

Summary of operations at the Alabama Mine in the Steeple Rock Mining District, Grant County, New Mexico conducted between May 1, 1938 and December 16, 1938 by George F. Utter.

Work was commenced at the mine about the first of May and that month was spent erecting a headframe, installing a hoist and compressor, and replacing old timbers in the shaft down to the 150 foot level, and cleaning up and timbering that level.

Ore was found to the south of the old stope on the 150 foot level and the month of June was spent breaking rock. By the middle of July seven cars had been shipped from the level. The stoping had continued south to ~~the~~ a calcite zone where the values pinched out. 378 tons of ore were mined from the 150 foot level having a value of \$7404.75. 4,195.8

The mine had filled with water to within 20 feet of the 150 foot level. Subsequent operations showed that the mine made very little water and that the hard quartz brecca of the vein was almost impervious. The water found had accumulated over a period of about twenty five years. The latter part of July was spent unwatering the mine to the 200 foot level, first by pumping and later by bailing which proved to be the more successful method and was used thereafter. The timbering below water level was in good shape and very little replacement was necessary. By the end of July the 200 foot level had been unwatered and a station established so a car of ore was broken and shipped early in August. During the remainder of the month the stoping was continued and by the first of September shipments from the 200 foot level had been completed. The ore shute on that level was only 15 feet long and three to four feet wide. It produced 175 tons of ore having a value

of \$4357.75. Samples cut from the stope to a point fifty feet south of it indicated an average value of about \$10.00 in the vein.

H 1610
Bailing operations to unwater the 250 foot level had been started by the first of September and during that month and October ore was stoped from the 250 foot level where a total of 362 tons were produced having a value of \$5853.42. The level looked very promising when it was first opened up but as the ore shute was followed upward values became generally lower and too low for profitable operation in the south end of the stopes. The ore proved to be particularly spotty. While samples cut across the roof of the level for a distance of forty feet indicated an average value of \$25.00 a ton, samples cut across the roof of the stope at a point eight feet above averaged only slightly over \$11.00 a ton.

During the month of November a car made up of ore partly from the 250 foot level and partly from the 200 foot level and a car including about 50 tons mined from the 35 foot level and 15 tons taken from the old dump were shipped. The results in both cases were unsatisfactory.

Early in December the 300 foot level was unwatered and 15 tons of rock were broken on that level which averaged about \$10.00 a ton. The poor showing on the 300 foot level coupled with the indefinite state of the lease and uncertainty in the price of silver caused Mr. Utter to discontinue operations.

During the eight and one half months of operations the mine was unwatered to the 300 foot level and conditioned for operation. One thousand and thirty eight (1038) tons

of ore were produced having a value of \$19,242.80 or an average value of \$18.53 with the price of gold at \$35.00 per ounce and silver at \$0.64125 per ounce. The values were slightly greater in silver on the upper levels and slightly greater in gold on the lower levels.

The table below shows the ore production by levels.

Level	Tons produced	Total Value	Average Value
150	378	\$7,404.75	\$19.56
200	175	4,357.75	24.83
250	362	5,853.42	15.89
Misc.	123	1,626.88	13.26
Total	1,038	\$19,242.80	\$18.53

$$950.15 @ 18.53 = 17606.28$$

$$10\% = 19242.8$$

Conclusions drawn from the 1938 operation.

No exploration work was done and the sampling was inadequate as a basis for estimates as to value and tonnage of the ore remaining in the mine so what immediate value might be attached to the mine on the basis of ore readily available is indefinite. However values in the ore removed were spotty and while the ore shute has a definite vertical trend it was shown that the values occurred in spots in the chimney and low grade horizons tended to keep the average down. The shute mined from the 200 to the 150 foot levels was fairly persistent but as seen on the included section it did not open up to show that it alone made the large tonnage of ore mined from the 150 foot level.

The shute mined from the 250 foot level to the 200 foot level was quite spotty and while it had a parallel trend, it did not follow the line of the shute mined from the 200

foot level. The stopes were started in the best rock showing in the roof of the drifts and continued upward following the best values. Undoubtedly there remain pockets of good ore as yet undiscovered between the drifts but they would be small and attractive only to a miner-leasor who can carefully study and mine his ore on a small scale.

Franklin W. Smith, in his report of August 5, 1910, indicates that the ore, already pinching, was faulted off just above the 350 foot level. During the 1938 operation the mine was unwatered only to the 300 foot level and on that level the ore was definitely weaker than it had been above. Throughout the district there has been no great faulting since the mineralizing period so if the vein has been faulted off it should not be difficult to pick up again. ?

The vein is of an extremely hard quartz breccia and it is probable that it was very tight at the time of mineralization and that condition caused the mineral to be deposited irregularly making a spotty ore body.

A fault cutting the Alabama vein 125 feet south of the shaft has offset the vein about 30 feet. The fault was cut in the south drifts of the 150 and 200 foot levels but a soft calcite zone lying along the north side of the fault, and part of it, had caved making it inaccessible underground. On surface the fault shows the calcite zone simulating a mud fault lying beside the quartz vein filling which shows moderate values at four points where exposed within 300 feet of the shaft. This cross fault or vein was not explored in the 1938 operation and aside from the fact that

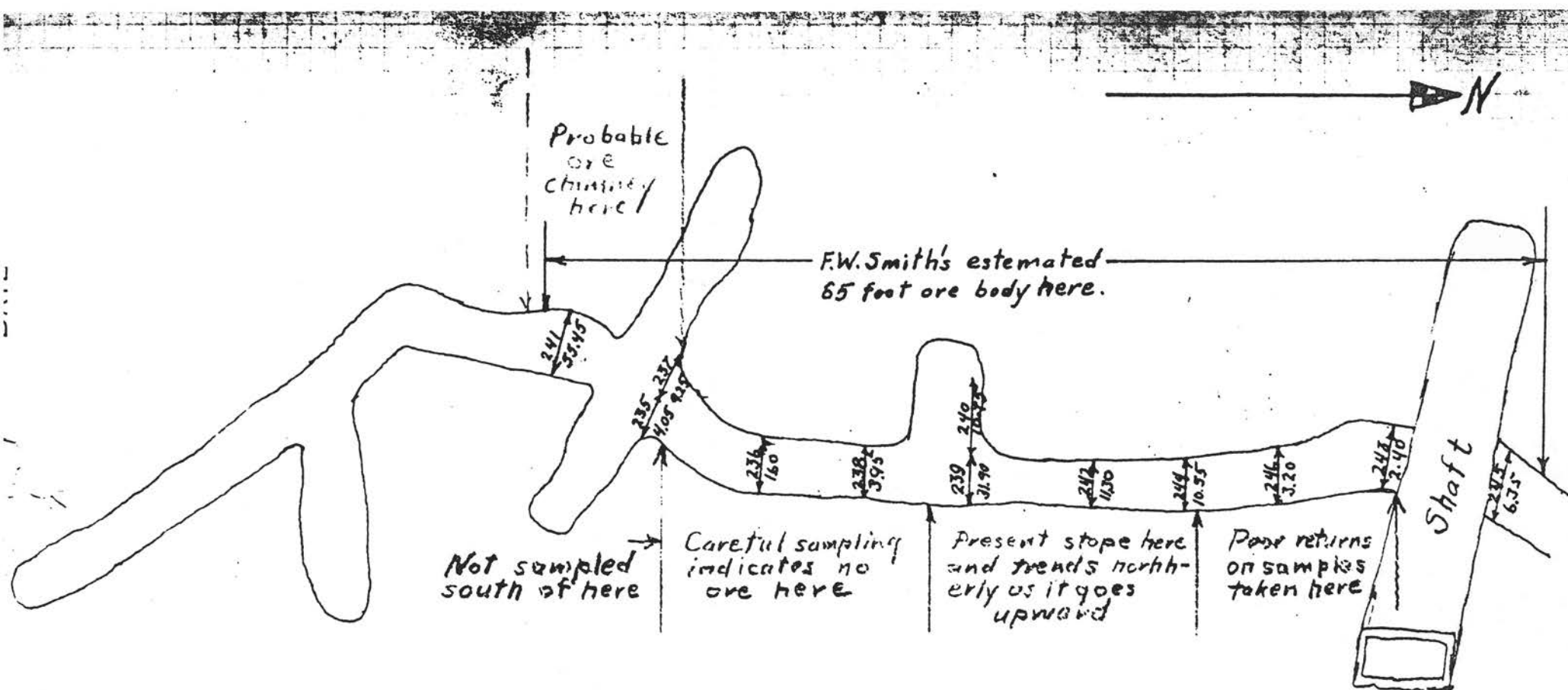
it was crossed by the south drifts on the 150 and 200 foot levels there is no record of its exploration in previous operations. It may have been crossed and then explored from the south side but that is very doubtful.

On the surface there are indications of extensive mineralization in ground that has never been explored underground. The mine might appeal to a gold mining concern prepared to pay the development costs on the basis of the possibilities of opening up a new and better ore body either in the cross fault or in the Alabama vein at greater depth.

James W. Van Evera Jr.

James W. Van Evera Jr.

January 7, 1939
Bingham Canyon, Utah



ALABAMA MINE - 200 FOOT LEVEL - SOUTH DRIFT

Showing assay returns in values as of 1910
gold - \$20.00 per oz.; silver \$0.54 per oz.

From report by F.W. Smith.

dated Aug. 5, 1910

With notes (in red) of present operation
and (in blue) possible development
overlooked in present operation

Scale: 1 inch = 10 feet

Aug. 20 1930



Alabama Fissure

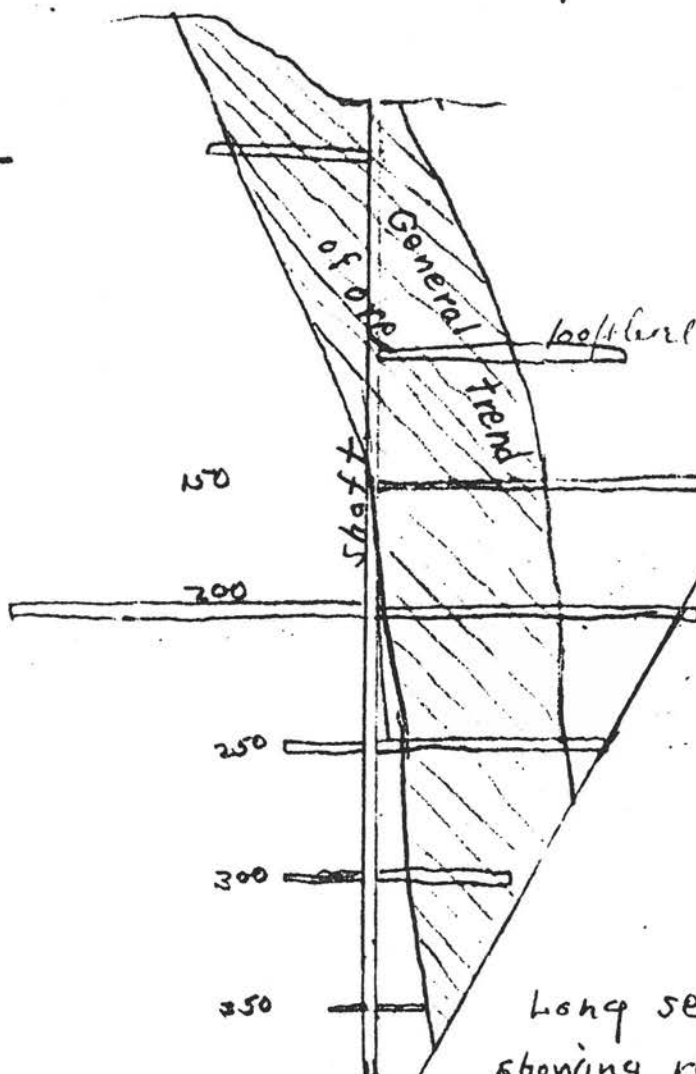
shaft

Sketch of South end
of Alabama claim showing
relation between Alabama
fissure and Northwest
fissure

Test pit.
rock assays \$30.00
West Boundary

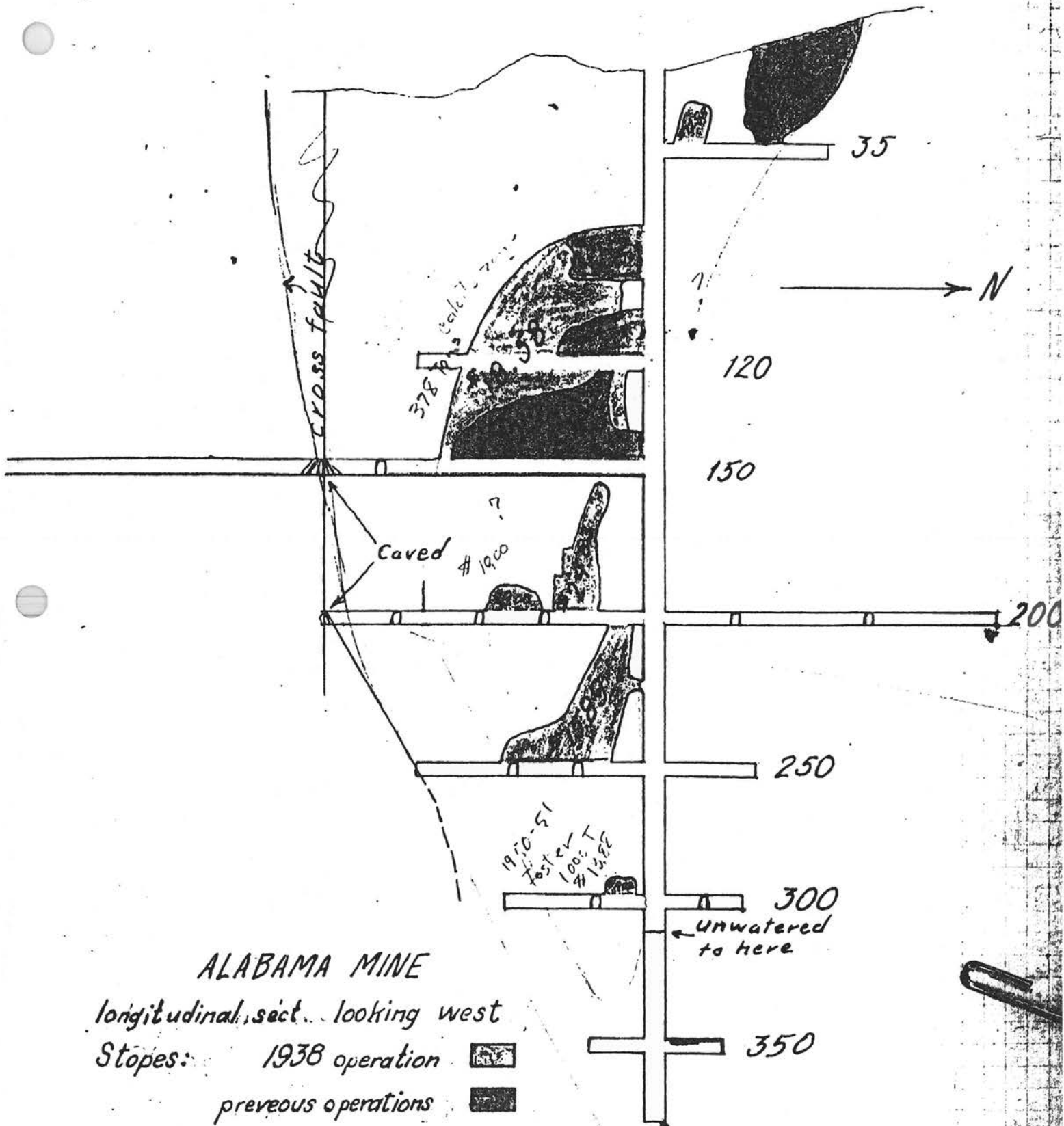
Northwest Fissure

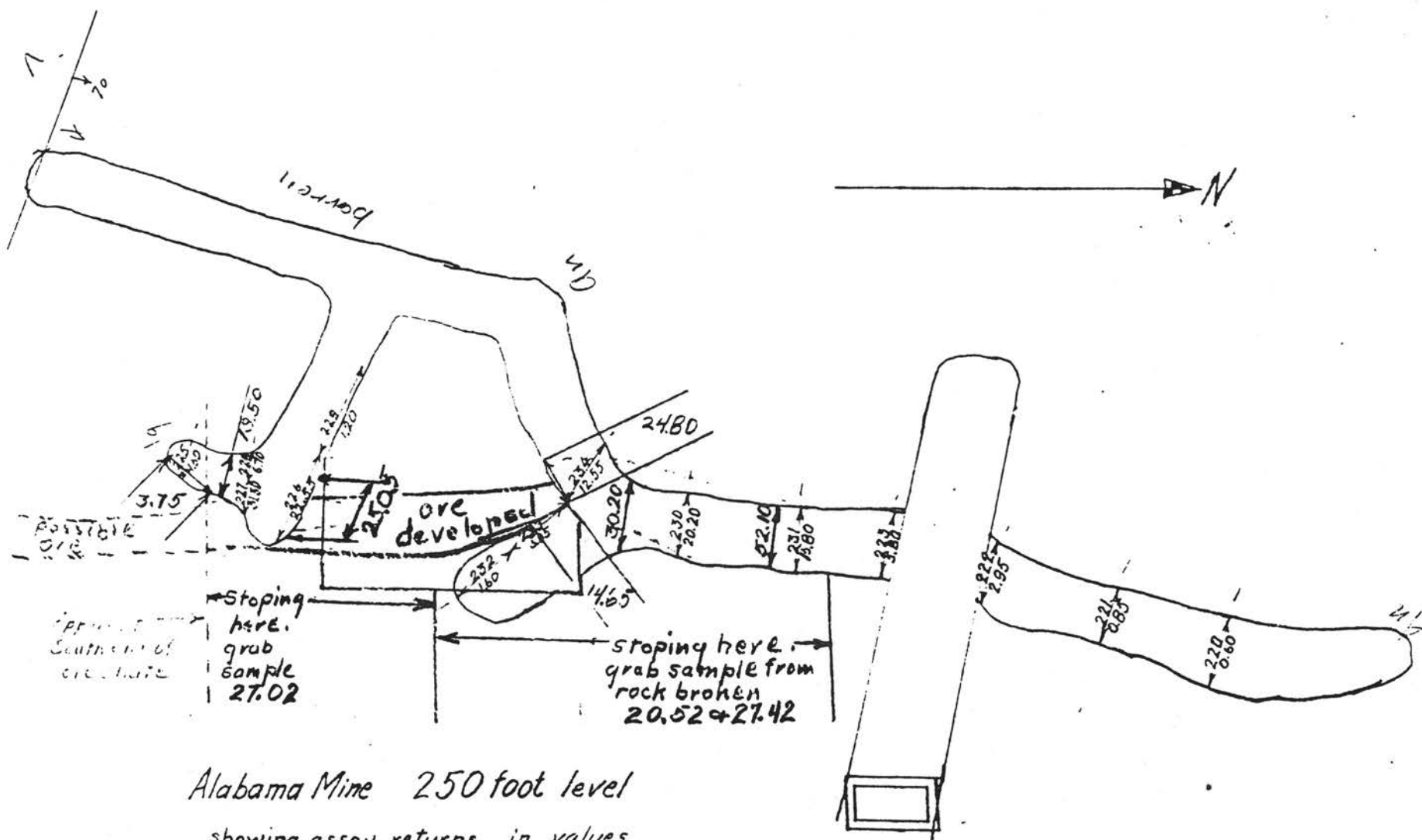
South Boundary



Sketch

Long sect Alabama mine
showing relation between ore
and Northwest fissure





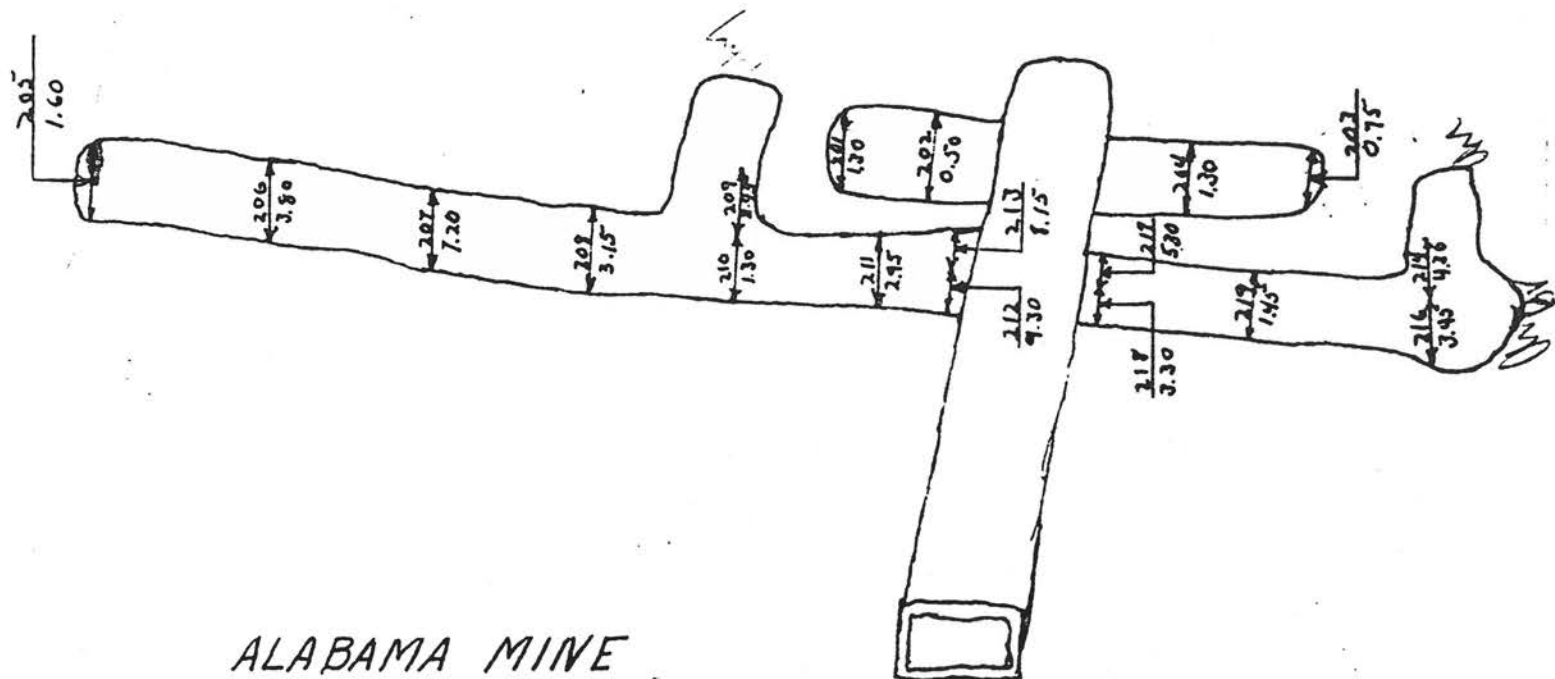
Alabama Mine 250 foot level

showing assay returns in values

as of 1910: gold \$20.00 per oz
silver \$0.54 per oz

from report by F.W. Smith

doted Aug: 5, 1910



ALABAMA MINE
 Assay Map of 300 and 350 foot levels
 from report by F.W. Smith

Scale: 1 inch = 10 feet.

