Currently producing 6,000 T/day at ROUND MOUNTAIN: 0.045 oz/T Au. Recently announced reserves of 177 MT at 0.047 oz/T Au and 0.089 4020 0056 oz/T Ag. The orebody is within a broadly homogenous porphyritic rhyodacitic rock. Phenocrysts present include quartz, K and Na feldspars and lesser biotite. It is simply a "pyrite-gold porphyry". Ore grade mineralization is outlined purely by assaying of blast holes. The top of the "deposit" is a coarse welded rhyolitic ignimbrite, which has been leached and oxidized by weathering. Weathering of the porphyritic rhyodacite to at least 300 ft. depth had occurred, with weathering following joints to well below this level. Although gold (secondary) was apparently present as "paint" on joints in the very oxidized (weathered) zone, it is distributed fairly evenly with pyrite throughout the unweathered porphyritic ? intrusive, over a depth of at least 1100 ft. It appears as if a high gold silicic magma has crystallized insitu, without fracture controls of gold, or quartz veining within the intrusive.

MEMORANDUM

March 26, 1982

TO:

M. J. Mackenzie

FROM:

M. K. Boots

RE:

NEVADA FIELD TRIP MARCH 1-5, 1982

Fred Warnaars and Tony Greenish organized this trip. Jean Lawler and Dean Ayres from EPRCO were also present.

Mines visited included Cortez, Gold Acres, Sterling, Round Mountain and Borealis. Breif inspections of Goldfield, Tonopah and Virginia City (Comstock) workings were also made.

Overall, the close association of "hot springs" with "Carlin type" gold deposits is striking, and definitely not coincidental! A very sound case can be made that "Carlin type" mineralization represents the roots or feeder systems of higher level "hot spring" type deposits.

CORTEZ: Reserves originally 3.4 MT at 0.29 oz./T Au Production was 3.4 MT at 0.26 oz/T Au

Apart from the features described in publicatons the following was noted.

- a) Strong post depositional weathering (oxidation) is present.
- b) Not one quartz vein was seen.
- c) Silica soaking (jasperiods) were poorly developed, although silicification to a lesser degree was present.
- d) Carbonate veining was in crem (post and itume