

were on the 200 foot level. Dynamite was extensively used as the tunnels were extended in the search for more ore.²¹⁵ This work revealed 3 new veins, averaging 3 to 5 feet in thickness, with the gold varying from 0.14 to 2.14 ounces per ton with an average between 0.42 to 0.57 ounces per ton.²¹⁶ By mid-1935 approximately \$75,000 was spent in developing the mine, erecting the flotation mill, and erecting and equipping a laboratory for assaying the ore.²¹⁷

The following assays show the character of some material from the Rudisill mine:

Assays of Gold Ores and Concentrates at the Rudisill Mine, Mecklenburg County²¹⁸

Average Value of Ores

Gold, per ton* \$57.73 (1.65 oz/ton)

Silver, per ton $\frac{8.47}{\$66.20}$

Average Value of Concentrates

Gold, per ton \$61.25 (1.75 oz/ton)

Silver, per ton $\frac{1.92}{\$63.17}$

*Per ounce value of gold assumed to be \$35.00

According to the reports of the management, concentrates worth approximately \$40,000 were shipped during the months of June, July, and August, 1935 to the American Metals Company, Carteret, New Jersey.²¹⁹

At one point there were three 8-hour shifts of 20 men each working around the clock in an effort to assuage the cost of pumping out the shaft. Each man earned about \$2.00 for an 8-hour shift.²²⁰ This was later changed to two 10-hour shifts.²²¹

The day shifts did most of the drilling and blasting.²²² When dynamiting, a series of 16 holes would be drilled in the wall and tamped with 20 sticks of dynamite each with a blasting cap wired to the power source. After retreating a safe distance back, the dynamite would be detonated, blasting a hole about 8 or 9 feet into the wall and loosening about three to four tons of ore at a time. The ore was loaded into a small gauge tram which traveled back to the main shaft and was removed from the mine.²²³ From here the ore was trucked (figure 33) to the mill on Remount Road. Most of the trucking was done by the night shift. After processing at the mill the concentrates were trucked to the Piedmont and Northern Railroad²²⁴ and from there transported to the American Metals Company smelting plant at Carteret, New Jersey.²²⁵ The concentrates averaged from \$100 to \$125 per ton, but with the shipping and smelter charges averaging about \$12 per ton some thought was given to erecting a small smelter with a capacity of 20 to 25 tons per day - this, however, was never done.²²⁶

A cost analysis for December, 1936, showed the company's direct costs for mining and milling the ore and for administrative expenses to be \$3,222.53. The total net returns for this period were \$3,958.57, giving the company a profit of 19%.²²⁹ (Appendix C).

While several gold mines were reopened and operated in North Carolina during the 1930's, the Rudisill was the state's leading producer for the years 1935, 1936 and 1937. It was the second largest producer in 1938, the Capps Hill mine being first.²²⁸ Operating expenses, especially pumping, were high, however, and the value of gold