

673950  
Eagl  
104P/3W

## PROPERTY GEOLOGY

### GEOLOGICAL SETTING

The EAGL claims on Eagle Mountain are underlain by volcanic rocks of the Sylvester group and are associated with minor limestone, chert and serpentinite. The volcanics appear to dip 35° to 50° north and overlie shales, argillite and quartzite formations which outcrop to the south of the property.

### ROCK UNITS

#### VOLCANIC ROCKS

Grey green andesitic to basaltic rocks outcrop throughout the claim group and extend to the east, west and north. Very little structure is evident but most outcrops exhibit poorly sorted angular fragments indicating a range of rocks from breccias, possibly flow breccias, to coarse and fine grained tuffs. Overall the volcanics are of massive appearance with only occasional evidence of flow structure, minor banding and rare bedding. A few small lenses of chert and limestone were found within the volcanics but most of these are too small to show at the present scale of mapping.

Epidote, chlorite, calcite and albite alteration is common within the volcanics.

#### CHERT, SERICITE SCHIST, ARGILLITE

In the southwestern part of the property small outcrop areas of light weathering black to light grey chert occur. This unit is not easily differentiated from some argillite and volcanic rocks. Single outcrops of dark chert-quartz arenite and of sericite schist were located near the west boundary of EAGL 1. This sericite schist may represent an exhalative horizon or an altered felsic volcanic.

A single outcrop of argillite occurs in the northeast corner of EAGL 2.

SERPENTINITE

On EAGL 1 claim a few small outcrops of sheared black serpentinite occur which are associated with alteration zones of talc schist and talc carbonate mariposite schist (listwanite). Origin of this rock is uncertain.

LINEAR STRUCTURES

Airphoto BC 5732-018 shows a striking pattern of cross cutting linear structures. In general these structures are relatively straight indicating steep to vertical dips.. In the southeast portion of the property however, several curved linear structures suggest possible thrust sheet structures.

The majority of linear structures can be assigned to three main sets and this area of intersecting fractures appears to be concentrated between two linear features trending approximately  $305^{\circ}$  lying to the south and northeast of the property.

The main fracture sets on the property are:-

SET 1 - trending between  $345^{\circ}$  within EAGL 1 and  $355^{\circ}$  within EAGL 2.

SET 2 - trending  $075^{\circ}$  to  $085^{\circ}$  throughout most of the claim area but, within EAGL 2, apparently related to fractures at  $060^{\circ}$  to  $075^{\circ}$ .

The two subsets do not intersect but rather join along local curved segments.

SET 3 - trending  $015^{\circ}$  to  $030^{\circ}$ .

Several other fractures, some of considerable extent, do not appear to conform to any of these fracture sets. In general mineralization and alteration zones appear to be related primarily to fractures of sets 2 and 3.

### ALTERATION

Numerous zones of alteration are covered by the EAGL claims. The most common alteration occurs as distinctive orange buff to reddish weathering iron carbonate, silicified rock with sericite mariposite and, commonly, minor pyrite and arsenopyrite. This alteration is associated with all significant mineralization but is not restricted to mineralized zones. Irregular patches of alteration occur within otherwise unmineralized outcrops and along the wall rocks of many of the linear (fault?) structures.

Manganese oxide staining is prominent with the better zones of mineralization and occurrences of drusy quartz veining, colloform iron carbonate-quartz banding and vuggy tectonic breccias were rarely seen except in relation to mineralized zones.

Several zones of silicification occur. The most prominent are shown north of Stibnite Lake. These zones are characterized by chalky white weathering rock with gradational contacts to unaltered rock. Although some sulphides occur with these zones no significant precious metal content is indicated thus far.

### MINERALIZATION

During the 1983 program widespread precious metal geochemical values were obtained from rock, talus and soil samples. Several mineralized zones were indicated in outcrop and float material. During 1984 detailed prospecting, trenching and sampling was planned to investigate these zones. Work was severely hampered by late remaining snow banks and as a result not all occurrences were investigated thoroughly. In particular mineralization observed southeast of Southeast Lake which were observed in 1983 were not exposed in 1984 up to the time the crew was withdrawn on July 22.

Of the mineralized occurrences most thoroughly investigated the following are important:-

SOUTH PLATEAU GRID

10+00E, 11+50N - a zone of yellow-orange clay and gravel is associated with a north trending linear of Set 3. Float fragments contain up to 15% pyrite and significant galena, sphalerite mineralization. Trench #4 was dug to a depth of 1.5 metres where it was flooded with water while still in overburden material. A sample of this material returned the following values:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
	240	3.4	na	na	680	34

Rock chip samples of the larger float fragments assayed:-

7590E	0.003oz/t	7.40oz/t	na	na		
7591E	0.072oz/t	10.04oz/t	3.01%	na		

11+00E, 12+00N - Trench 6 was excavated where a few small manganese stained float fragments were found associated with the intersection of several linear fracture structures. Assay values from this trench are:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm	
7539E	0.020oz/t	12.68oz/t	+10,000	10,000	1400	570	/3.2m
7540E	0.014oz/t	4.56oz/t	+10,000	5,600	1350	350	/4.0m
7541E	110	72	6,800	1,900	700	480	/1.8m

NORTHWEST EAGL 1- Sugary quartz float with sphalerite, stibnite, pyrite.

7566E	0.012oz/t	6.32oz/t	1000	na	23	+1000
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STIBNITE LAKE AREA

26+50E, 23+50N - float fragments of quartz with quartz-carbonate alteration appear to be related to the intersection of several fractures of Sets 2 and 3. Values obtained are:-

Sample No	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
7577E	-5	9.3	na	na	17	67
7578E	150	63.	na	na	100	530
7579E	1150	18.5	na	na	180	710

27+00E, 21+00N - during 1983 veins containing stibnite were located near the shore of Stibnite Lake. Only a portion of this showing was free of snow during July 1984. Values obtained are:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
41092C	680	na	7200	na	5650	na
41093C	110	na	6650	na	980	na
7549E	0.008oz/t	2.40oz/t	na	na	2200	790/0.5m
7550E	0.010oz/t	4.68oz/t	0.59%	0.4%	na	5.4%/0.6m

25+50E, 21+00N - manganese stained iron carbonate alteration with drusy quartz breccia located in 1983 was partially investigated in 1984. Snow obscured some of the area of interest. Values obtained are:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
41091C	1080	na	3250	na	2150	na

Somewhat further west quartz float found in 1984 ran:-

7574E	0.026oz/t	1.18oz/t	940	2300	1500	+1000
7575E	0.084oz/t	4.52oz/t	na	na	170	880

BASE LINE

28+00E, 10+00N - manganese stained rubble associated with fractures of Set 3 was resampled in 1984 returning values of:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
7583E	0.008oz/t	8.28oz/t	na	na	16	0.1

SWAMP AREA

28+00E, 17+00N - mineralized float was located near a swamp area west of Shark Lake. This float is of somewhat different appearance than the material from other showings and is associated with fragments of shale. It is possible this mineralization is related to sediment hosted bodies such as the Midway or Cottonwood occurrences rather than to the more common fault hosted mineralization. Values obtained are:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
7586E	0.003oz/t	3.62oz/t	7.16%	8.38%	na	na
7587E	0.003oz/t	6.16oz/t	1.51%	12.2 %	na	na

MISCELLANEOUS OCCURRENCES

26+00E, 18+00N - iron carbonate alteration float in a stream bed with quartz float containing pyrite and minor tetrahedrite returned values of:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
7572E	0.068oz/t	8.22oz/t	na	na	4600	+1000

DALTON DOME - south of the property narrow fractures with mineralization occur in an alteration zone. Values obtained are:-

Sample No.	Au ppb	Ag ppm	Zn ppm	Pb ppm	As ppm	Sb ppm
7527E	0.006oz/t	8.06oz/t	na	2450	na	na