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Papke, K., Sulfur deposits 3. in Nevada, NBM & OFR, 1966 (not pub)

is not impossible that several million tons with grade in the order of 30 percent might be developed. Certainly this district has the best sulfur potential of any in Nevada.

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2) Humboldt, Pershing County. This area is one mile southwest of Humboldt House and 500 feet west of the Southern Pacific tracks. It is on a hill about 800 by 500 feet rising about 30 feet above the surrounding plain. Exploratory work and evidence of sulfur is restricted to a central portion about 200 feet in diameter.

Much of the area is underlain by calcareous tufa; most of this is porous, friable, horizontally banded material. Crystalline gypsum occurs as interlayers within the tufa and as a small, vertical mass at the center. The bright sulfur generally is associated with the gypsum. Probably the maximum grade of native sulfur is about 25 percent; the gypsum as a whole contains less than 10 percent native sulfur. This obviously is a hot spring deposit.

Exploration and mining was by a number of irregular pits and several shallow shafts. Production from the area was small. An inclined shaft about 30 feet deep was in tufa with little or no sulfur. A pipeline excavation along the east side of the hill penetrated barren tufa for 800 feet. There has been no activity at the property in recent years. I do not believe that this area is capable of producing any significant amount of sulfur.

3) Hot Springs Point, Eureka County. This area is at the extreme western end of Dry Hills, in Sections 11 and 12, T. 29 N., R. 48 E. This is about 13 miles by road south of the railroad at Beowawe. The property is covered by unpatented mining claims. These are controlled and are being explored by the Southwestern Exploration Company, which is stated to be a joint venture of Hunt Oil Company, Nationwide Oil Company and the Hathaway family. The work is being directed by Mr. Ralph Edwards of Reno.

The end of the mountain is bounded by two intersecting faults that separate the steep mountain slopes from a nearly flat, alluvium-covered valley. A north-northeasterly trending fault bounds the northwestern side of the range for some distance while a northwesterly trending fault bounds the southwestern side.

Sulfur is now exposed in a face up to 50 feet high for a distance of 300 feet. The sulfur appears to be restricted to the northwest-trending fault zone; this zone is about 50 feet wide and has a nearly vertical dip. Shales and quartzites, regarded as Ordovician in age, are present on the northwest side; these rocks are strongly silicified adjacent to the structure. A trench on the valley side of the fault zone is in unconsolidated gravel.

The rocks within the zone are strongly altered to a clayey material; native sulfur is irregularly distributed through this material. A small tonnage of fairly high-grade material has been sorted out; mining of the entire zone, as now exposed, would yield a very low grade material. Small amounts of cinnabar and antimony are reported to be present in the material.



The north-northwest fault has been explored by trenches over a length of about one-fourth mile. There has been some bleaching and alteration along this structure but sulfur was not found. There are a number of almost inactive hot springs near the Point.

My examination suggested that development of additional sulfur must be to the southeast along the mineralized fault zone. Mr. Edwards is of the opinion that the sulfur-bearing material extends for some distance back into the mountain. He had a crew of three men ineffectually drilling short holes into the silicified rocks on the northeast side. He planned to start core drilling in the same area.

It seems extremely unlikely to me that an adequate tonnage can be developed to support a mill to upgrade this material. Even if a considerable strike length of ore can be developed, mining below a shallow depth would have to be by underground methods. It is more reasonable to expect that any production from this area will be sulfur for agricultural use in limited tonnages.

4) San Emidio, Washoe County. This area is on the west flank of the Lake Range near its north end, mostly in the central part of T. 29 N., R. 23 E. The zone is covered by patented placer claims.

An altered zone is intermittently exposed for a distance of more than 7,000 feet in a north-south direction. This is on an alluvium-covered slope some distance west of the linear front of the mountains. Pleistocene sediments and Lake Lahontan beds are exposed in a number of trenches, cuts and pits. The former range from sandstone to fine conglomerate; they are altered in all exposures. The Lake Lahontan sediments vary from silts to occasional conglomerates; they are flat-lying and overlie the altered rocks.

Sulfur is poorly exposed in a few places. It occurs as disseminated particles and irregular masses in a dark gray clay, siliceous sinter or opal. Crystalline gypsum is very common, generally as a one-foot or thicker layer on top of all altered material. In some places it overlies the sulfur with a fairly sharp contact between the two minerals. Cinnabar is rather common in the altered material. The width of the zone has never been determined. The zone probably reflects a structurally aligned group of hot springs. Warm ground in a few places shows that some of these are still partly active.

Signs near the property state that the property is controlled by Basa Minerals, Inc., 512 Las Vegas Blvd. So., Las Vegas. There was no activity at the time of my visit but this company had drilled two very shallow holes.

It is unlikely that sufficient sulfur could be found in this area to be of commercial interest. However, the cinnabar mineralization may deserve more exploration and sulfur possibly might be recovered as a by-product.

5) Alum, Esmeralda County. This area is located in the western part of the Weepah Hills, about eleven miles north-northwest of Silver Peak. The township is unsurveyed but the property probably is in Section 29, T. 1 N., R. 39 E. The property is covered by patented lode claims held by Nevada Potash and Chemical Company.