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PRELIMINARY EXAMINATION

of the

GUILD-ADAMS-RICE PLACER MINE

YERRINGTON, NEVADA.

INTRODUCTION. The scope of this examination is limited to a review of existing reports, supported by a study of the surface and exposure of gravel in the several open pits. Mr. James Adams accompanied me during my visits on the property. He is quite familiar with the various operations to date, but had no detailed data relative to the results of sampling and production by other companies and individuals. I believe that his statements were correct to the best of his knowledge.

I have read a copy of the report by Mr. E.W. Bedford, engineer, in charge of operations for Messers Platt and Guild during 1932 and up to May 1933. This may be considered in the nature of an owner's report.

Two sketch maps attached were prepared by Pierre Beaurey, one of the foremost placer mining Engineers of California. Inasmuch as there were no maps available I have used Mr. Beaurey's maps and have shown thereon the approximate location of various sample shafts and shovel pits, resulting from former operations.

GENERAL FEATURES. The property consisting of some 40 placer mining claims and fractions, aggregating a total of approximately 800 acres, is held by right of location in accordance with U.S. Federal and State Laws.

Climatic conditions are favorable for operations with the exception of occasional periods during the winter season.

Good Roads extend from the town of Yerrington, Nevada, which is located about 10 miles south-westerly from the property.

Electric power is supplied at the usual rates over a branch distribution line that was built by Platt and Guild over their own right of way. Suitable transformers are now in service.

Labor supply does not present any problem.

Water supply so very essential to placer mining operations is presently obtained from a well that was sunk by Platt and Guild. This is equipped with a 7" Pomona deep well pump that has a rated capacity of 600 gals. per minute, delivered to a supply tank, located beside the pumphouse. Two Gould Triplex pumps deliver the water to the 105,000 gallon storage tank thru a 4" pipe line at the rate of 155 gallons per minute. The storage tank is two miles up the gulch from the pump station and approximately 650 ft. elevation. It is possible to suppliment this supply by returning the water from settling dams located below the sluices by means of a supplementary pumping system. Mr. Adams stated that this return water could gradually be built up to about 1000 gallons per minute.

Tailings Disposal becomes a matter of major importance due to existing surface topographical conditions and stream gradient. This will be discussed in further detail in later paragraphs.

DESCRIPTION OF DEPOSIT. The deposit occurs within a canyon for a distance of 17,400 feet, and extends beyond the canyon mouth in a "Delta" or alluvial fan, as shown on the accompanying sketches. In general the gravel consists of fragmental material; the direct product of erosion, showing little evidence of stream action, and secondary sorting. The major portion of this deposit varies in size from sand to fragments 3 to 4 inches thru, but there is an appreciable proportion of coarser material and occasionally a large boulder. Heavy seasonal rains during the period of deposition is evidenced by the irregular layers of coarser material and sands. Mr. Adams advises that a small amount of fine gold occurs thruout the upper portion, but the important values, and coarser gold particles and nuggets, are concentrated on or near bed rock.

The deposit varies in thickness between 15 ft. at the upper end and 30 ft. at the lower end of the canyon. Widths at the surface, as noted in very indistinct figures on Mr. Beaurey's map, vary from 150 feet to 610 feet.

Remnants of a tertiary river channel, filled with well rounded and thoroughly metamophosed igneous boulders, that have been cemented by lava indicate that it was relatively of the same age as the so-called intervolcanic channels of the western slope of the Sierra Nevada Mountains. The general course of this channel as exposed in the canyon is indicated on the map in red. Apparently there is little knowledge of the value of the gravel in the tertiary channel, as bed rock has not been reached. The source of the gold found in the deposit under consideration is not definitely known. It probably represents the erosion products of numerous small gold bearing veins, that may have existed when the present mountains were many hundred of feet higher.

There are no large gold veins in the immediate vicinity known at the present time. Certainly there is gold present that varies in size from very fine particles up to nuggets weighing nearly one ounce. It averages 930 fineness.

Digging is easily accomplished by means of gas or diesel operated shovels as the material is very loosely consolitated. There is no clay present, so that all of the gold is easily released from the gravel during washing.

Bedrock is thoroughly oxidized and fractured, and with the exception of an occasional hard like, it can be excavated with the gravel and the gold contained in bedrock seems easily recovered.

It is my opinion that the characteristics of the gravel deposit provides a natural division into two classes of placer operations.

1- The "Delta" or alluvial fan below the canyon mouth may prove suitable for dredging.

2- Within the canyon, extending from the mouth to the upper limits, excavation by shovel is preferable with transportation in trucks to a suitably located washing plant, high on the hillside, tailings from which can be discharged on valuless areas.

HISTORY. The various mining claims, which I will not undertake to name or describe, were located over a considerable period extending thru 1931-32. During 1932 Judge Clark J. Guild of Carson City and Samuel Platt of Reno entered into an agreement to operate the property. Water was developed on the Don Claim, far down the slope of the "Delta", below the canyon mouth, by sinking a well 165 feet deep. Pumping equipment was purchased and installed. This consisted of a 600 G.P.M. Pomona Deep well pump to deliver to a small supply tank and 2 Gould Triplex pumps (155 G.P.M.) for delivering to a 105,000 gal. storage tank, which is located about two miles up the canyon at an elevation of 650 ft. above the pump station. A 4" pipe line was laid between the pumps and tank, and a 6" pipe line from the tank to the washing plant.

An electric power line was built on a privately owned right of way from the main distribution line of the Power Co. and a complete unit of transformers and switches built near the main pumping station. All of this equipment remains in place with the exception of the washing plant, which has been partly dismantled. The total capital expenditure for this plant is reported to be approximately $60,000.00.

The plant was in operation for about 6 months. Mr. E.W. Bedford was the engineer and Mr. J. S. Adams was Superintendent.

The material supplied to the washing plant was excavated from the open cut pit marked "C" on the accompanying sketch, by means of a gasoline shovel, loaded into cars and hoisted up an incline tramway to the gravel bins. There is no record either of the number of cubic yards washed or the recovered value per cubic yard.

The plant was designed by Mr. Bedford. It washed the gravel succesfully, but because it was improperly located, insufficient tailing storage resulted, thereby necessitsting undue handling, including pumping 60 cubic yards of gravel per hour, 30 feet high, to deliver to a flume for discharging to the dump. Arrangements for excavating and delivering of the gravel to the plant resulted in numercus inefficiencies all of which contributed to increasing costs. Finally the operations were discontinued and I am informed by Mr. Adams that the closing of the Nevada Banks hastened the end.

In May 1933 the property was optioned to the Apex Mining Co., Long Beach, California. Mr. Albert Stephens, an oil operator, provided the major portion of the capital, formed a Company and sold "units." Mr. Stanley was the engineer in charge. His preliminary sampling was confined to sampling in 3 shafts, but later a number of additional shafts were sunk. Mr. Adams states that after the shafts had reached bedrock, samples were taken along the sides instead of washing all the gravel removed and maintaining a proper record.

Mr. Stanley purchased a "dry land dredge" from the Mine and Smelter Supply Co., in Denver, Colorado, at a delivered cost of $40,000.00 following which was an additional very high cost for erection. Excavating was done by a ½ cubic yard Northwest shovel that delivered to the washing plant at the rate of 90 cu. yds. per hour. Improper arrangements for tailings disposal quickly caused difficulties to which were added the high cost of frequent movements of the dredge, by means of the shovel and a 75 H.P. Caterpillar tractor, necessitating unduly long and expensive delays.

In September Mr. Stanley left the employ of the Company. He was succeeded by Max Vall a practical placer operator, who in turn was succeeded by a Mr. Bradley, reported to be an expreacher. I have carefully observed the general features of both of these former operations and can readily understand why they were unsuccesful. Their dredging operations were confined to pit "D". Later they excavated pits "A" and "B" for purpose of sampling and other unknown reasons.

During 1934 Mr. Chester Carter was sent to the property by the Gold Coast Limited Co., then operating in Gouler Canyon, 9 miles from Randsburg. They wished to sample and appraise the property with the view of effecting a consolidation of the two operations. I understand that the terms of the proposed deal proved unattractive to Messers Guild, Adams, and Rice who now own the property.

However, from Mr. Adams' description, Carter's sampling was very well done. He sunk a number of shafts, sampled the open cuts, where accessible; washing the entire spoil recovered in all cases. There is no record available of his results, but he read his report to Mr. Adams, and stated that in the section marked "A" shown on the sketch map in red, which is 1000 ft. long, he estimated the gross recoverable value to be $160,000.00. Furthermore on the face of cut "B", marked "X", a sample 1 ft. deep across the entire face of the cut averaged $1.15 per cubic yard.

I have outlined the history of the early operations and sampling in some detail because the evidence rather conclusively indicates the reasons for failure in what should be a relatively simple operation, with modern excavating and transportation equipment.

SAMPLING & VALUES. Mr. Adams states that in addition to the various engineers noted in the preceding paragraphs, the property was inspected rather briefly by the following engineers:-

Mr. Pierre Beaurey, for the Griffin Interests--------1931
Mr. Short, for the Griffin Interests--------1931
Mr. McShane, for Natomas Dredging----------1931
Mr. Van Law, ----------1936

Records of sampling results are very meager. I was well acquainted with Mr. Beaurey and familiar with his methods and I am using his sketches to illustrate certain features.

In my opinion the two best attempts to sample the deposit were made by J.A. Adams, while acting as Superintendent, for the Apex Company, and by Chester Carter. Mr. Adams excavated with the power shovel two trenches from surface to bedrock across the entire deposit; and washed all of the spoil. He informed me that the average value varied between 50 cents and 70 cents per cubic yard, but that detailed data was not prepared.

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Many of the other sampling records as reported by Mr. Badford included an undue proportion of the bedrock material. Furthermore the entire spoil from the shafts had not been washed and there was evidently no systematic attempt to record the values from various horizons in the gravel. Inasmuch as I have not personally done any sampling my opinions will be based upon Mr. Adams valuation of 50 to 70 cents per cubic yard; rather than on the higher and apparently erratic sampling results reported by some of the other engineers.

VOLUME OF GRAVEL. Consideration of the volumn of gravel that may prove profitable, will be influenced by the method of operation that will most successfully recover the contained gold, with a minimum of capital expenditure. Detailed data relative to value per cubic yard, and depth of gravel in the "Delta" area is not available except

for some rather casual panning tests that were made while sinking the water well. Evidently thru out much of this area the depth from surface to bedrock is greater than 50 feet, and in some sections approximately 100 ft. deep. It is my opinion that this area could be most advantageously operated by means of a modern large capacity "gold dredge" of the Yuba type. Due to the considerable amount of capital necessary for such an enterprise and lack of detailed data relative to all important factors, I do not further consider this section at the present time. That portion of the deposit lying within the canyon proper has received benefit of considerable sampling and two attempts at operation have been made.

I have not made an estimate of the volume, but for the purpose of this preliminary investigation refer to the estimates of Bedford and Beaurey. The former (Bedford) estimates "3,780,000 yards subject to removal for washing." Mr. Adams states that this estimate includes a considerable portion of the "Delta" gravel. I do not agree with this estimate, because of lack of knowledge relative to values, depth and other factors. Mr. Beaurey estimates a total of 1,391,870 cubic yards as noted on the accompanying sketch map. This estimate appears to coincide more nearly with available estimats, until such time as a survey and sampling campaign is completed.

PROPOSED METHOD OF OPERATION. I have confined my study to the "working" of the gravel within the canyon. The reasons for failure of the two previous operations are quite apparent. It is evident that successful operation will be dependent upon:-

1-Efficient and systematic excavation and transportation of gravel to the washing plant. I am very confident that this can be done by Diesel shovel loading into modern automobile trucks, that haul over properly designed roads.

2-A washing plant favorably located to provide ample space for tailings disposal.

3-Plant design should include large storage bins, equivalent to at least the capacity of the plant for 24 hours. This will assure a more continuous washing operation in event of necessary repairs to shovel or equipment.

4-Simple design of plant that will permit of its' removal to a new site, when the hauling distance has increased beyond the limit of efficiency.

It is my opinion, based on somewhat similar operations elsewhere, that with a well organized and systematic operation the unit costs under this method should be 30 cents, or less, per cubic yard.

INDICATED PROFITS. I am unable to make any definite statement relative to future profits. These will be dependent, of course, upon the volume and value of the gravel washed and the cost of operation. For the purpose of this report I have assumed that Mr. Beaurey's estimate of 1,391,870 cubic yards of gravel is approximately correct. Mr. J.A. Adams' statement relative to average value impressed me as being more reasonable than the reported results of sampling by the engineers. In his opinion the average would be somewhere between 50 and 70 cents per cubic yard. Reference to the sketch shows that only 3 shafts have been sunk in the lower section of the canyon, and that most of the sampling had been done in the upper section where the higher values would be expected. Furthermore, the sampling by some of the engineers evidently included an undue proportion of bedrock material as the drifts were extended along bedrock from the bottom of the shafts.

For the above reasons I have therefore assumed an average value of 50+ 70÷ 2=60 cents and an ultimate total of 1,391,870 cubic yards. Then the gross recovered value indicated is 1,391,870 x 60 = $835,122.00. From this total amount must be deducted, in addition to operating costs such items as purchase price of property, capital invested, taxes, plant depreciation, insurance and organization expense. It is apparent that the net realization would be relatively small. Attention is directed to the fact that I do Not make any reference to profits that may be realized from the "Delta" area. I have considered this as being entirely dredging area, and therefore not within the scope of this investigation. Information presently available is entirely too meager to provide a basis for forming any opinion.

CONCLUSIONS. As a result of my rather brief inspection of the property which was supplemented by a review of available data and discussion with Messers Adams, Guild, Rice and others, I have formed the following opinions:

1-There is a substantial yardage of gravel within the canyon section of the property which can be mined and washed at a cost of less than 30 cents per cubic yard for direct charges.

2-Extensive sampling was confined largely to the upper portion of the canyon area. In general the sampling was not systematically performed and the results may be erroneous. However there is reason to believe that the value may average 60 cents per cubic yard, but this must be verified by extensive sampling prior to making any expenditures for operations.

3-The sampling in the lower canyon section is too limited to provide a reasonable basis of appraisal.

4-The "Delta" area can probably be dredged. There is no reliable data relative to the important features. Sampling would prove expensive and a large size dredge would cost upwards of $400000.00. I do not advise further consideration of this section of the property.

5-No doubt the contained values are irregularly distributed and any exact appraisal will prove difficult.

6-In conclusion I feel that the property possess some merit. However, the sampling and operations performed heretofore indicate that the higher grade gravel in the upper canyon may prove limited in quantity as compared to the entire deposit, and for this reason I doubt if the expenditure of sufficient funds for the necessary plant and equipment is justified.