ELMES GOLD MINING COMPANY

PE 58-2 Kx 58-152 Kx 58-153

Elmes Gold Mining Company:

An Alaska corporation with a capitalization of \$150,000---Byron Elmes, Pres.,

O. A. Matheson, Vice-Pres., Z. J. Loussac, Sec.-Treas., E. Pilgrim, General Manager.

Company has option on the P. J. Nickoloff group of 7 lode and one placer claim located on Happy Creek, Fairbanks, District, and has recently located another placer claim and two lode claims. See sketch map of claims.

The property is easily accessible by auto road, being about 8 miles from Fairbanks; or can be reached from Happy, a station on the Alaska Railroad, where a 1-1/2 mile wagon road connects with the camp.

Intense movement along a fissure vein in schist has developed an ore zone varying up to 7 feet in maximum width. Its general strike is North 30° east, and the dip is practically vertical, varying from east to west and cuts across the formation on both strike and dip. The greatest movement has been along the strike and dip of this vein with minor faulting crossing it at differing angles. At least three periods of movement are apparent.

The lode, where developed, has a width of 5 to 7 feet and consists of quartz, mica schist and clay, with fairly well defined schist walls although locally showing irregularities. The quartz, which contains a mineralization of arsenopyrite, pyrite and stibnite, generally holds to the footwall portion of the lode and in the main developed area ranges from a few inches to 2-1/2 feet in width. The quartz is, however, erratic in occurrence and irregular in extent. The higher grade ore is confined to the quartz, the better values appearing to occur in relatively small but long flat lying shoots. The clay, and schist also carry some gold, especially where mixed with ground up quartz. Gold is occasionally visible in selected quartz specimens and most of the quartz will pan. While distinct narrowings in the width of the lode have been encountered and quartz may be lacking in places, the lode has so far been traced by a series of open cuts for a distance of about 2000 feet on this property, and it is apparently the same lode that is being mined by the Mohawk Mining Company, more than a mile to the southwest following its general strike; it also has the same mineralization and general characteristics.

The main underground development has been done on the "Principal" claim where two shafts 350 feet apart have been sunk on the lode. Shaft No. 1 is 110' deep and drifts have been driven from the bottom for ten feet each direction. Shaft No. 2 is 66' deep and from a point 41' down a drift has been driven 21' south and 23' north. See sketch of longitudinal section. Pits sunk thru 10 to 15 feet of soil have traced the lode into the American claim to a point about 1200' to the northeast of the No. 2 shaft. An adit is now being driven along the lode at this place at an elevation of about 200' lower than the collar of the No. 2 shaft. On September 21 this adit was in 65' and while in mixed up clayey lode material, had not yet struck any ore. Recent reports, however, state some good ore has been found.

The underground workings have not been thoroughly sampled and I did not take samples. The management, however, has taken numerous samples and states that the highest assay obtained from quartz ore was \$142.00 in gold per ton (Au @ \$20.60/oz.), and contends that this quartz ore, which in the main developed shoot between shafts no. 1 and no. 2, ranges from 6 inches to 2-1/2 ft. in width, will average \$30 to \$40 in gold per ton. Some good assays are at times also obtained from samples of mixed schist, clay and finely ground up quartz, so that it is thought practical to mine an average width of about 4 feet producing an ore that will average about \$12 in gold per ton. Good ore has been found to a depth of about 40' in the both shafts, indicating a flat lying ore-shoot.

The management states that sufficient ore has been developed to justify the installation of a mill, which is now being done. The ten stamp mill formerly installed at Chena has been obtained and is now being transported to the property. This mill consists of a 9 x 13 Blake-Hendy crusher, ten 1000-1b Hendy stamps, and copper plates for amalgamation. One battery of five stamps will first be installed and straight amalgamation will be practiced. Steam power will be provided, the plant being a 60 h.p. boiler and a 10 x 13 double cylinder engine. Wood will be used as fuel. A 135-foot drill hole put down in the schist at the mill site apparently struck a fault below the frozen horizon, and provides flowing water. With this water available the company plans to operate throughout the year. The large amount of

soft schist and clay in the ore, as it will be mined, will not be advantageous for stamp milling, however, for it is sticky and will tend to greatly reduce the mill capacity.

All of the lode material so far encountered is much oxidized, and an enrichment of the gold content no doubt exists in this oxidized zone. This feature may be more pronounced in the crushed areas so that deeper mining may have to be more closely confined to the oreshoots in the quartz in order to obtain a profitable grade of ore. Much further development is necessary to determine the occurrence and nature of the ore-shoots, and conditions indicate that a large amount of development will be required to develop relatively small tonnages of ore. The work done to date has given much encouragement and is being economically done. The property is, however, still a prospect and its possibilities are still to be determined.

This is not to be considered a detailed or complete report, for while brief visits were made to the property on July 5 and September 21, a detailed examination was not the object.

N. L. Wimmler, October 73, 1926

1 To Camp HAPPY CREEK - DATUM- 0:0 LONGITUDINAL ELMES GOLD Reported by HAPPY CREEK. MILL - Now under Construction. SHOMING PRINCI Scole 1" ADIT - Elev. 50' Drift on lode N. L. minmter- Sept 211926 AMERICAN CLAIM FRIKERNIKS SECTION 400 2001 a aneroia Vartical + Horizonto. opproximate Altonlode 0 DISTRICT. Pit on lode Par on rode TOOK Elev. 175' Piton lode PRINCIPAL Piton lede No. 2 SHAFT ELEY. 250' CERIM No. 1 SHAFT Elev. 270"

HAPPY CREEK. FRIRBANKS, ALASKA. 1926 YANKER BOY LIFFLE MURRE J. Smill owner J. Smill same Shop DShoff E. MOONSHINE MASHINGTON COLUMBIA YANKEE GIRL AMERICAN FILLSO Jos BUSH OKEGON NICKOLOFF PLACER. Sille 日 Sille Millaite o dung Coolie Placer

RICKOLOFF QUARTE CLAIMS

ELMES. GOLD MINING CO.