3358 0868

(133) Item 10

PROPERTY NAME: Buckskin Mtn. Property

OTHER NAMES: Buckskin National (Hatch) Mine, Halcyon Mine, etc.

MINERAL COMMODITY(IES): Ag, Au

TYPE OF DEPOSIT: Epithermal vein

ACCESSIBILITY:

OWNERSHIP: Under lease to Asarco by Buckskin National Gold Mining Co.

PRODUCTION: Unknown amount of Au-Ag.

HISTORY: Discovery in 1920's; mill burned in 1937, little production since (high grading only?).

County: Humboldt

Mining District: National

AMS Sheet: McDermitt

Quad Sheet: McDermitt 15'

Sec. 11, T 45N, R 39E

Coordinate (UTM):

North 4 6 2 6 7 0 0 m

East 0 4 5 5 1 0 0 m

Zone +11

DEVELOPMENT: About 1200-1500 m of underground workings, mainly as drifts along northerly-trending veins. Asarco has drilled 1000 m or more of core holes.

ACTIVITY AT TIME OF EXAMINATION: None. Tour conducted by Peter Vikre, Asarco.

GEOLOGY: The rocks that make up the Buckskin Mtn. area are, from bottom to top, triassic pelitic rocks, andesite flows (approx. 16 m.y.), quartz latite flows, rhyolite flows (14-15 m.y.), quartz latite flows and, on the top of Buckskin peak rhyolite intrusive and pyroclastic rocks and volcaniclastic sediments with pool sinter. (see Paradise Hg property description) The mineralization at Buckskin consists of a complete mineralized system from surface mercury deposits in sinter to stibnite-rich upper portions of veins to deeper ruby silver-and gold-bearing quartz veins. The mines explore 2 N15W, 75W veins; these are parallel to and on strike with National and Birthday veins in the National District Property 7Km to the north. The eastern vein is The Lawry, The Western, The Bell vein. Most of the production is probably from The Bell vein. The tops of the vein system can be seen at the surface in pits and stopes at these high levels. The veins are a 3m wide silicified zone with veins and stockworks of fine-grained chalcedonic quartz with fine laminated crustification. Stibnite occurs in upper parts of these veins; it is absent or present as last stage in veins deeper in the workings. Vein mineralization consists of 4 stages: Stage IV (latest, highest in system) stibnite & Ag sulfosalts & fine crustified chalcedony; Stage III strong pyrite & marcasite mineralization; Stage II rythmically crustified quartz-chalcedony veins with silver sulfosalts and native Au (electrum); I (deepest) silver minerals associated with K-mica and feldspar-stable alteration. The tops of the veins as described above, "apex" or top out about 200m below the paleosurface (pool sinters, etc.). Fluid inclusions from these veins indicate temperatures of approx. 175°C with some indication of over-pressure. Hydrothermal breccias noted. Ore & sulfide minerals in the veins include native Au(electrum), pyrargyrite, miargyrite, naumannite, tetrahedrite plus an approximately equal amount of base metal sulfides including galena pyrite chalcopyrite, sphalerite, bornite and stibnite. The Bell vein underground consists of a strong iron-sulfide zone several meters wide with a 20-60cm crustified quartz vein in center. Alteration, outward from the pyritic zone, is kaolinite, followed by illite/montmorillonite, REMARKS then by quartz-chlorite-quartz-calcite, then fresh rock. Then kaolinite zone is more extensive in the hanging wall of the veins. There is little unaltered rock under Buckskin Mtn. Magnetite in the calcite-chlorite-quartz zone goes to pyrite in the illite-montmorillonit zone. Vertical alteration zoning; top of Buckskin Mt. = silica cap, Hg & silicification; 20 meters or more down from peak (vertically), rhyolites are latered to alunite and quartz; selvages of kaolinitic alteration border the veins to depths of several hundred meters. K-mic alteration reportedly occurs in and around? veins at depths below level of workings (but cored by Asarco). Ore grades in veins are apporximately 0.6 oz/ton Au, 20 oz/ton Ag. Hypogene alunite is dated at 15 m.y.(believed to be alteration age). The rhyolitc rocks are peraluminous. Arsenopyrite is reported from Stage III mineralization, and quartz after

Continued On Next Page.....

REFERENCES:

EXAMINER: DATE VISITED:

Continued from Page I

PROPERTY NAME:

OTHER NAMES: Buckskin Mtn. Property

MINERAL COMMODITY(IES):

TYPE OF DEPOSIT:

ACCESSIBILITY:

OWNERSHIP:

PRODUCTION:

HISTORY:

County: Humboldt

Mining District:

AMS Sheet:

Quad Sheet:

Sec. _____, T _____, R _____

Coordinate (UTM):

North _____ m

East _____ m

Zone _____

DEVELOPMENT:

ACTIVITY AT TIME OF EXAMINATION:

GEOLOGY: lamellar calcite textures are common in parts of the veins (stage II).

Sample #479 is select ore-grade vein matter from dump of Buckskin National Mine;
Sample #480 is select vein matter from dump of Halcyon Mine.
Sample #481 is select vein matter from the "apex" of The Bell vein.

REMARKS:

REFERENCES: Vikre, Peter (1984?) Mineralization at Buckskin Mtn., National District, Nevada: Econ. Geol., accepted for publication.

Vanderberg, W.O. (1938) Reconaissance of mining districts in Humboldt County: U.S. Bureau of Mines R.I. 5446.

REFERENCES: Willden, R. (1964) Geology and mineral deposits of Humboldt County, Nevada: NBMG Bull. 59 p. 126-127.

EXAMINER: L.J. Garside, H.F. Bonham, Jr.

DATE VISITED: 18 Aug 83