

1080 0003

(165) Item 3

PROPERTY NAME: Lucky Chief

County: Lincoln

OTHER NAMES: SOA Lode Claims

Mining District: Chief

MINERAL COMMODITY(IES): Mn, Ba, Pb?

AMS Sheet: Caliente

TYPE OF DEPOSIT: Thrust fault (breccia zone), replacement vein

Quad Sheet: Chief Mtn. 7 1/2'

ACCESSIBILITY:

Sec. 7, T 3S, R 67E

OWNERSHIP:

Coordinate (UTM):

PRODUCTION:

North 4174990 m

HISTORY:

East 0718530 m

Zone +11

DEVELOPMENT: 1 vertical shaft & 1 N30W trending adit are main workings. Shallow trenches & prospects & short adits are scattered along fault zone.

ACTIVITY AT TIME OF EXAMINATION: None, but property is staked.

GEOLOGY: As with other mines in the district, the numerous small workings at this locality lie along the northwest or east-west fault contact between younger limestones & older Prospect Mtn. quartzite. Sample location 121 is largest adit in group of workings. Quartzite beds at the portal of the adit are 6" - 1" in width & strikes north-south & dip 35°E. The rocks at the portal are highly brecciated & Fe-stained, however, & bedding attitudes are probably not significant. Quartzite & silty sandstone exposed at portal are veined by Fe & white & grey calcite. Gossany breccia cemented with calcite sampled from dump (Sample 121) contains lenses & veins of bladed, silver pyrolusite(?) & white barite crystals. The gossan is slightly vuggy & heavy. Fe-stained jasper is common along the fault zone & in the gossan. Quartzite wallrock contains some oxidized pyrite & sericite.

The fault zone exposed at lower portal is highly Fe & Mn stained. The best estimate on the attitude of the zone as measured at the portal is N80E, 15SE, although line up of workings indicate a northwest or north trend of the zone.

Upslope from sampled adit are shafts & short adits which explore same highly Fe-stained brecciated thrust zone. Clots of hematite, limonite & manganese occur in the light-grey, fine-grained quartzite wallrocks. The fault zone is altered to clay & Fe & Mn oxides, but below the thrust the quartzite beds are fractured & highly Mn stained.

Most of the workings are in quartzites. Limestones outcrop southwest of the workings. According to Callaghan, lead carbonate ore was removed from a north or northwest-striking fault zone developed between the limestones & quartzites.

REMARKS: Samples 121 - Dense, manganese & iron-rich gossan with barite & pyrolusite in discrete crystals & veins.

REFERENCES: Callaghan, 1936, Geology of the Chief district, University of Nevada Bull., v. 30, no. 2.

EXAMINER: Bentz/Smith

DATE VISITED: 8/17/83