1937

The history of the Vaucluse gold mine

Thomas Todd

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The History of the Vaucluse Gold Mine

by Thomas Todd
INTRODUCTION

The writer is very familiar with the mine and the recent activities that have taken place there in the past four years. Having been born and reared within two miles of this property. The writer assisted Mr. Moritz Norden, in prospecting that section of the country prior to the organizing of the Rapidan Gold Corporation, which worked the Melville mine for more than two years. Then, after the Rapidan Gold Corporation was established, he worked for them during part of two years, as hoisting engineer. When the V-M Corporation was established, he worked there during the summers of 1935 and 1936. Much material obtained in this paper has been gathered from actual experience while working in the mine and from talking to the officials of the two companies that have recently operated the mine.

ACKNOWLEDGMENTS

The writer is greatly indebted to the late Moritz Norden, geologist, and President, of the Rapidan Gold Corporation; also, to William M. McGill, Assistant State Geologist, who contributed free use of several bulletins of the Virginia Geological Survey. The writer also wishes to acknowledge the efficient help rendered him by W.E. Haille, ground-foreman, and E.L. Flannigan, walking boss, of the mine. Thanks are also due to C.E. Bass, manager, of the V-M Corporation, and to the operators and employees of the Corp., for their whole-hearted cooperation.
The History of the Vaucluse Gold Mine

The Vaucluse gold mine is situated in what is known as the Piedmont region of Virginia, which lies between the Blue Ridge on the west and the Coastal Plains on the east; the property is between 250 and 500 feet above sea level. The mine lies in a belt which can be traced for more than 500 miles, extending from Maryland to the southwestern part of North Carolina; its width varies from twenty-five miles to two or three miles, and is parallel to the Alleghanies. The ore-bearing veins run northwest and south east, and in some places on the property, one can see an "out-cropping" of the vein, which can be traced along the ground for some distance.

The property is located in the northeastern part of Orange county, Virginia. Fredericksburg lies approximately twenty miles to the east; Culpeper eighteen miles to the west; Orange Court House twenty-five miles to the south; and the Rapidan (Rapid Anne) river two miles to the north.

The Vaucluse property adjoins the Melville property on the north. The Crasty, Greenwood, Wilderness, Partrigde, Orange Grove, Culpeper, Love, and Embry mines are old mines which were worked before the Civil War and which are located within ten miles of the Vaucluse property.

The region of the Vaucluse contains a series of recrystallized quartzites and schists which are considered to belong to the Wissahichon formation. The geological age to which this formation is supposed to belong is not known, because of the lack of fossil evidences, but judging from the structure of the ground; it is generally classed as belonging to the Pre-Cambrian Age. The gold deposits are of two types—1. lode deposits which consists chiefly of stringers and veins of ore, and, 2. replacement gold deposits which consists of free gold which is found chiefly in the gravel and sands. The replacement gold is obtained by panning, and washing; or, what is known as the placer process. The former deposit is obtained from shaft mining and milling of the ore.

The mineralogy of the ore is very simple. Quartz is the most abundant gangue mineral. It is found in the veins and in the wall rock. The quartz found below the water level is white, or, in some cases grey, while other

quartz found below the water is sometime bluish, especially if it is located in a very hard "granite like" rock. Nearer the surface of the ground and above the water level, the quartz is a more highly colored "sugar" quartz and is called "rose" quartz. The change in color is probably due to the oxidation of the iron which gives it a tint. In many places, one finds quartz in which the sulphides have all been oxidized; this is called "honey-combed" quartz. The rose quartz is considered to be the richest quartz found in the mine. In many instances, large quantities of free gold have been bound in contact with the rose quartz. The clear glassy-appearing quartz contain very little gold and in many cases it does not have even a trace of gold. Quartz with large cubical sulphides in it is often very poor in gold content. Within the weathered zone, which extends from the surface of the ground down to the water level and accordingly is variable in depth, the quartz is more or less porous and discolored or stained with iron-oxide from the oxidation of the sulphide minerals and thus, gold is found in many cases in the free state. The degree of staining is proportional to the sulphide mineral present and the stage of oxidation.

Sericite, next to quartz, is the most abundant gangue mineral in the veins. It is found in the walls of the veins and is common in all quartz bodies.

There are two carbonates that are found in the Vaucluse. They are ankerite and calcite. The ankerite is the most abundant and is found between the quartz and the wall-rock. It is milky white, but turns brown after it has remained on the dump some time. Only slight traces of calcite have been discovered in the Vaucluse veins.

Gold is the only valuable ore mineral. Below the water level gold occurs in contact with the sulphide ore and also in very small particles. Other minerals as shown by assay are: alumina, iron, sulphur, zinc, copper, lead, and silver.

The earliest authoritative reference to gold in Virginia was by Thomas Jefferson in 1782. He described a lump of ore found on the Rappahannock River, which weighed about four pounds and yielded seventeen pennyweight of gold.

In 1831 the Vaucluse gold mine was discovered. The first gold mine incorporated in Virginia was this mine, which was owned and operated by the Virginia Mining Company of N.Y., from 1831-34. The company also operated the Crasty property which was nine miles from the Vaucluse. The Company installed much machinery.

In 1844 the Virginia Mining Company was considered

6. Ibid.
7. Personal interview with Dick Bertram, assayest, of the V-M Corp.
8. Taber, Stephen, op. cit., p. 5.
one of the successful operations at that time. A mill for

(10)

the grinding of the ore had been set up. The Vauciuse

mine was worked for a number of years as a deposit mine,

(11)

before any veins were discovered. Large heaps of sand and

gravel on the banks of the streams gives good evidence of a

large amount of placer mining. However, the most profitable

operations were done in mining the lode deposits. In 1843

(12)

the mine was operated by a plant valued at $70,000. In

1847 this mine maintained a very elaborate plant for the

separation of gold from quartz and pyrite. According to

(13)

Lonsdale,

The machinery consists of a condensing Cornish mining engine of 120 horse-power; the mill-

house contains six large Chilean mills; the cast-

iron bed plate of each is five feet six inches

in diameter, the total weight of the mill being

6,200 pounds. The ores, on arriving at the sur-

face, are divided into two classes; 1. The coarse

and hard ore for the stamps; 2. Slate and fine

ore for the Chilean mills. This is done by means

of a large screen. The very large pieces are

first broken by a hammer before they are fed to

the stamps. All of the ores are ground with water,

each mill being supplied with hot and cold water

at pleasure. Twelve inches from the top of the

bed-plate there is a wide, open mouth, from which

the turbid water escapes to tanks. On the south

side of the steam engine is the stamp house and

amalgamation mill, containing six batteries of

three stamps each; these stamps with the iron

head of 125 pounds weigh 350 to 380 pounds each.

Each battery is supplied with water and at each

blow of the stamp a portion of the fine ore passes

11. Whitney, J.D., Metallic Wealth of the United States,

1654, pp. 115-25.
12.Lonsdale, J.T., Geology of the Gold-pyrite Belt of the

Northeastern Piedmont, Virginia, Virginia Geol.

Survey Bull. 30.,1927, p. 81.
13.Ibid, pp. 81-82.
out of the boxes through the grates to the amalgamation room. Here are stationed 18 small amalgamation bowls of cast iron, 30 inches in diameter. The bowls are supplied with runners which move horizontally; in the center of these runners is an eye or opening like that in the runner of a corn mill. The ground or finely-stamped ore, gold, and water pass into this eye, and by the rotary motion of the same are brought into contact with the quicksilver deposited in the center, forming amalgam. From the amalgamators, the pulp passes through three dolly-tubs or catchalls, acting as mercury and gold tubs. After this the whole mass passes to the strikes or inclined planes, where the sulphur-ets are deposited and the earthy matter washed away. These sulphur-ets were formerly treated in two heavy Mexican drags or arrastras, but not answering so good a purpose, they have been altered into three heavy Chilean mills.

Some of this machinery was removed by Henry Ford in 1929. Today, similar machinery as described by Lonsdale can be seen on the adjoining property.

The Vaucluse mine was at one time owned and operated by Dr. Peyton Grymes, who operated the mine on slave labor and is reported to have taken a half million dollars worth of gold from it; later he sold it to a Philadelphia company which installed a great amount of machinery.

In 1854 the Liberty Mining Company of England, capitalized at 1,000,000 pounds and purchased the Vaucluse and the Grymes mines, for which they paid 50,000 pounds. The average yield of the ore was $8.00 per ton. During the time that the Liberty Mining Company worked the Vaucluse, six shafts were sunk and in 1853 a mill run of 80 days produced 556 ounces of gold of fineness of 943½. In Dec.

1853, fifty tons of ore were crushed daily. The vein consisted of five parallel bands of quartz all bearing gold. Hydrated oxide of iron was the principal associated mineral. Prior to 1852, the mine was worked by two openouts; sixty feet deep, seventy-five feet wide, and 120 feet long. These openouts can be seen to-day on the Vaucluse property.

The slavery issue seemed to be one of the greatest things that held the mines up, prior to 1865. However, slavery also promoted the mines due to the fact that they were operated chiefly by slave labor, which was very cheap. However, the Northern capitalists would not invest their money in the mines because they were worked by slave labor. It was to be expected that at the end of the war, there would be an increase in the mining activities at the Vaucluse and other sections of the south. However, this was not the case, for labor became high, the south had to be reconstructed, and the California "gold rush" was still going full blast at that time.

At the outbreak of the Civil War, almost all mining operations were stopped in Virginia and in the South. Considerable activity was again manifested in the Virginia gold

16. Lonsdale, J.T., op. cit., p. 81.
17. Ibid.
18. Ibid.
fields after the close of the war. Many of these attempts met with small success and in most cases were abandoned, not because of the lack of ore, but because of bad management and inexperienced mining attempts.

On September 20, 1867, The Rapidan Mining and Manufacturing Company of N.Y. bought the Vaucluse property. Forty thousand shares of stock were sold which was valued at $80,000. The extent of operation carried on by this company could not be learned.

We have some evidence that the mines of Virginia seemed very prospective, in a statement that Routt, a mining engineer, who visited the field in 1895, made. He said, "I have been to some extent the gold fields of the West, and I believe these in Virginia to be vastly superior".

On October 9, 1913, the Central Virginia Mining and Milling Company operated the Vaucluse mine. This was a corporation granted by the State of R.I. The company failed due to mismanagement and there were several suits filed against the company. Judge A.T. Embrey of Fredericksburg was appointed as Special Commissioner to bring about a settlement.

23. Orange County Deed Book, No 73, p. 503.
On May 15, 1926, Judge A.T. Embrey, Trustee and Special Commissioner of the Central Virginia Mining and Milling Company, sold the Vaucluse property to John A. Standish of New York. The property consisted of 200 acres; $2,000 was paid in cash and $4,000 deed of trust was taken against the property, which was to be paid in two notes plus interest at six per cent.

Operations were again resumed at the Vaucluse after a period of thirteen years. This was the first attempt of anyone to work the mine during my generation. I was a boy, 12 years old, and visited the mine only several times during its operation. Therefore, for information concerning this operation, I am chiefly indebted to W.E. Hailey of Wilderness, Virginia, who worked there as ground-foreman during the entire operation. According to Mr. Hailey:

The machinery consisted of a Cameron pump, No. 9, one Emerson pump, a 50 h.p. Fairbanks-Morse air compressor, a 30 h.p. steam boiler, one 30 h.p. steam hoist, and a Jackhammer drill. Operations lasted eighteen months, but never reached production. The mine was worked two shifts a day by fifteen men. The "top" men were paid $3.50 and the ground men $4.00 per day. A 5 x 10 foot shaft, timbered with 6"x8" timbers was reopened and deepened to a depth of 137 feet.

25. Ibid., p. 45.
26. Personal communication, with Hailey.
Levels were driven west. On both of these levels, a vein was hit, which was made up of quartz and sulphide ore. Samples were taken from the vein and assayed. The result showed that it run $18.00 per ton. The company did not have sufficient pumps and they had much trouble with water, which they were unable to handle. One of the Openouts was cleaned out to a depth of sixty feet, and some very rich sulphide ore was taken out and assayed. After eighteen months, operations were ceased. This was due to bad management and insufficient funds to carry the work any further. It was thought that Standish sold "watered stock", for he disappeared and never returned again to the property. The men working there had from fifteen to over a hundred dollars owed them which was never paid.

By the failure of Standish to pay the notes that were secured against the property in a deed of trust; the property went back to Judge Embrey, Trustee and Special Commissioner, of the Central Virginia Mining and Milling Co. (28)

On November 15, 1927, Judge Embrey sold the property to L.K. Hearn of Fredericksburg, Virginia, for a sum of $3,400. However, no operations were done by Hearn. On April 26, 1928, Embrey bought the property from Hearn. (30)

27. Ibid.
29. Ibid., No. 95., p. 32.
30. Ibid., No. 96, p. 76.
Embrey did not buy the property for the purpose of developing its mineral resources, but for the timber that was on the property. Considerable timber was cut on the property during the time that the property was in Embrey's possession, but no mining operations were undertaken.

On August 23, 1929, a deed was recorded in the Orange County Clerk's Office, by which Judge A.T. Embrey of Fredericksburg, Virginia, transferred his title to the Vaucluse mine tract to Henry Ford of Dearborn, Michigan. The property consisted of 200 acres and was bound on the north by the Melvin property and on the south by the Greenwood property.

A real-estate man had been seen around the Wilderness, but no one seemed to know who he was, or whom he represented. It had been known that he had been looking over certain mining tracts in that section of the country, but no one suspected that he represented the great millionaire, Henry Ford, therefore, it was a great surprise to the people of that locality when they learned that Mr. Ford had bought the Vaucluse. Mr. Ford's name was concealed, in order that the property could be bought at a reasonable price, for if the owners had known who the real purchaser was, then they would have probably wanted a good deal more.

32. Ibid.
for it then was finally agreed upon. The price paid by Mr. (33) Ford for the property was $10,000. This amounted to $50. per acre. It was considered a good deal more than the property was worth.

Much interest was created in that locality when it was announced to the papers that Mr. Ford had bought the "Old Vaucluse Mine" property. Everyone expected to see the mine opened up again, but this was not the case. Mr. Ford had no such intention, for he bought the property only to get the old machinery that was on it for his museum out in Dearborn, Michigan.

Very soon after the deed had been recorded in the Clerk's Office, Mr. Ford sent several of his men down to the property and plans were begun for the removal of the old machinery. Local labor was secured and the men were paid very generous wages for their assistance in moving the machinery and loading it on railroad cars in Fredericksburg, Virginia. It was considerable work and it took approximately two months to complete the task, this was due to the place where the machinery was setting and its bulky weight. Trees had grown up around the machinery and it was necessary to cut a road for a half mile to a place where several large pieces could be loaded on a truck and transported to Fredericksburg. Several mill stones,

34. As told to me by J.E. Bailey.
a 100 h.p. Walking beam engine, several stamps, and three boilers were removed. Two of the boilers were 20 feet long and approximately eight feet in diameter. The other was a 100 h.p. boiler, thirty feet long and eight feet in diameter. Mr. Ford carried the latter out to his museum in Dearborn. The two small ones are now setting on the side of the road where they were placed to be loaded on the truck. Mr. Ford visited the property during the work of removing the machinery.

In August 1932, Mr. Moritz Norden, a mining engineer of many years varied experience in Mexico and the Western part of the United States, who had become interested in the Virginia gold-belt, came to Virginia from Arkansas and made a personal inspection of many properties in the Wilderness area. I worked with Mr. Norden, for many weeks prospecting and panning in the streams and gulches of that locality, the property which Mr. Norden was particularly interested in, was the Melville property, which was owned by Dr. Lee Cooke of Fredericksburg, Virginia. The Melville tract (35) comprises about 800 acres. Mr. Norden immediately secured a lease on the property for a period of twenty years. He then attempted to work the small stream which flows east from Red Hill and empties into the Rapidan River about a mile above Wilderness, Run. A 4" pipe line was laid from

36. As told to me by Mr. Norden.
the river up the small "creek" about 880 feet to the place where operations were to begin. A centrifugal pump, connected directly with a 80 h.p. Studebaker motor, was installed on the river bank. The pipe line was reduced to one inch by means of a fire hose and nozzle. A line of boxes, with ripples, was installed with the proper "fall" per 100 ft. With this stream of water under great pressure, Mr. Norden attempted to wash the banks of the stream thru the boxes and thus extract the free gold from the gravel and sand as it flowed with the water thru the boxes. This process is known as hydraulic placer mining. However, this operation was a failure. Winter was approaching and the ground became frozen and it was necessary to discontinue all operations until Spring. Mr. Norden, also, lost considerable money in the stock-markets that winter and was unable to finance the operations alone.

After several months of detailed prospecting, Mr. Norden became convinced that the possibilities of finding mineral bodies of sulphide ore beneath the oxidized zone in which most of the early operations had been made, warranted a definite test. As a result, the Rapidan Gold Corporation was organized with Mr. Norden as president in the Spring of 1933. Within a very short time after its incorporation, the Rapidan Gold Corporation commenced active explorations on the Melville tract, under the management of Mr. C. Hyde.
Lewis, a mining engineer, who had been associated with Mr. Norden in Arkansas, and who had had much experience in some of the Western mining districts.

Placer operations were again resumed, only on a different scale. A ½-yard gasoline-shovel was bought, a revolving-screen washer, and two revolving classifier bowls. These were installed and for several months operations were again underway. However, this work was discontinued and operations begun in a shaft. The result of the placer operations neted over $500 worth of gold. (38)

An old shaft was drained, cleaned out, and deepened to a depth of 125 feet. There they found many old workings, consisting of more then 500 feet of drifts and cross cuts on the vein. (39)

The results of these explorations and the showings of sulphide-bearing ores, as determined by assay of samples from various parts of the workings were sufficiently encouraging for the management to recommend further detailed investigation. Accordingly additional capital to an extent of $500,000 was secured. It was at this time that the Rapidan Gold Corporation bought the Vaucluse Mine from Henry Ford. The transaction took place on October 25, 1933. The sum which the property was bought for was

38. As told to me by F.H. Johnason, who amalgamated the gold.
39. Personal interview with E.L. Flannigan.
$11,000. However, this was not actually what the property cost the company. It actually cost them $15,000. The reason for this was that one of the stockholders advanced the $11,000 for the purchase, and, under agreement with the company, he was to receive $15,000 if they had not reimbursed him by a certain date.

In July 1933, the Rapidan Gold Corporation, which at that time was operating the Melville mine, began investigation the Vaucluse property for a place to sink a shaft. At the advice of Mr. Norden, president of the company, and Mr. C. Hyde Lewis, manager, the Directors decided to reopen an old shaft rather than sink a new one. As a result, a shaft approximately 100 feet north of the "old cream pot" was agreed upon. It was at this shaft the old boilers which Mr. Ford bought had been setting.

A crew of five men was immediately put to work clearing away the trees and undergrowth and later they set up a windless and begun the reopening of the old shaft. By means of the windless, they were able to carry the shaft down to the depth of 40 feet, before timbering and machinery had to be put in. Timbers were cut and framed at the Melville mine and transported by truck to the Vaucluse. The shaft was a modern two-compartment shaft, $9\frac{1}{2} \times 4\frac{1}{2}$ feet inside the timbers, and was timbered with 8 x 8 inch timbering.

42. Told to me by Jim Todd, book-keeper, at that time.
43. Ibid.
44. Ibid.
45. Personal communication with W.E. Hailey.
46. As told to me by E.L. Flannigan.
and lagged with 2" oak boards. Each set of timbers was swung by steel rods and were five feet apart. A fifty foot headframe, made of 8x 8 timbering and re-inforced with steel rods. A 80 h.p. steam boiler was installed and connected with a two-cylinder single drum hoisting engine. This work had been completed by Sept. 1934. Now, work in the shaft progressed more rapidly, soon they reached the depth of 60 feet, and at that depth they discovered a level. Upon investigating this they discovered some very interesting ore, which gave the company an incentive to continue the operation. The level was very narrow and in places it was caved considerably.

Evidence of free gold was discovered along with some very rich oxidized quartz. At the depth of 80 feet, work was abandoned by the "old timers". At that depth was found an old pump and several old picks. It was thought that the "old fellows" were probably run out on account of the water, for they left their tools and pump in the bottom of the shaft.

Finally the 100 foot mark was reached and the company decided to run a level south to see if they still had the vein with them. A level was drifted and they hit the vein, it was approximately eight feet wide at the place where they hit it, but it was not compact for there was a string of slate which came in between the quartz. The vein showed a dip to the north and the formation acted as if it would bring the

47. Personal communication with H.E. Hailey.
48. As told to me by Moritz Norden.
49. Personal communication with E.L. Flannigan.
two stringers of quartz together. As a result of these discoveries, it was decided to sink the shaft another hundred feet. At the two hundred foot mark, a similar level was run south until the vein was hit. There they found evidence of a still wider vein which seemed more compact than was noted on the 100 foot level. Samples were taken and some of them ran as high as $150 per ton. However, the average sample ran from eight to twelve dollars per ton. Two levels were begun one to the south and one to the north.

In March 1934, the Vaucluse mine and the Melville mine were operated at the same time by the Rapidan Gold Corporation. Approximately sixty men were employed by the corporation. A camp had been built for the men who did not live in that immediate locality. Approximately thirty of the men were from nearby counties and lived in the camp.

In May 1934, the Rapidan Gold Corporation, secured two Fairbanks-Morse Diesel Engines from the Virginia Electric and Power Company. One was a 2-cylinder-120 h.p. engine and the other was a 4-cylinder-240 h.p. engine, they were operated on crude oil. A modern power house was built and the engines were installed in it. Also a Texrope-driven air compressor and a single drum hoist, connected with a 52 h.p. electric motor was installed. A ball mill, crusher, and various other machines were bought and properly installed.

50. Personal communication with Dick Bertram, chief-assayest.
51. Ibid.
Ore taken from the Vaucluse mine by the Rapidan
Gold Corporation was transported to the Melville mine by
truck and milled. In the month of June 1934, the manage­ment estimated that 14,000 tons of ore had been blocked out
(53) and 350 feet of new development work done.( On June 7, 1934
the first shipment of concentrates (fifty-tons) from the newly
erected mill went forward to the American Metals Company in
Parteet, N.J. This shipment was estimated to have a value
(54) of $5,000. This was the first shipment of gold of any
importance that had been obtained from any of the Virginia
(55) gold-mining areas in seventy-five years or more.

Operations at this time were appearing to be very
profitable at the Vaucluse, but just as the company was
beginning to see some returns from the many thousands that
they had invested; the very sudden death of Mr. Norden, its
President, occurred. Mr. Norden had been a very able business
man and it was through his efforts that the company had
survived. As a result of Mr. Nordens death, a settlement
had to be made to his wife. The Corporation did not have
sufficient funds to pay off its creditors and it was forced
into the hands of the receivers, in January 1935. Operations
were discontinued and the property, machinery, and other
assets were "put up" and sold at public auction. They were

54. Ibid.
55. Ibid.
bought by Joe Goldsmith of Fredericksburg, Virginia, for a sum of $25,000. This included a twenty year lease on the Melville property, the Vaucluse property, (200 acres) machinery, buildings, and equipment. Mr. Goldsmith had been one of the stock-holders of the Rapidan Gold Corporation.

There were several shipments of concentrates made by the Rapidan Gold Corporation to the American Metals Co.'s smelter at Parteet, N.J., during the seven months that the mill was running at the Melville. These shipments total about 529 ounces of gold, valued at $18,489. A small percent of this gold was taken from the Vaucluse mine shortly before the Rapidan Gold Corporation went into the hands of the receivers. Gold recovered by the Rapidan Gold Corporation ranked them as the second largest producers in the Eastern States in 1934.

On March 9, 1935, the Virginia State Corporation Commission, created the V-M Corporation. The incorporators were several business men of Fredericksburg, Virginia, who were stockholders of the Rapidan Gold Corporation. They were Joe Goldsmith, George Benoit, and Philip Stern. The charter provided that the V-M Corporation would have power to operate, mill, refine, smelter, buy property (not to exceed 10,000 acres), operate its own railroad, (not over 20 miles

58. As told to me by E.L. Flannigan.
distance) etc. The minimum capital stock should be $5,000
and the maximum $250,000. There should be common stock and
each share should be $100 each. Duration of the Corporation
should be unlimited. The Charter further provided that the
officers should be: George Benoit, president; Philip N.
Stern, Vice-president; F.M. Chichester, Secretary; and Joseph
M. Goldsmith, Treasurer. The directors, as provided for by
the Charter, were to be George Benoit, Philip Stern, Henry

The first block of stock was issued on March 16,
1935, five thousand shares were sold to the following

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<th>Shares</th>
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<td>175</td>
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<tr>
<td>Philip Stern</td>
<td>150</td>
</tr>
<tr>
<td>F.M. Chichester</td>
<td>150</td>
</tr>
<tr>
<td>J.M. Goldsmith</td>
<td>150</td>
</tr>
<tr>
<td>Henry Pratt</td>
<td>150</td>
</tr>
<tr>
<td>L.G. Roach</td>
<td>100</td>
</tr>
<tr>
<td>John Pratt</td>
<td>4125</td>
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The second block of stock was issued on April 4,
1935. Forty-five thousand shares of stock were subscribed

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<td>600</td>
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<td>L.G. Roach</td>
<td>150</td>
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<td>F.M. Chichester</td>
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<tr>
<td>John L. Pratt</td>
<td>10800</td>
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<tr>
<td>Frank C. Pratt</td>
<td>1000</td>
</tr>
</tbody>
</table>

60. State Corporation Commission, Richmond, Va.
61. Ibid.
C. O'Connor Goolrick 500 shares
D. Brown (of N.Y.) 10000"
E.F. Johnson 10000"
J.D. Honey 5000"
L.L. Strauss 5000"

Now, with sufficient capital at hand, the V-M Corporation resumed the work at the Vaucluse, where the Rapidan Gold Corporation had left off. During the two months that the affairs of the Rapidan Gold Corporation were being settled and the establishment of a new Corporation, pumps were still keeping the water under control in the shaft. Therefore when the V-M Corporation was established and sufficient capital had been raised, the mine was soon in full operation again. The Directors decided there were sufficient evidence of paying ore on the 200 foot level to give them an incentive to deepen the shaft another hundred feet. Therefore, work was discontinued in the levels and the process of deepening the shaft was begun in April 1935. Three ground shifts were put to work, each working eight hours a day. Many hardships were to be experienced before the 300 foot mark was to be reached.

On account of a heavy fall of water in the shaft, and insufficient pumps to take care of it; the sinking of the shaft the remaining 100 feet was a very costly and prolonged task. The best time that three crews of men could make was approximately one foot a day. The ground grew harder 62. Ibid.
63. As told to me by W.E. Hailey.
as the shaft was deepened daily. Finally, by June 1935, the 300 foot mark had been reached, and then they started a drift toward the southwest. After another month, when they had gone approximately 100 feet, they hit the vein. The vein was about 12 feet wide at the place where they hit it and there was some very nice sulphide ore in contact with the white quartz.

The V-M Corporation, now began trucking the ore over to the Melville mine and there it was put thru the milling process. The ore was brought up into a 150 ton bin by a 2-ton skip and automatically dumped into the bin. The ore was then gotten out of the schut by means of a hand feeder. It came down on a 28" conveyor belt and there it was hand-picked and the waste discarded. Approximately 8\% of the ore was waste. This conveyor belt fed the ore down into a large coarse crusher. From the crusher, the ore was fed on to a conveyor belt, which carried it up an incline, 125 feet, and into a 80-ton fine ore bin, above the mill.

From this bin a Hardinge constant-weight feeder delivered the ore to a six foot by twenty-two inch, Hardinge ball mill in closed circuit with a 18 foot classifier, set on a slope of 2\% to a foot, the rakes moving 27 strokes per minute.

The classifier overflowed at 25% solids, which were then carried by water into five Fagergren 28" round flotation cells.

65. Ibid.
66. Ibid.
The clean concentrates that passed through the five flotation cells were then carried into settling boxes. There they were allowed to settle for about a day and then they were dried and put into 100# sacks. When a car load of concentrates had been obtained, it was trucked to the nearest railroad station and there loaded on a railroad car and sent to the American Metals Company in New Jersey. There, the final recovery of the gold was obtained. The management reported that more than 90% recovery of the gold content was obtained.

On January 7, 1936, a fifty thousand dollar block of stock was issued to the following subscribers.

George Benoit 1000 shares
J.M. Goldsmith 750 "
Henry Pratt 1250 "
L.G. Roach 250 "
F.M. Chichester 175 "
J.L. Pratt 14925 "
F.C. Pratt 1000 "
P.N. Stern 150 "
C.O'Conor Coolrick 500 "
D. Brown 10000 "
E.F. Johnson 10000 "
J.D. Mooney 5000 "
L. L. Strauss 5000 "

50,000

On January 29, 1936, an additional $35,000 worth of stock was issued.

George Benoit 1150 shares
P.N. Stern 1045 "

67. Personal communication with Mr. Norden.
68. State Corporation Commission.
69. Ibid.
During the year of January 1936 to January 1937, thousands of tons of ore were blocked off. Work in the 200 foot level and the 300 foot level was in process during the entire year. The mine was operated two shifts a day by approximately thirty men. Power was furnished to the mine by two Fairbanks-Morse Diesel engines, which were stationed at the Melville mine, and a 80 h.p. boiler, stationed at the Vaucluse property. Power for drilling and ventilation was furnished by a large "crude oil burning" compressor, a Fairbanks-Morse steam compressor, and a Texrope-driven air compressor. The former was bought from the Benedum Trees Company, which had just ceased working the Melba mine, located one mile south of the Vaucluse. The latter compressors were brought from the Melville over to the Vaucluse. The water in the mine was handled by two electric pumps, a Cameron "sinker" pump, and a Cameron No. 9 pump. The two Cameron pumps were run on steam or air.

On October 30, 1936, a $30,650 block of stock was issued to the following subscribers, at $1.00 per share.
George Benoit 767 shares
J.L. Goldsmith 638 "
Henry G. Pratt 886 "
L.G. Roach 295 "
F.M. Chiester 87 "
John L. Pratt 14384 "
P.N. Stern 336 "
F.J. Pratt 500 "
D.Brown 5000 "
J.D. Mooney 2500 "
E.F. Johnson 5000 "
C.E. Bass 239 "

The total stock subscribed for by April 1936, as shown on the books of the State Corporation Commission, was (71) $165,650.

In November 1936, the mill was running three shifts a day, and during a twenty-day period of that month, $5,000 worth of gold was milled. (72)

The last visit of the writer to the property was in April 1937. At that time the mine was in full operation. It was being operated two shifts a day by thirty-five men. A "high line" had just been completed by the Virginia Electric Power Company and the mine was being operated entirely by electrical power. The mill was running three shifts a day. Ore taken from the Vaucluse, was being trucked to the Melville where it was milled. Approximately 100 tons of ore were taken from the mine daily. A modern assay office had been erected on the property and the ore was "running" from $5 to $8 a ton. Ore was being taken from the 300 foot level and the

71. Ibid.
72. Personal communication with Dale Flippo, bookkeeper, for the V-M Corp.
200 foot level. At the 300 foot level a "stope" was being run on a 45 degree incline. At that time they expected to continue the "stope" all the way up to the 100 foot level. The mine was under the management of C.E. Bass.

On April 24th and 25th, 1937; there occurred one of the greatest falls of rain that ever occurred in that section of the country. As a result, the mine was flooded. The water poured in so fast that the pumps were not able to take care of it. The electric pump at the 300 foot level was capable of removing 420 gallons of water per minute; a No. 9 Cameron pump stationed there, also, was capable of moving almost as much as the former, still, the water gained on the pumps; until finally they were covered. Entire operations had to cease. The company has, at this time, approximately $10,000 worth of pumps, and $15,000 worth of drills, pipes, and steel covered with water. There is some doubt at the present time (May 1937) whether the mine will reopen. Many people think that they will not. It would be considerable cost to get the water out of the mine and with proper pumps, it would take probably a month to get the water down again.

The success or failure of mining operations in the Piedmont region depends upon whether or not the mine will be reopened. The mine was a lifesaver to the people of that locality during the depression and since then many of 73. Above; told to me by E.L. Flannigan.
them have continued to work there. Now, all those men have been thrown out of a job. The people of that section are looking with interest and expectation to the reopening of the mine; whether it will or not is a matter that cannot be answered at this time. We shall, in the meantime, hope and pray that operations will soon be resumed again.

End.
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