0750 0015

(108)

PROPERTY NAME: Buckhorn Mine-north pit

OTHER NAMES:

MINERAL COMMODITY(IES): Au, Ag

TYPE OF DEPOSIT: Breccia (fault), vein

ACCESSIBILITY:

OWNERSHIP: Cominco

PRODUCTION:

HISTORY: See Buckhorn Mine - south pit

County: Eureka Item 15

Mining District: Buckhorn

AMS Sheet: Winnemucca

Quad Sheet: Horse Creek Valley 15'

Sec. 30,31 T 27N R 49E

Coordinate (UTM):

North 4 4 4 8 3 0 0 m

East 0 5 4 3 4 2 5 m

Zone +11

DEVELOPMENT: See Buckhorn Mine - south pit

ACTIVITY AT TIME OF EXAMINATION: On day of our visit Cominco was conducting rotary drilling within north pit.

GEOLOGY: The north pit is the smaller of the two open pits which comprise the Buckhorn Mine. Within the north pit we examined the northern extension of the mineralized breccia zone observed and sampled in the southern pit. Again, the zone was kaolinized, chaotic & characterized by abundant limonite. Large boulders of silicified breccia material littered the floor of the open pit. (Sample 1557)

In this pit we were able to examine a fairly thick sequence of basalts overlying Tertiary gravels & conglomerates. To the west & north of the fault (ore) zone siliceous shales & siltstones are found. Shale & siltstones horizonsare also found in their core, indicating that indeed the host rock is an interbedded sequence of flows & sediments. We examined siltstones north of the north pit & found them to be silicified & Fe-stained.

Further north beyond the siltstones we sample an outcrop of resilicified hydrothermal sedimentary breccia. The rock contained patches of free opaline material & was supported by a silty to sandy matrix. Still further north, we found a well rounded Tertiary conglomerate exposed in an E-W drainage. The conglomerates dip shallowly to the E & appear to directly underlie the basalts.

According to the Cominco geologist, the basalts are 15 m. y. old.

REMARKS: Sample 1557 consists of silicified breccia from the north pit. The breccia contains angular fragments of kaolinized basalt & siltstone cemented by grey chalcedony.

Sample 1558 is from a flat-lying outcrop of resilicified conglomerate or hydrothermal breccia. Although the origin of the rock is not known, this author believes it is hydrothermal in origin because of its highly altered + brecciated appearance.

Samples 1557 & 1558.

Photo: Drill rig in north pit.

REFERENCES:

EXAMINER: Bentz/Tingley/Bonham/Smith

DATE VISITED: 7/82