

3060 0011  
PROPERTY NAME: Monarch Mine  
OTHER NAMES: \_\_\_\_\_  
MINERAL COMMODITY(IES): Pb, Zn, sulfides, Ag?, Au?  
TYPE OF DEPOSIT: Shear zone, thrust, replacement, ~~contact?~~  
ACCESSIBILITY: \_\_\_\_\_  
OWNERSHIP: Nammco, P.O. Box 3439, Casper, Wy.  
PRODUCTION: \_\_\_\_\_  
HISTORY: \_\_\_\_\_

County: Elko Item 11  
Mining District: Merrimac  
AMS Sheet: Wells  
Quad Sheet: Reed Station 7 1/2'  
Sec. 34, T 38N, R 53E  
Coordinate (UTM):  
North 4 5 5 5 0 6 5 m  
East 0 5 8 4 7 8 0 m  
Zone +11

DEVELOPMENT: Canyon contains several prospects including a large caved adit on the south side of canyon near mouth. Sampled workings consist of one caved shaft(?) & adit.\* Remains of buildings near workings. Old drill road? or trench located at head of canyon.  
ACTIVITY AT TIME OF EXAMINATION: Nammco geologist sampling in canyon at time of exam.

GEOLOGY: The rocks found near workings consist of a mixture of siliceous black shales (major rock type), dark grey calcite veined limestone & minor amounts of a dark dike rock. No structure can be observed because both workings are caved. However, the existence of siliceous+limey rocks & abundant breccia on the dumps indicates we are in the brecciated, siliceous thrust zone (or high-angle fault) between Ordovician & Devonian sediments.

The rock on the dumps consist of pyrite-bearing limestones & shales, abundant gossan & silicated, mineralized limestone. Pyrite is the most abundant mineral. It occurs in clots & pods in the host & also as fine disseminated crystals. Many samples were brecciated & cemented by calcite, FeOxs & less commonly quartz. Quartz filled fracture surfaces in the shaley rocks which also contained pods of opaline silica & FeOxs. Silication is not as obvious as other workings in district, but intrusive float in area indicates mine is proximate to contact zone.

The best mineralized rock consists of limestone & limestone breccia containing vug fillings of galena & hemimorphite, in addition to pyrite. Some Fe & Mn - rich gossan was also included in sample (sample 183).

REMARKS: \*Sampled workings not shown on topo map, but shown as Monarch Mine on geologic map. (GSA Bull., V. 70, no. 5, p. 539).

Sample 183

Photos.

REFERENCES: \_\_\_\_\_

EXAMINER: Bentz/Smith

DATE VISITED: 6/30/82