Scouting report

Molybdenum, talc

NEVADA
ESMERALDA COUNTY
~~LIDA DISTRICT~~
Sylvania District and Tule Canyon District

(95)

Item 1

4720 0101

These are notes on a brief excursion through the Lida district with Rich Chamberlain on February 22 and 23, 1964.

We first spent several hours at the home of Marlyn MacBoyle and his father, a house a quarter mile east of Lida on the highway. Marlyn's father (called Mac by Rich) was celebrating his 92nd birthday, with another couple in their fifties, and we stayed for the birthday lunch. Then drove through the dristrict with Marlyn: around east flank of mountains, up Tule Canyon, past Stockade Spring, up to rim above Poison Spring in Sec. 3, T 7 S, R 39 E -- site of Bear Creek's main interest when they were intensively working over the district a couple years ago -- also known as the Siskon property. Then around and down Cucomungo Canyon, and up side canyon to State Line Station 80, where we looked down into Copper Canyon at the Molly Property. (all these locations shown on USGS Macgruder Mtn 1 : 62500 topographic sheet). After taking Marlyn home, we spent the night at the cabin at Rich's talc mine, in Sec. 13, T 6 S, R 38 E. Next day we looked at the talc mine briefly, and headed home by way of Sylvania Canyon, stopping in to call on Don Clair and his wife, owners of the Sylvania Mine in Section 22 and 23, T 6 S, R 38 E.

Marlyn MacBoyle (Esmeralda Co. road commissioner) has been in this country many years, at least off and one; als his father. He also introduced us to one Sam Hain, old man, also oldtimer. MacBoyles and Hain own the Molly property, and MacBoyle was local contact man for Bear Creek when they were working on the Siskon (which belongs to people called Sorenson, for whome MacBoyle is keeping an eye on it). MacBoyle has custody of the Bear Creek drill cores, which are stored in the "stone house", near Log Spring, in Sec. 21, T 6 S, R 39 E; MacBoyle says there is twelve tons of core, from some twenty-odd holes. He says there has been no interest in the district by the major companies since Bear Creek dropped their option, except that Anaconda spent two weeks logging their holes, but did not mapping or other work.

The country is intriguing, in that there are several shows of molybdenum: at the Siskon (Poison Spring), Copper Canyon (Molly property) and some showings at the Sylvania Mine. To my experience, this makes it a heavily moly-mineralized country, worth more work, particularly in view of the fact that ~~Rich~~ moly is a high-priced metal, and Rich says is being actively sought by major companies, because there just aren't any deposits of it known in the world, aside from Climax and byproduct from some porphyry coppers.

For simplicity, I will call the mountains south and west of Tule Canyon and east of Cucomungo and Las Thance Canyones the Moly Mts.

Tule Canyon has had quite a bit of gold placering, none of it ver productive; in Sec. 3, T 7 S, R 40 E we stopped off to call on a prospector sinking a shaft to bedrock in the canyon bottom; he had run into water. The MacBoyles evidently knowx of no particular gold deposits in the mountains, and ascribe the placer to an old channel that brought the gold from elsewhere. There is also placer gold in

Sylvania Canyon, not particularly the one so marked on the map, but the canyon running north from the head of that one, through which the road runs. Also in the flat containing Stockade Spring.

The moly show at Poison Spring is very impressive. Here the country drops off from the plateau of Stockade Spring into barranca country. At the scarp, there is a yellow lightly iron stained mass of highly silicified quartz monzonite (?) several hundred yards long and perhaps 100 yards wide (horizontally -- a hundred yards vertically exposed, too). The zone trends northwest. The rock contains in bulldozer cuts, even almost at the top of the scarp, unoxidized pyrite, and in many pieces a few small grains of molybdenite can be seen. The yellow coloration is partly from limonite, but a little is also allegedly ferrimolybdite, the oxidation producte of molybdenite. According to MacBoyle or Rich, or both, the outcrops carry a few hundredths percent moly. Bear Creek drilled several of thei holes on and around this exposure, including some of the deeper ones, and the rest of them widely spaced along the northwest and southeast projections of the zone -- along a length of several miles. According to MacBoyle, they covered an area about sixmiles wide by 12 miles long. He knows the locations and numbers of all holes and has a fair idea of what they drilled.

The Molly property lies across Copper Canyon, just barely onto the Nevada side of the state line, two miles south of Poison Spring. As viewed from State Line Station 80, it is a zone about 1/3mile wide extending from just about Station 80 southeast parallel to the line for at least a couple ofmiles. It appears to tail out northwestward, though reaching as far as the tunnel half a mile north of Station 80 -- this tunnel was driven for tungsten. Viewd from a distance, it is a lightly iron stained area, like the poison Spring one, though the staining is more irregular (spotty) than what can be seen at Poison Spring. My impression was that it was a somewhat weaker zhow than Poison Spring. According to MacBoyle, sulfides are exposed closee to the surface here, as well as at Poison Spring, and there are fairly abundant copper sulfides; I saw no copper at Poison Spring. (Incidentally, at Posion Spring there are also patches of dark blue mineral, said to be ilsemannite, but MacBoyle says they are predominantly sericite with traces of moly to colore them). He says there is moly at the Molly property.

According to what Rich and Don Clair had to say, the Sylvania Mine is a contact zone a mile or so long, extending from the mine as shown on the topog sheet northwestward to the next couple of shafts shown; it is at these latter workings that Clair has a mill. Clair evidently likes to talk in terms of big things, and describes (to Rich) this whole zone as containing gold, silver, copper, moly, tungsten and no telling what else. Several of the specimens he showed us contained very high grade molybdenite in tactite.

My impression is thatmost of the Moly Mts. is made up of one or several large granitic stocks with narrow bands of sediments between; the Sylvania Mts have a large granitic stock south of Sylvania Canyon, but are

mostly sediments north of there (probably Silver Peak around Sylvania Mine, Reed Dolomite at Rich's talc mine). The big mineralization occurs in northwest-trending zones, at Poison Spring and Molly (possibly on opposite sides of a granitic mass) and at Sylvania. From MacBoyle's comments on the drilling, it would seem that the Poison Spring zone may be much wider than what we could see -- he indicated they got alter ation for a couple miles north of the outcrops. I gather that much of the plateau is covered either by gravels or basalts.

The presence of sulfides essentially at the surface in both Poison Spring and Molly areas is not so encouraging -- it pretty well eliminates the possibility of a secondarily enriched orebody at depth. I don't know whether moly will enrich secondarily or not, but suspectnot, but copper certainly should. Either way, with sulfides so close to surface, if there were an orebody below, it should be easy to spot. This may explain Bear Creek's lack of interest in the Molly property -- it appears to be pretty well exposed, with no or little room for possible ore segments covered by younger rocks, as compared to the Siskon, which at least may have orebodies covered by gravels and volcanics of the adjacent plateau. The surface exposures I gather do not even approach ore grade in either zone.

MacBoyle says no maps done by Bear Creek are available, and he implies that they did not map geologically as far south as the Molly property; I find this difficult to believe, and suspect they covered the whole Moly and Sylvania Mts, as well as the southern Palmettos -- for the regional picture.

Themoly shows are storng enough and numerous enough to make this in my opinion an impressive place for moly. Worth further work, even though Bear Creek did abandon it. We (Rich and I) made a verbal agreement with MacBoyles to cut us in for a 10% commission if we brought in a buyer. Rich is going to present it to Union Carbide when we get a written agreement drawn up and signed; we hope to be able to also rope in Sorensons for the Siskonn property. To approach Union Carbide, I don't see that we need anyting -- Rich has already whetted their interest. If they aren't interested, we will have to try someone else; Duval comes to my mind as a good prospect. To interest anyone else who is presumably entirely new to the area, we should have at least a rough geologic map and a few assays -- to show the layout and distribution of properties and moly. I think I could do an adequate job on the mapping in a week or so -- using a blown-up topog sheet at 1" = 2,000' or so, and just putting on what geology comes handy, plus all of Bear Creek's drill holes.

Rich's talc mine, in the Sylvania Mts., is one of several in this area; he considers it about the eastern or northeastern end of a talc province extending at least from Huntley's White Eagle talck Mine at Willow Spring in Saline Valley, up through Nikolaus' Eureka Mine near the Loretto Mine (copper) just west of Eureka Valley; into these Sylvania Mts. The talc I have seen from all these areas is certainly similar: very white to sea-green high-slip talc, very pure. All is considered to be the very highest grade talc, apparently -- by Sierra Talc and Huntley and such. Sierra Talc has a very good mine a couple miles west or Rich's; both mines lie on what could be the western

projection of the Poison Spring moly structure -- though about four miles distant, with nothing to indicate at present that the structure is that persistent (Sylfania Mine could be considered to lie on the westemn projection of the Molly structure).

Rich's talc mine is in "eed Dolomite (Pre-Cambrian), in a shear zone striking northeast and dipping about 50 NW. There are also N-NW narrow breccia zones in the hanging wall, but no apparent effect on the mineralization. Minehas produced something like 1,000 tons of ore, and Rich figures there is another hundred tons or so in sight; all ore has come from a single open pit. A 60' or so inclined shaft sunk in pit floor has narrow ore to bottom; an adit driven by Rich and partners in the past few years reaches within a few feet of the bottom of this winze, but was abandoned without finding any ore. Several hundred feet northeast of the pit, at the end of the ridge on which the pit lies, there are several old workings on pretty fair talc, though it doesn't look to me as good as the pit ore. Rich thinks the structure may persist between the two sets of workings, and might have ore elsewhere along it; this sounds extremely likely to me, and if this were a better-financed operation, I would strongly recommend bulldozing at intervals along the ridge.

Rich pointed out some dark fine-grained to lamprophyric talcose rock at a couple of places in and near the pit, which he says is invariably associated with talc in the district, in his experience. I have seen similar rock in prospect pits west of the Eureka Mine, in similar limestone -- no talc associated with them, though. We concluded it is a very poor grade of talc --prototalc, might be called. Probably a fair lead to talc, though not infallible. I found some float of it halfway northeast along the ridge from the pit; a good place to do some digging.

Rich says Sierra's nearby mine has produced one million dollars worth of talc -- at the general price of about $20 per ton for this talc, this would be 50,000 tons or so -- not a big mine, but a respecable-sized one. Rich says talc miners in general mine by the honor system -- get honor and stay honor. He has been converted to this by his experience driving the barren adit below his pit. My conclusion is that it is necessitated only by the extremely limited resources of most talc miners -- one or two men trhing to make beans. I think a company could explore for talc by ordinary metal-exploration techniques, and find some fairly good mines, but most would be the small dogholes typical of all mineralization. Like the many small gold shows in the White Mts.

MacBoyle, who may be in a position to know because of his political situation in the county, says that Anaconda's work at the Liberty property, north of Tonopah, has blocked out a big orebody of moly ore averaging either 0.22 or 0.27% MoS_2. I don't recall what Climax averages, but it seems to me is somewhat loer than this.

I've just been going through some mining journals of the past few months, and run across a statement that newadays US porphyry coppers are mining ore averaging 0.5 to 0.8% Cu and 0.01 to 0.04% Mo.

Arthur Baker III

Scouted February 22 and 23, 1964