-649-

Paylor - ROBINSON DIST.

The ore bodies of the Taylor mine of Consolidated Coppermines Corporation in the Robinson (Ely) mining district contained scheelite as well as copper. The mine is in the NW sec. 8, T. 16 H., R. 62 E., about half a mile north of the Corporation's main office at Kimberley. The schoolite occurred with chalcopyrite, chalcocite, pyrite, and, in places, quarts in a block of ground 80 feet long, 60 feet wide, and 40 feet deep. The ore body was in the Carboniferous Pilot shale near the contact with Devonian Nevada limestone and not far distant from intrusive monsonite porphyry. The ore was banded, with many parallel, narrow layers of ore mineral that dipped southerly at a low engle and out across the stratification in the shale and also penetrated the perphyry for short distances. Although the ore averaged 0.45 percent of WOg and 4.5 percent of copper, enough was not found to justify a special concentrator, and the ore was treated for copper without saving the scheelite.

U. S. Geological Survey Ely, Nevada March 18, 1942

TUNGSTEN IN THE ELY DISTRICT, NEVADA

Scheelite occurs in the Taylor mine of Consolidated Coppermines
Corporation at Kimberley, Ely district, Nevada, possibly in commercial
orebodies. A composite of car samples representing about 2500 tons of
copper ore sent to the smelter from this property is reported to have
assayed nearly 0.5% of WO<sub>3</sub>. Kenyon Richard, geologist for Con. Copper.,
estimates that sampling of drifts, stopes, and deep Leyner holes indicates
a proved reserve of 2,000 tons of ore that may average 0.25 to 0.3% of
WO<sub>3</sub> and 2% of Cu; there is also another 3,000 tons of probable ore. Assays have
varied from a trace to 3.0% of WO<sub>3</sub>, 0.0 to 17% of Cu. From underground the
company is drilling numerous deep test holes to determine if sufficient ore
is available to warrant a small mill.

The Taylor mine, about  $\frac{1}{2}$  mile north of the main office in Kimberley, is in the Carboniferous Pilot Shale near the contact with the Devonian Nevada limestone. A nose of intrusive monzonite porphyry enters the east side of the mine. The copper-scheelite mineralization is confined to a body 80 feet long, 40 feet deep, and 60 feet wide, and consists of many parallel narrow streaks containing chalcopyrite, chalcocite, pyrite, scheelite, and sometimes quartz. These streaks, which dip southerly at a low angle and cut across the stratification, lie mainly in the shale, but also penetrate the porphyry. The limestone appears to be barren. The known orebody is in the vicinity of the 150 foot level of the mine.

Work done to date indicates that there is little chance of developing largetonnages in the Taylor mine, either laterally or at depth. I anticipate that 15,000 tons of ore is about the maximum to be expected.

No scheelite has been found in the Emma Nevada or Morris Brooks mines, the main producing properties operated by Consolidated Coppermines Corporation.

No other occurrences have been reported from other parts of the district.

There is a good possibility that some of the other mines in the sedimentary rocks may contain scheelite, and Richard plans to prospect them and the surface if the snow melts away this year.

It is peported (by an Ely informant) that Con. Copper purchased the Taylor mine within the last year from a former Ely banker who was active in tungsten operations during the 1916-1918 period. The banker told Con. Copper about the scheelite, which was discovered 25 years ago. Paul Sirkegian, Assistant general manager for Con. Copper, tries to leave the impression with his board of directors and with outsiders that he was responsible for the discovery.

This note is based on a one day visit to the property on March 18, in company with Donald Wyant.

Dwight M. Lemmon

cc Holan Wyant

## Taylor Mine, Kimberley, Nevada

In a recent conversation with Paul Sirkegian of Consolidated Coppermines, I learned that sampling and drilling at the Taylor mine have thus far indicated 10,000 tons of ore averaging 0.45 % of WO<sub>3</sub> and 4.5 % of Cu.

The company plans to explore the property further. A mill will not be built unless 25,000 tons of this grade of ore can be proved in advance.

Dwight M. Lemmon

July 8, 1942