# COMPILATION OF DRILL HOLE DATA AND ALTERATION ON THE DUSTY MAC PROPERTY, OKANAGAN FALLS, B.C.

I have reviewed, at the request of Geoff Harden and Chris Graf of Ecstall Mining Corporation, all of the available assessment report information on the Dusty Mac gold/silver property located near Okanagan Falls, B.C. The objective was to define areas of potential for drilling, by a compilation of previous data, with the most attractive target being high grade, feeder zones either beneath the previously mined area or elsewhere on the property.

It was clear, after a brief review of the data, that the best way to define areas of interest would be to compile all of the drill hole intersections above 0.1g Au plus the associated alteration, where possible, for the Dusty Mac percussion and Noranda diamond drilling on the Main deposit(297 percussion and diamond drill holes), the subsequent Dusty Mac percussion drilling on various targets outside of the Main deposit(153 holes)plus the Esso(18 percussion holes and 3 diamond drill holes)and Minnova(24 diamond drill holes)drilling programs. Unfortunately, only drill sections for the eastern part of the deposit are available with data from some key Noranda holes beneath the pit unavailable. Also, for the Dusty Mac percussion drilling program assay information is only available for 67 of the 153 holes. Data for all of the Esso drill holes are available but only holes DM 12 to 24 drilled by Minnova.

## **RESULTS**

The key assays of greater than 0.1g Au over at least 1m, but mainly greater than 1g Au with six of greater than 10g Au assays, are plotted on the plan map(Plate 1)as well as the distribution of the various alteration types. The geological units in Plate 1 are the same as on the Minnova geological map while the faults are the ones that clearly off set geological units or alteration zones. Plates 2 to 12 are cross sections(highlighted in heavy penciled lines on Plate 1)showing rock types, alteration and precious metal assays while Plates 13 and 14 are longitudinal sections, plotted to a vertical plane striking parallel to the base line, showing intersections of greater than 1g Au of the Pit and the Chalcedony zones respectively.

Plate 1 shows the intersections of greater than 1g Au highlighted in pink while those assays greater than 10 g Au are highlighted in pink and boxed in blue. These assays clearly show two areas of interest, one beneath the Pit zone(from about 200N to 100S-300m in length) and the other in the Chalcedony zone(from about 1000N to past 600N-+400m in length). In the Pit zone intersections of interest are below the mined deposit(Plate 13) in the eastern part of the deposit with the best assays on Dusty Mac sections: (1)10050N- 31.5gAu and 606gAg/3.05m and 13.7gAu and 305gAg/3.05m, (2) 10125N- 37.4gAu and 784gAg/4.6m and (3) 10150N- 29.0gAu and 806gAg/3.05m plus 9.4gAu and 425gAg/3.05m. The true widths and trend of these intersections is not known. It should be mentioned again that no geological sections exist for the western part of the deposit so other high grade intersections may be present but

based on the foot times Au opt plan by Esso the best ones appear to be in the eastern part. It is interesting that some of the above intersections are in quartz breccia while the alteration association of other intersections is not recorded. The Au/Ag ratios of the high grade intersections is the same as the deposit mined at about 0.03 as are the intersections in holes DM-1 and DM-12(Plate 13)while DM-13 is much higher at 0.47 and does not belong to the same population. Also, of interest is the occurrence of a quartz pebble(1.5cm in diameter)in conglomerate in Esso diamond drill hole 1 which is calculated to run 160gAu and 4,800gAg(visible electrum noted). This pebble is in the hangingwall to the Main deposit so during this stage of sedimentation high grade veins were exposed, perhaps coming from the target sought. The potential feeder zones would have to strike northeast otherwise they would have being cut by the previous drilling by Dusty Mac/Noranda and Minnova. Faults of this strike exists and are plotted on Plate1. It is possible that some of the high grade intersections by Dusty Mac and Noranda may have cut parts of the high grade feeder system.

The second zone of interest is the Chalcedony zone, located 800m northwest of the pit(Plate 1). Here, 8 Dusty Mac percussion holes cut about 1 to 4 gAu over 7.6 to 29m with hole 76-17 the best at 4.11gAu and 9.94gAg/12.2m, including 23.3gAu and 41.1gAg/1.5m. This hole was drilled to the south at -60 degrees with the high grade intersection from 13.7 to 15.2m. In addition to the Dusty Mac percussion holes, diamond drill hole DM-17 cut 7.74gAu and 7.4gAg/1.5m in clay/chlorite altered rock. The +400m long Chalcedony zone is described as a clay altered zone with banded, chalcedony veins. It is possible that the high grade intersection cut in hole 76-17 is part of a high grade feeder zone to a covered quartz breccia zone at the old paleo surface shown in Plate 1. The Au/Ag ratios in the Chalcedony zone are about 0.26 to 1.05 and are very different than the ratios in the Pit zone and similar to the deep intersection in hole DM-13(0.47).

#### **CONCLUSIONS**

- (1) two drill targets, as shown by the presence of high grade gold and silver intersections, have been identified, one beneath the Pit zone and the other at the Chalcedony zone, 800m to the northwest of the Pit zone. These zones are of sufficient size(300 and +400m respectively)and grade(+20gAu)to potentially host a feeder system of economic size.
- (2) the geological environment(rock types, structural setting, alteration and mode of occurrence of the mineralization)at Dusty Mac is very similar to that reported from the epithermal Golden Promise mine in the Republic camp, just south of the Canada/U.S. border(Fifarek, 1996). It is interesting that of the total production of over 500,000 ounces most came from a shoot in the GP-2 feeder vein system which was only 76m long but about 365m down dip. It is interesting that this vein strikes to the northeast.

### **RECOMMENDATIONS**

The targets at the Pit and Chalcedony zones are clearly worth a drill test. Previous drilling by Dusty Mac, Noranda and Minnova at the Pit zone was on sections oriented NE/SW which only leave room for any potential feeder vein to strike more or less parallel to these sections. These veins would presumeably dip steeply. Two diamond drill holes are recommended as shown on the longitudinal section through the pit(Plate 13). These holes would be at -45 degrees and each 100m.

For the Chalcedony zone I would recommend a small geological mapping program in the vicinity of percussion hole 76-17 to map in more detail the alteration and orientation of veins before attempting to drill. I would think at least 2 diamond drill holes would be required(say 200m).

#### REFERENCES

(1) Fifarek, R.H., 1996, Au-Ag mineralization at the Golden Promise Deposit, Republic District, Washington: Relation to graben development and hot spring processes; in Geology and Ore deposits of the American Cordillera, Geological Society of Nevada.

M. J. OSATE

Myron Osatenko

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ATTACHMENTS: Plates 1 to 14