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INTERPRETATIVE PROGRESS REPORT  
ERICKSEN-ASHBY PROPERTY  
ATLIN MINING DIVISION

(Interpretation of results of  
1981 Drilling Program by  
Island Mining & Exploration Co.,  
in relation to previous work  
on the property; directions  
for further exploration work  
are indicated)

by

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March 1982

## INTERPRETATIVE PROGRESS REPORT

### ERICKSEN-ASHBY PROPERTY

March, 1982

#### Introduction:

The purpose of this report is to review the drilling program of the summer of 1981, performed by Island Mining and Exploration Co., Ltd., on the EA#1 and EA#2 claims. Reference is made to an Assessment Report by Brent Hemingway and Terry Elliott of Island Mining, dated 12 February, 1982. The drilling program is interpreted in the light of regional and property geology, and directions for future work are indicated.

#### Summary of Drill Program:

Six drill holes (EA81-1 to EA81-6) were drilled in Zone 1 (for location of zones see geology map in report by Payne, 1979). These were to test the downward extension of the surface massive sulfide zones.

The holes intersected a similar geological section, passing through the following units:

- 1) Limestone, with thin lenses and beds of argillite, a few major andesite units, possibly thin flows or subvolcanic sills. This unit is in sharp to gradational contact with
- 2) Breccia, variably described as skarn breccia, limestone breccia, in places containing abundant fragments of cherty, pyritic rhyolite. Sulfides generally occur in the matrix of the breccia. The skarn breccia ranges in width from 1 meter in EA81-6 to 21.3 meters in EA81-3 and 33.6 meters in EA81-5. The distribution of sulfides is variable as well; sulfides are virtually confined to the breccia. The maximum concentration of sulfides both in grade and thickness is in EA81-3 where a section from 33.5 to 42.7 meters averages 4.9% Pb, 4.2% Zn, and 16.5 oz/t Ag. Hole EA81-4 has a section from 27.1 to 30.1 meters averaging 6.4% Pb, 6.2% Zn and 18.3 oz/t Ag. Hole EA81-2 contains a section from 46.9 to 49.4 meters averaging 2.0% Pb, 7.6% Zn, and 5.6 oz/t Ag. These intersections combine with the high grade zone on surface to indicate an irregular lens-shaped body of high-grade breccia surrounded by low-grade to barren breccia.
- 3) Andesite, commonly amygdaloidal, corresponding to the major andesite unit on surface to the east of the mineralized zone. The contact with breccia (Unit 2) generally is sharp. Detailed textures suggest that the tops of the units are to the east. This is in agreement with conclusions of the regional study (Payne, Nelson, Gosson, 1980), and contradicts the preliminary conclusions by Payne in the 1979 study.

One drill hole was set up to test the down-dip extension of the skarn breccia zone outcropping in Zone 3 near the main adit (EA81-7). The hole intersected a variable sedimentary sequence dominated by chert to 63 meters, and by detrital limestone with lesser chert to a depth of 166 meters.

Four drill holes tested the downward extension of the high-grade chert breccia deposit in Zone 8. These holes intersected lower grade sulfides over widths up to 21 meters, with only scattered assays over

1% Pb, 1.3% Zn, and 3 oz/t Ag. The best intersection is in EA81-9 where the section from 23.3 to 35.4 meters (12.1 m) average 1.3%Pb, 1.5% Zn, and 5.7 oz/t Ag. The sulfides occur in chert breccia and bedded chert; the drill intersections are similar to the chert breccia in the surface showings. Some intersections suggest that sulfides were precipitated as beds rhythmically layered with chert. The drill holes terminate in or near the main andesite unit to the east of Zone 8.

### Interpretation of Results:

#### A: Zone 1

The purpose of the drilling in Zone 1 was to attempt to establish the measure of continuity to be expected in the sulfide lenses in the major zone of rhyolite and rhyolite and chert breccia extending from Zone 1 to Zone 2S. The drilling has established a sulfide zone with continuity from EA81-1 and -2 through -3 to -4, but not continuing into 81-5. The approximate dimensions of the zone are: length 70 meters, width 5 meters, depth 50 meters. With a specific gravity of 5.0, this gives a tonnage of almost 90,000 metric tons. The body may have continuity to the northwest and to the southeast below EA81-5, so the tonnage might be increased by a factor up to 1.5.

Because the sulfides are confined to the skarn and rhyolite breccia zone, this remains the main exploration target in the region of Zones 1 and 2. The continuity seen in Zone 1 is encouraging, and suggests that a similar order of continuity should be expected for sulfide bodies along the length of Zone 2. Because of the larger amount of rhyolite in Zone 2, it is suggested that this is a more major zone of volcanic activity, and may also contain significantly larger sulfide bodies than the one outlined in Zone 1.

#### B: Zone 3

Surface geology suggested that the skarn body in Zone 3 was of limited extent, and probably would not have a continuity of more than several meters. However, the continuity of the sulfide body in the adit suggested that it would be worthwhile to test the downward extension of Zone 3. The fact that no skarn or sulfides were intersected indicates that the interpretation of this zone being small was correct (Payne, 1979).

#### C: Zone 8

This zone is the largest of the deposits in chert and chert breccia away from the major rhyolite zone of Zones 1 and 2. The continuity of the zone in the drill holes is encouraging with respect to the size of the zone, but the relatively low grades are somewhat discouraging.

### General:

Results of the regional study and drill program indicate that the original top of the deposits was to the east. This suggests that the deposits of Zone 8 are stratigraphically the lowest. These may be correlative stratigraphically with those of Zones 3 and 6 (see 1979 report), or may be stratigraphically below these. The latter interpretation would equate the major chert zone which extends from the top of the ridge through zones 6 and 3 to the Bracken fault, with the major chert zone

on the east side of the sedimentary section north of the Bracken fault. This interpretation would place the sulfides of zones 1 and 2 at a much higher stratigraphic level than the other deposits. The original configuration of topography is unclear, but it is possible that the region between Zones 1 and 2 was a basin, with the large mass of rhyolite and rhyolite breccia centered at Zone 2 marking a topographic ridge, possibly also the center of felsic volcanism. As well, Zone 1 may be centered on a second focus of volcanic and hydrothermal activity. The possibility exists for other volcanic centers in the region, or for massive sulfide deposits which have slumped off the flanks of the felsic centers and are concentrated in the nearby basins.

#### Exploration Possibilities:

The nature of future exploration will depend greatly on the economic climate and prices of metals, especially of silver. The major region of exploration potential is the zone between Zones 1 and 2S. This can be tested in a number of ways, each with some advantages and disadvantages.

#### Method 1

The original plan to drill beneath zones 2 and 2N from surface could be implemented. Perhaps more effort could be made to prepare drill sites higher up the ridge than that prepared for the proposed drill program in 1980. This would allow a better angle of attack to test the downward extension of the southern end of the deposit.

This program would include a first stage of 4 to 6 drill holes from 150 to 400 meters in length. Encouraging results of this program would lead to implementation of programs 2 and/or 3 below.

Problems with drilling from surface include dangerous ground on the steep side of the ridge, low availability of water and dependence on either meltwater from the top of the ridge in early summer or on lengthy and expensive water lines.

#### Method 2

At several times, various people have suggested that the present adit be extended to the southeast. The adit now barely allows exploration of Zone 1 at a depth of several hundred feet below the known mineralization. If extended it would allow testing of the downward extension of Zones 1 and 2 at a depth of up to more than 400 meters below the bodies on top of the ridge (Zones 2,2S). The adit would have to be extended 400 meters to allow testing of the entire zone of interest. Drill stations could be cut every 70 to 100 meters, and holes fanned out in vertical and, if necessary, horizontal or obtuse planes.

To extend the adit would be expensive, but would provide a good base from which to test a large amount of the zone. Water and weather problems which would handicap surface drilling at higher elevations, would be much less deleterious in an underground drilling program.

#### Method 3

A drill program could be based at a lower elevation on the east side of Ericksen Ridge, northwards from the site of the ill-fated Cominco drill hole of 1951. These holes would penetrate the target zone a few to several hundred meters below the surface. Holes would have a length of between 250 and 400 meters.

Disadvantages of this program include hazardous ground with high

probability of rock falls and until mid season of snow slides. As well holes would be going against the generally southwest dip of the units, although in the southern end of the zone the dips are almost vertical.

Advantages would be readily available water, better weather conditions than higher on the ridge, and the possibility of penetrating the target zone at about the same depth as could be reached in the underground program.

Conclusions:

The continuity of the zone has not been established well enough to justify the large scale expenses which would be involved with an extension of the adit. This would be a logical second stage after some measure of continuity of the deposits in Zone 2 has been outlined. Thus the original plan as indicated above in Method 1 should be the first exploration program to be implemented. Positive results from this study would justify a second stage program to test the zone at a deeper level. I would prefer extension of the adit at this stage rather than drilling from Ericksen Valley to the east because it allows for further exploration at a much lower additional cost after the second stage has been completed. The overall cost of extension of the adit plus underground drilling is more attractive than drilling long holes from the eastern valley.

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PROPERTY LOCATION

