0450 0073

(228) Item 23

PROPERTY NAME: Diamond Queen Mine

OTHER NAMES: Goldspar Mine

MINERAL COMMODITY(IES): Fluorite

TYPE OF DEPOSIT: Hydrothermal breccia filling?

ACCESSIBILITY:

OWNERSHIP:

PRODUCTION:

HISTORY: First work in the area (shafts) was for gold, beginning in 1905.

County: Nye

Mining District: Bare Mountain

AMS Sheet: Death Valley

Quad Sheet: Bare Mtn. 15'

Sec. 11, T 13S, R 47 1/2E

Coordinate (UTM):

North 4076800 m

East 0532400 m

Zone 11

DEVELOPMENT: Small open pit, several shafts in a N-S line to the west of the pit and extending > 0.5 km to the south.

ACTIVITY AT TIME OF EXAMINATION: None.

GEOLOGY: Fluorite and minor gold mineralization are present in an irregular breccia pipe or zone in dolomite of the Cambrian Nopah Fm. The deposit is mapped and described in detail in NBMG Bull. 93. The breccia consists of fragments of felsic volcanic rock as well as dolomite and siltstone. One or more dikes of quartz monzonite porphyry crop out just west of the breccia zone, which is over 100 m wide in places. Alteration in the breccia and locally in the dikes of argillic. The fluorite occurs as open-space fillings and replacements, and as irregular fragments (which suggest that at least part of the brecciation is past fluorite deposition. Iron-oxide minerals are locally present. The breccia is probably due to hydrothermal explosions; the fragments are rounded from their ~~moment~~ movement in the pipe, and are surrounded by fine rock flour. Some breccia zones show obvious injection textures with the wall rock. An unusual sequence of graded breccia beds was observed in the north wall of the main pit. These may be the result of the deposition of fragments from successive explosions as they fell back into the pipe. Most breccia fragments in the zone are 1-2 cm, although some are 15cm or larger.

The Diamond Queen Mine is in a north-trending zone of argillic alteration, bleaching (in dolomite) and porphyry dike intrusion which extends south for at least 800 m, toward the Sterling Mine, where similar brecciation and ore minerals are present. A hydrothermal breccia zone and porphyry dike is also present at the United claims, one-half way between the Diamond Queen Mine and Sterling Mines. The presence of stibiconite in one sample from the Diamond Queen (NBMG Bull 93, p.47) is also indictive of a similar geochemistry, mineralogy and made of formation ot the Sterling Mine. The Mary Mine, about 1km to the north of the Diamond Queen has similar fluorite mineralization in a breccia pipe (NBMG Bull 93).

REMARKS: NBMG Bull. 50 & 93 (p.43-47).

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REFERENCES: L.J. Garside and J. Tingley

EXAMINER:

DATE VISITED: 25 Mar 82