerly known as the Epi, Epi Fr. and Sandy claims.

The author was the owner of the Epi and Epi Fr. and purchased the Sandy claim in June, 1986. The claims were subsequently abandoned and relocated in their present form and recorded in Clinton on 11 July, 1986.

This is the first prospecting report on the claims.

On 10 July, 1987 the Epi # 2,3 and 4 claims were grouped with several others and now form part of the Vidette East Group. (96 units



## INTRODUCTION

The Epi claims were staked to cover an area underlain by altered and silicified volcanic rocks of Triassic age which may represent the near surface expression of an auriferous epithermal hydrothermal system.

Several pre-existing quartz-carbonate-mariposite(fuchsite) altered shear zones appear to have been the locus of renewed hydrothermal activity, probably in conjunction with Miocene volcanism, that has produced pervasive anomalous mercury, antimony, arsenic and gold in veins and in silicified and argillized zones. Such features are considered characteristic of the upper parts of productive epithermal gold deposits in many mining camps in volcanic terrain.

# LOCATION, ACCESS and TOPOGRAPHY

The Epi claims are located near the south end of Vidette Lake in the Clinton Mining Division.

Access to the area is provided by an all-weather gravel road which runs north along the Deadman River valley from the Trans-Canada Highway about 6 kilometres west of the town of Savona. The claims lie within the southern part of the Fraser Plateau with elevations ranging between 880 metres near Vidette Lake to 1065 metres near the eastern part of the property. The area has never been logged and has modest stands of pine and some large fir.

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## WORK SUMMARY

During the past year, twenty-five days were spent prospecting the Epi claims. East to west traverses were carried out at 150 metre intervals from the southern perimeter of the claims. Particular attention was paid to the 'window' of Triassic rocks exposed on the Epi # 2 claim which straddles the Deadman River below the Falls. In this area, all of the rock outcrops were examined in detail and a partial grid was established to cover an area about 600x325 metres over the most interesting part of the 'window'. This involve& restoring and extending a grid which was first marked in 1985. Only limited sampling was completed during the past year as the author had previously sampled most of the zones of interest. In addition, considerable hand-trenching was completed in an effort to better expose the most altered rocks.

#### PROPERTY GEOLOGY

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## ROCK FORMATIONS

Miocene flows of the Deadman River Formation, primarily flat-lying olivine basalt and amygdaloidal basalt, are extensive on the Epi claims, especially at higher elevations south of Deadman River. Near grid location 50S, 125E, where the contact is exposed, they have a thickness of about 15 metres. Underlying the basalts, a buff unconsolidated ash and a multi-coloured andesite breccia, are partially exposed near station 25N, 225E and sporadically revealed along and below a steep cliff which bisects the claims from north to south. To date, no alteration or mineralization has been observed. in these Miocene rocks.

The Triassic Nicola rocks, exposed in the 'window' along the river canyon, dre dominated by porphyritic augite and esite. Where massive and unaltered, this rock is composed of augite phenocrysts in a pale green aphanitic groundmass.

Porphyritic hornblende andesite of uncertain origin, is exposed near grid locations 240S, 180W and near 100S on the baseline. Where least altered, it is composed of elongate hornblende phenocrys **f**<sub>s</sub> in a light cream to white groundmass of quartz and feldspar. This unit may cut the augite andesite or it may be an interbedded flow. Near station OS,200E, argillite is interbedded with sheared and foliated augite andesite in two zones about 3 metres apart. Where massive, the argillite is fine-grained and black. The upper bed of argillite, about 1 metre thick, has been bleached to a greyish colour and cut by veinlets of calcite and fine-grained white quartz The lower bed is intensely silicified and brecciated and is identical to the argillite breccia occuring on the Precisely property to the south. The argillite breccia outcrops at river level and its thickness and areal extent are not known.

### ALTERATION and MINERALIZATION

Several zones within the Nicola rocks have been sheared and altered both north and south of the Deadman River.Between these zones, the augite andesite has been subjected to large scale propylitic alteration with abundant chlorite, calcite, epidote and disseminated pyrite.

The most impressively mineralized area occurs on the south side of the river at grid location 258,25W in a shear striking 335\* and dipping 55\*west. The sheared rock has been intensely silicified by grey and white fine-grained quartz that has been cut by later quartz veinlets and mineralized by clots and disseminations of fine pyrite. Samples of this rock contain up to 3000 ppm As,300 ppm Sb,16000 ppb Hg and 385 ppb Au.

Similiar alteration occurs up dip near 258, but in this location the silicification is spotty and less intense. Rock textures have been obliterated and secondary clay minerals are more prominent. Pyrite mineralization is weaker and sampling reveals correspondingly lower but anomalous results. Overlying this zone, on line 508, from 50E to 100E, a cap of white sucrosic quartz with fragments to 2 cm. in width of altered rock, has developed. This silica cap is not mineralized.

Hand-trenching has uncovered a hydrothermal breccia zone centred on line 100S between 90W and 25W.This breccia consists of fragments of propylitic andesite,fine-grained silicified andesite and clots of white clay in a matrix of fine pale brown clay and carbonate. Some of the breccia fragments are up to 15 cm. in width.Limonite stain and disseminated pyrite occur throughout the zone.Later carbonate and quartz veinlets to 3 cm. cut the breccia.A barren milky white quartz vein near 100S,25W also cuts the breccia which has been intensely clay or argillic ly altered in this location.

Between 35W and 80E on line 175S, a large zone of undetermined direction has been intensely altered by the hydrothermal solutions. Brecciation and argillic alteration is pervasive and all original rock textures have been destroyed. Iron staining is pronounced and the rocks have weathered a reddish orange colour. Locally, white clay in streaks and clots, mixed with fine-grained silica and some fine carbonate has resulted in a light brown to cream coloured

rock mass.A channel sample, taken near station 1758,50E, across 10 metres, assayed 127ppm As and 125ppb Au.Some of the rocks in this large zone are pale green with considerable secondary chlorite and iron staining after pyrite.A 1 metre sample returned 325ppm As and 65ppb Au.Similarly altered zones occur on line 100S, between 12W and 75E (strike 250\*, dip 60\*NW), on line 150S, between 25W and 100W and on line 250S, near stations 25W and 175W (strike 300\*, dip 55\*NE).

Several interesting areas were noted on the north side of the Deadman River.A prominent rusty weathering shear zone, striking about 310\*, is traceable from station 25N at river level, up a steep slope to the southern boundary of the Gnome claim. This zone is about 10 metres wide and consists of foliated andesite which has been variably bleached, brecciated and pyritized. A poorly exposed vein within the zone is composed of fine-grained quartz and calcite. Disseminated pyrite and fuchsite were observed.

A branching quartz vein, striking 355\*, was hand-trenched near grid location 50N. This vein is composed of milky quartz, carbonate, fuchsite, finely disseminated pyrite and minor galena and sphalerite. Intensely bleached schistose andesite borders the vein. Samples of the vein contain up to 12.7ppm Ag, 401ppm Pb, 101ppm As and 240 ppb Au This vein is about 30 cm. wide and is similar to veins exposed near 1758, 450W and at 1508, 150W.

A large zone of quartz and carbonate altered foliated andesite, striking 290\* and dipping 60\* SW,outcrops near staion 1258,250W. In places,the reddish-brown weathering rocks are cut by microveinlets of chalcedonic quartz and calcite and contain disseminated fine pyrite.A similar zone at 1258,400W returned 1530ppb Au from random chips over a 2x3 metre area.More intensely argillized rocks containing considerably more chalcedonic quartz are exposed over limited areas near stations 75N,250W and ON,250W.These rocks also weather a deep red-brown colour.

Shear zones on the lower slopes north of the river, from 1 to 2.5 metres wide, are composed of varyingly altered schistose andesite, replaced and veined by fine silica and calcite. In places, they have been bleached and brecciated and contain finely disseminated pyrite. One zone, at 100S, 150W exhibits several stages of quartz veining and silicification in a 30cm. vein striking 240\*. A central 5cm. wide milky white quartz and carbonate vein is flanked on either side by 4cm. wide brecciated chalcedonic quartz veins which are black from finely disseminated sulphides. Roughly parallel veinlets to 1 cm. in width of fine quartz and calcite occur between the chalcedonic veins and the altered wallrock. A sample across the vein assayed 280ppm As and 62ppb Au.

14





#### CONCLUSIONS

The silica caps and the argillic alteration zones preserved on the Epi claims, as well as the Gnome and Yard claims to the north, indicate that the paleosurface at the time of hydrothermal activity has been but slightly eroded.Significantly, the geochemical signature of the veins and altered zones is similar to that commonly encountered above bonanza gold deposits in many localities. Clearly, if commercial mineralization exists on the Epi property, it will be at depth and future exploration efforts should attempt to pinpoint the most likely areas for drilling.

#### STATEMENT OF EXPENDITURES

Misc.(flagging,topo:	fil,pick etc.)	56.00
Report preparation	3 days @ \$200.00/day	600.00
Gasoline		260.00
4x4 truck	25 days @ \$ 40.00/day	1000.00
Prospecting claims	25 days @ \$250.00/day	\$ 6250.00

Total Physical Work (12 pits)

\$ 8166.00 2829.00 \$10,995.00

## STATEMENT OF QUALIFICATIONS

I have been a prospector in British Columbia since 1972.For the past 9 years I have been self-employed as a full-time prospector. Although I have not had formal education in geology I have studied several textbooks on the subject as well as many government reports and publications describing regional and local geology throughout British Columbia.



