Location and accessibility

The Lage Antimony prospect is in north-central White Pine County, Nevada, about 40 miles north of Ely and 8 miles southwest of Cherry Creek. It is located on the western flank of the Egan Range, at an altitude of about 7000 ft. It is only slightly higher than the floor of Butte Valley, which lies just to the west. The prospect is reached by automobile from Cherry Creek. A well-graded gravel road leads westward up Cherry Creek canyon. Approximately 7 miles west of Cherry Creek, a poor dirt road leading to the mine turns south from the main road. The distance over this road to the mine is approximately 7 miles. In wet weather the road from the main road to the mine is impassable, or nearly so, to ordinary vehicles.

Ownership

The property consists of one unpatented lode claim, owned by A. H. Lage, W. C. Lage, and J. H. Anderson. The proposed operation will be conducted as a partnership, with A. H. Lage as manager.

Investigation

A reconnaissance examination of the deposit was made by R. G. Reeves in August 1951, accompanied by W. C. Lage and Phillip Aranguena. The author spent one day at the property.

History

The deposit was located by the present owners 15 years ago. There has been no production from the property. Some exploration was attempted during the period of high antimony prices during and just after World War II, but this was discontinued in 1949 as a result of the slump in price.

Development

Two small cuts, 40 ft. and 20 ft. in length, and a shallow prospect pit constitute the only development work on the property. At the time of the visit, the owners were working on an extension of the longer cut.
Geology and ore reserves

The Egan range, in the vicinity of the Lage Antimony prospect, is composed of a thick sequence of sedimentary rocks, mainly limestones. These dip 20° to 30° east and north. The range appears to be bounded on the west by a fault trending north to northwest. Transverse faults, generally with east-west trends, cut the range. Certain beds in the limestone have been silicified, generally at the intersection of the boundary fault and transverse faults. The silicified areas form bold outcrops and cliffs.

The Lage Antimony prospect is in silicified beds, on the west side of the supposed boundary fault. The silicified limestone grades upward into a recrystallized limestone, and finally into a blue-grey limestone. It also grades laterally into recrystallized limestone. The base of the silicified zone was not seen; it is covered by the alluvial fill of the valley to the west. What is thought to be the same silicified beds crop out to the east of the boundary fault, and continue eastward for an unknown distance. They also contain antimony, in occurrences similar to those in the beds to the west.

The antimony occurs mainly as stibnite. Near the surface, the stibnite has been oxidized, with the formation of senarmontite and cervantite pseudomorphic after stibnite. The ore occurs both in small, parallel veins which have a general east-west trend, and in disseminations throughout the silicified zone. The veins, two of which are exposed in the short cuts, appear to be quite irregular, with the ore occurring in pockets, or small lenses. They vary in width from 3 ft. to 2 in., and are exposed in the entire length of the cuts. In the disseminated ore, small clusters of stibnite are found distributed throughout the silicified limestone. No other sulphides were apparent in either the vein or disseminated material.
Assays of both are as follows:

<table>
<thead>
<tr>
<th>Assay No.</th>
<th>Sb</th>
<th>Au</th>
<th>Ag</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14.46</td>
<td>0.01</td>
<td>0.10</td>
<td>30 in. width across vein exposed in longer cut.</td>
</tr>
<tr>
<td>2</td>
<td>2.06</td>
<td>0.005</td>
<td>Tr.</td>
<td>Disseminated ore, 75 ft. south of vein in longer cut.</td>
</tr>
<tr>
<td>3</td>
<td>0.96</td>
<td>Tr.</td>
<td>Tr.</td>
<td>Disseminated ore, 100 ft. northeast of vein in longer cut.</td>
</tr>
<tr>
<td>4</td>
<td>4.58</td>
<td>Tr.</td>
<td>Tr.</td>
<td>Grab from small pile of material removed from vein in shorter cut.</td>
</tr>
</tbody>
</table>

There are no measured or indicated reserves. Because of the small number of samples taken at the time of the examination, it is not possible to infer reserves with any degree of certainty. The silicified area, 500 ft. long and 200 ft. wide, with an exposed vertical extent of 30 ft. or 40 ft., would, if mineralized as indicated by the samples of disseminated ore (No's 3 and 4) yield perhaps 200,000 tons of low grade ore.

Conclusions and Recommendations

It is believed that the merit of this property depends on the development of a large tonnage of low-grade ore which could be mined relatively cheaply by open pit methods. This would entail a large mining and concentrating operations; the applicants ability and experience to conduct an operation on that scale seems questionable.

The veins are small, and are not expected to be either persistent or consistent; however, they will help to raise the average grade of the ore as a whole.

There is ample room for a large milling installation, and waste and tailings dumps on the desert just west of the property. Water for
a large mining and concentrating operation will be difficult to obtain.

SUPPLEMENTAL REPORT, LAGE ANTIMONY PROSPECT, CHERRY CREEK DISTRICT, WHITE PINE COUNTY, NEVADA --DMEA-1234

The Lage Antimony prospect was revisited by the author on May 12-13, 1952, accompanied by L. F. Muller, U. S. Bureau of Mines, to make a map of, and more thoroughly sample, the property.

A block which contains an estimated 270,000 tons of antimony-bearing silicified limestone, was sampled. The average value of 14 samples taken was 0.22 percent Sb. An inferred 500 tons of ore containing about 5 percent Sb is contained in quartz-stibnite veins in the silicified limestone.