4020 0055

(247)

Item 79

ROUND MOUNTAIN NYE COUNTY NEVADA

Production: Conflicting figures in literature, ranging from production of 10.5MT at 0.08 oz./T Au and 0.02 oz./T Ag to production plus reserves of 48MT at 0.074 oz./T Au and 0.045 oz./T Ag . Present production ~~60~~ 6,000 T/day of .045Au/T

Type: Classifications vary from "epithermal" through "disseminated in Igneous rocks" and "disseminated in volcanics and volcanic sediments".

Host Rocks: Miocene Lake Beds, Rhyolite tuffs, Ignimbrites.

Ore Age: 25.0 m.y.

Vein Mineralogy: Adularia, Quartz, Gold, Fluorite, Pyrite, Arsenopyrite, Realgar, Calcite, Alunite, Sericite.

Alteration: Propylitic, Potassic (weak), ARgillic, Phyllic, Alunitic, Silicic.

Others: Low in base metals.

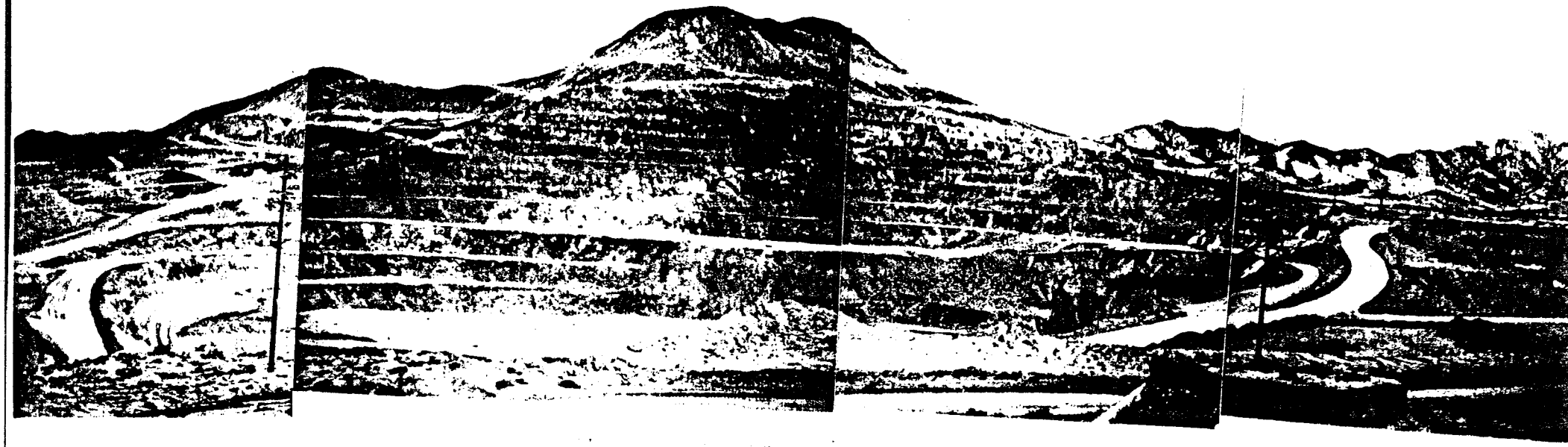
Present open pit mining is confined to weathered and altered broadly homogeneous rhyolite tuff. The oxidized is approximately 300' deep. Appears typical porphyry ore. Au occurs with sulfides (pyrite) at depth

Mining is from levels 6958 to 6115 with ore still 300' below bottom level.

Old workings (1906) had Au in thin sheets on fractures.

MKB:0493b

ROUND MOUNTAIN, NEVADA



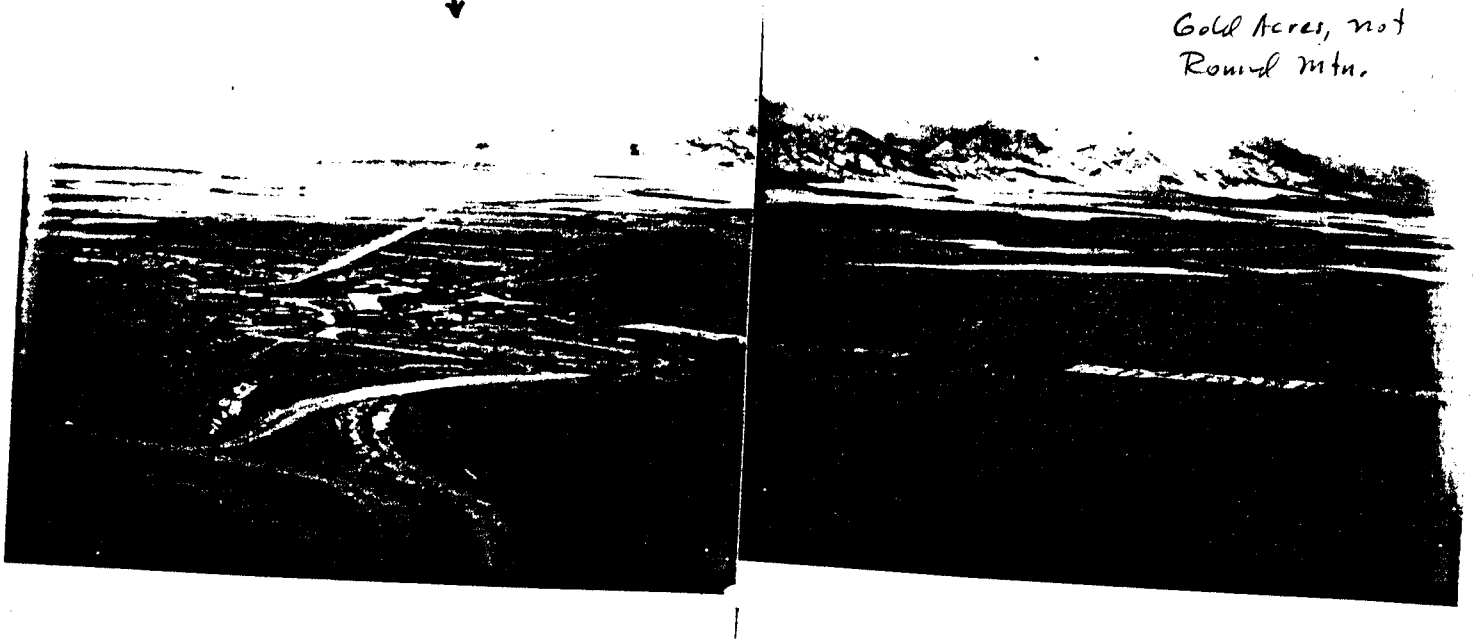
(CORTEZ ?)

ROUND MOUNTAIN N to GOLD ACRES

GOLD ACRES

↓

CORTEZ IS E. of Gold Acres, not Round Mtn.



DRILL RIG ON ROUND MOUNTAIN.

TO: J. L. Walker

FROM: D. E. Ayres E. P. R.

SUBJECT: Nevada gold deposits field trip, March 1- 5, 1982.

This field trip was arranged by Fred Warnaars and Tony Greenish of the International Explorations Department. Max Boots of that department and Jean Lawler participated also. Visits were made and samples collected from the "Carlin-type" deposits at Cortez, Gold Acres and the Sterling Mine, a "porphyry" related deposit at Round Mountain, and an epithermal hot springs deposit at Borealis. Locations of these deposits are shown on the accompanying map.

Approximately 50 samples were collected, mainly from the Cortez, Sterling and Borealis deposits. These appear suitable for clay mineral and possibly fluid inclusion analysis. The Sterling mine, in view of its size, geological setting, ease of access and the interest shown by the staff, has potential for research studies on Carlin-type mineralogy and alteration.

Dean Ayres

D. E. Ayres

10 March, 1982

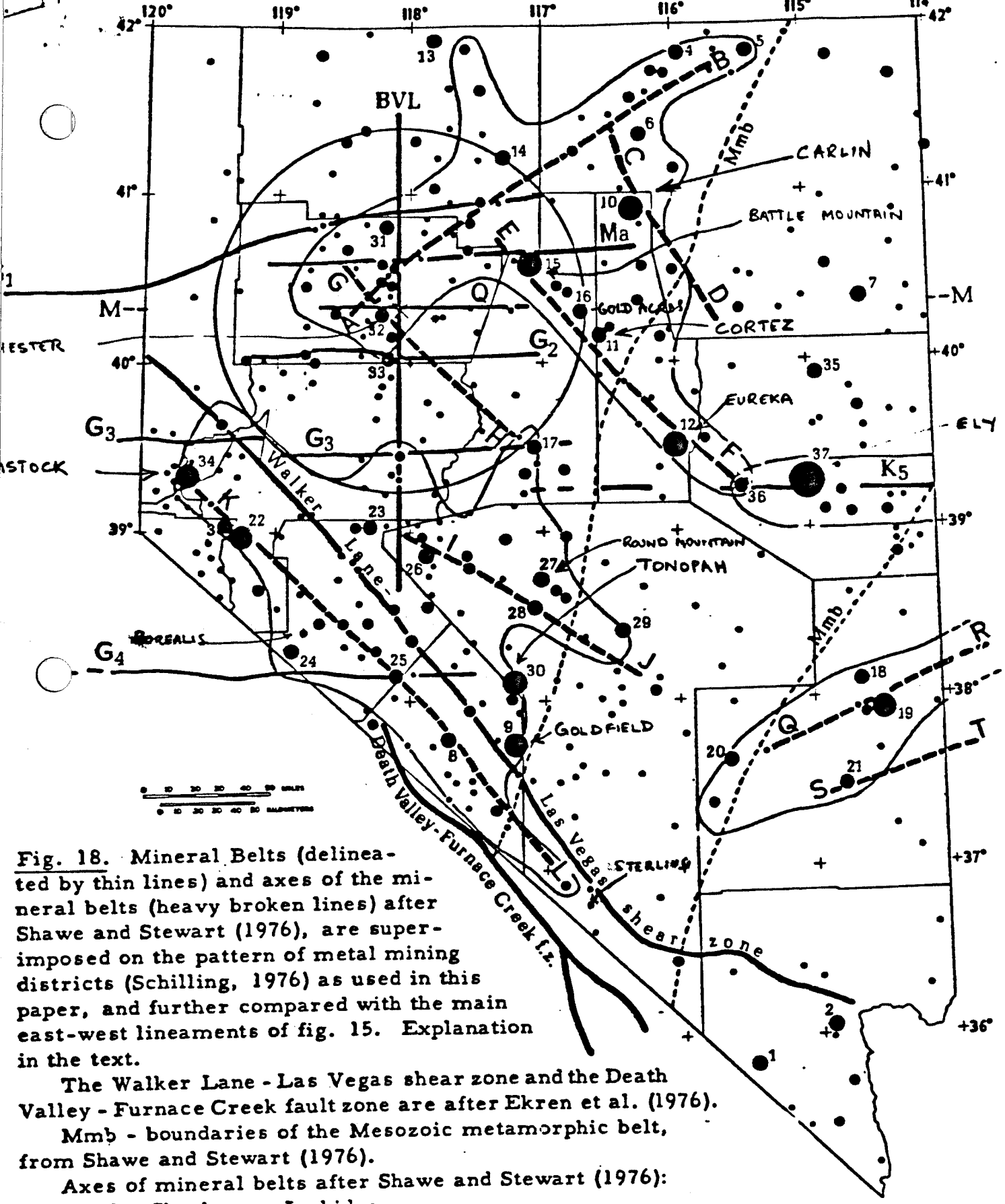


Fig. 18. Mineral Belts (delineated by thin lines) and axes of the mineral belts (heavy broken lines) after Shawe and Stewart (1976), are superimposed on the pattern of metal mining districts (Schilling, 1976) as used in this paper, and further compared with the main east-west lineaments of fig. 15. Explanation in the text.

The Walker Lane - Las Vegas shear zone and the Death Valley - Furnace Creek fault zone are after Ekren et al. (1976).

Mmb - boundaries of the Mesozoic metamorphic belt, from Shawe and Stewart (1976).

Axes of mineral belts after Shawe and Stewart (1976):

A - B : Shoshone - Jarbidge

(continued on next page)