

COLORADO EXPLORATION COMPANY
W. ALAN STEWART, OWNER
1117 WASHINGTON AVENUE
P. O. BOX 509
GOLDEN, COLORADO

ESNT
22M.
SEP. 01
5VINDTA

**REPORT ON
BRIEF PRELIMINARY RECONNAISSANCE
TO DETERMINE THE FEASIBILITY OF
FURTHER INVESTMENT INTO THE PROPERTY
OF THE LOMBARD MINES, Inc.
Clear Creek County, Colorado**

**Prepared by
Adam Thomas
Geological Engineer
July 18, 1955**

INTRODUCTION

On July 13, 1955 the Lombard Mines, Inc. property was visited by Mr. Oscar Stutenroth and myself. The Lombard Mines, Inc. tunnel No. 4, which was the primary objective, lies approximately 13 miles by road from Idaho Springs, Colorado. The first four miles from Idaho Springs is along paved U. S. Highway 6 and 40. Turning right at the St. Mary's Glacier road, a good secondary gravelled road was followed for the next seven miles, thence completion of the journey was by two miles of private road which is in excellent condition.

GEOLOGY

The Lombard Mines, Inc. tunnel on the 4th. level was driven several thousand feet through barren rock before encountering a mineralized vein. The barren extent of rock consists mostly of Idaho Springs formation gneisses and schists with a few intrusions of pegmatite and monzonite dikes. The mineralization follows along a northeast-southwest trending faulted zone. This zone dips approximately 70-75⁰ to the northwest. The faulted zone thins and thickens along the strike. The mineralization consists of free gold and disseminated pyrite with lead and zinc, some silver and a trace of copper. The mineralized zone contains considerable gouge which is reported to contain values rich enough

to run as mill dirt.

A particularly interesting area was found along the faulted zone. This area covers about 180 horizontal feet in an area where the faulted zone has thickened to around $3\frac{1}{2}$ feet. Reported assays taken from the floor in 1949 show very good values in gold and lead with some silver and zinc. Evidence of mineralization was detected in the hanging wall and encouraging signs were noted along the floor of the tunnel throughout this area.

The tunnel was checked in part for radioactivity. In one of the crosscuts anomalous radioactivity was detected along a northerly trending cross fissure. In places the radioactivity ran as high as 20 times normal background. From the general geologic setting of the area the writer believes that this is worth looking into to determine whether there is uranium mineralization of consequence, or is the higher radioactivity due to slight concentration of radioactivity carried by ground water and precipitated out along the walls of the drift.

SUMMARY

The following conclusions are based on the above described brief preliminary reconnaissance: Since considerable money has been put into the property thus far, it would be advantageous to spend a small amount more to check the particular area of interest listed under GEOLOGY. This area could be cleaned in preparation for the sampler. Once

cleaned, the sampler should cut approximately 13 channel samples at 15 foot intervals. Each channel sample would be approximately 3" x 3" x 4 feet long. It is recommended that a mining geologist cut the samples, describing the vein and adjacent wall rock carefully for guidance in determining possible future drilling. These samples would then be assayed to determine whether they contained mineable quantities of ore. Should these assays show commercial grade of ore, the next step would be to have some geological mapping and recommendations prepared for setting a diamond drill station where the vein could be most advantageously tested at depth for thickness and grade of mineralization.

ADAM THOMAS