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File
Tucson, Arizona

October 23, 1972

John E. Kinnison
Tucson, Arizona

Blue

Standard Mine Copper Prospects, Silver Reef Mountains, Pinal County, Arizona--
Lloyd Frost Submittal

NOTES ON RECONNAISSANCE

The graded road from Chiu Chu on the Papago Reservation to the Indian village of White Horse circles the north and east side of the Silver Reef range. The road extends south from White Horse, and a turn westerly reaches the eastern front of the volcanic-layered range. The main road drives up by and just south of a metal building and metal house. A modest amount of bulldozer trenching has been done on the immediate face of the mountain, and has partially opened a zone about five feet (possibly as much as fifteen feet wide) of copper oxides in andesite. The dip is about 80° west and the strike is north 18° east. The andesite shows slight alteration along seams to epidote, and some quartz seams are present. The road work and trenching has failed to show other copper mineralization than in this one zone.

The andesite in which the above mineralization occurs appears to be correlative to the "Blue basalt" of my old mapping in the San Tan/Blackwater area. Also, this would be correlative to Jim Sell's "red-speckled" andesite described in the 1968 AGS Guidebook III.

I am not entirely sure of my location in reference to the maps contained in the report by Ramsing, but I believe the adit and old workings at the area of oxide just described is the old Cowboy mine.* The drill sites were not found.

Northeast of the Cowboy oxide zone (N+20°E), an estimated 1200 feet, a road reaches to some small diggings on the north side of a shallow gully (Esperanza Claim?*). This consists of very sparse specks of chryse-colla scattered through andesite. This is exposed in a prospect adit and shaft, and in a small open cut. No structural control is evident. A limonite filled seam strikes north 18° west at the shaft. If this is an extension northeastly, it is much weaker than at the Cowboy.

*Review of maps after examination indicates that the main Esperanza workings were not seen--possibly obscured by bulldozer work. The works described above on the Esperanza claim are about 2000 feet north of the Cowboy.

About 800 or 1,000 feet (visual estimate), on a bearing of S 42° W from the Cowboy oxide zone, I examined another copper silicate zone. This is exposed by some small pits, and an adit intersects the zone below these pits. The copper oxide zone is here poorly defined in width, but probably is about 10 feet wide, and dips steeply. No clearcut structures are evident. The strike of the zone is N 35° W approximately. A portion of the copper oxides are exposed in natural outcrop in an overhanging cliff, deposited by precipitation. In this area the rock is a dense silicic volcanic--possibly a rhyolite or latite. The exact relationships of the rhyolite and andesite are not clear, even in distinct exposure; however, a series of natural caverns and overhanging indentations formed by erosion, occupy the same position approximately on several cliff faces at the point which apparently marks the contact of the rhyolite and the andesite. The gentle dip shown by these cavernous layers suggests that the rhyolite overlies the andesite and that the dip is very gently east. The rhyolite evidently makes up most of the cliff face that fronts the east part of the range in this area.

CONCLUSIONS

The copper oxides examined today are controlled by fissures and are therefore limited in extent. They occur in volcanics which are younger than copper mineralization (Laramide), and are therefore even of less interest than might otherwise be the case. The deposits are certainly not of interest to KEM, nor do they appear to be deposits which a small miner could operate profitable. The reports by Ramsing, although deficient in other interpretations, clearly indicate that the best copper occurs in the Cowboy and Esperanza shear zones.

The drill holes reported by Ramsing to contain fairly high grade copper intercepts are not supported by the appearance of the outcrops in general, or of the copper oxides where they are opened by trenching. Underground samples from the Esperanza, however, suggest parts of the shear zone to grade 2 % Cu (Vaughn Copper Company maps, 1943). Since the Ramsing drill core is unavailable there is no positive way to check out this discrepancy, and only inferences are possible. It would appear that Ramsing did not actually handle the drilling and sampling of these holes, and may have seen only parts of the core at a later date. Therefore, improper techniques may have been utilized to upgrade the apparent assays. This speculation is made with the knowledge that Powdered Metals Corporation, and promoters of the Harlan process--which conducted this work--have not been entirely circumspect in the handling of other properties which they have tried to promote.

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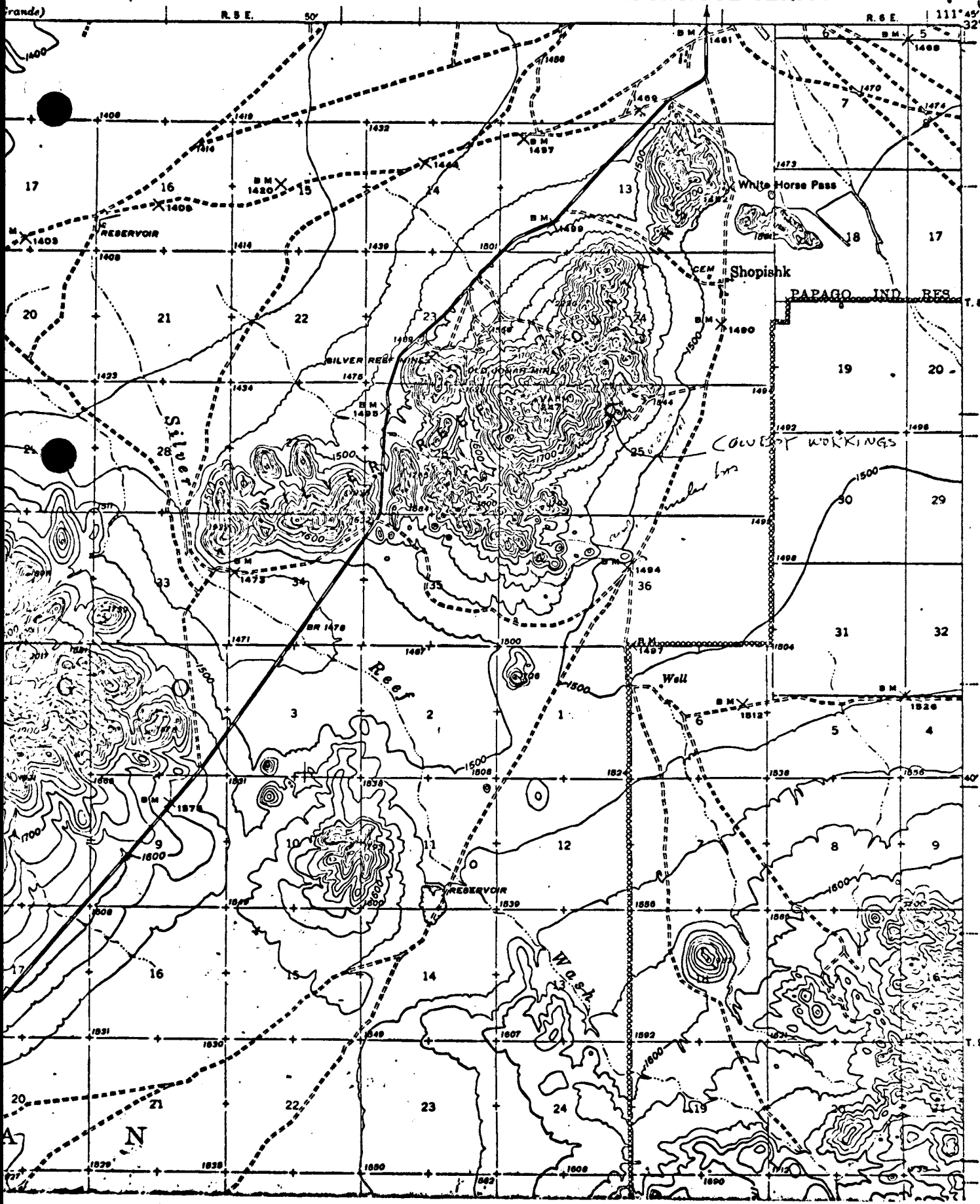
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