PRELIMINARY REPORT

on the

OAKLAND GROUP

Searchlight, Nev.

by

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SUMMARY and CONCLUSIONS:

The property in question is the Oakland group of claims, located in the Searchlight Mining District, about three miles NE of Searchlight, Nevada. The claims are owned by Mr. A.C.Calkins and are held under possessory title.

The principal vein of the group is of the contact type, with a quartz-monzonite footwall and a brecciated andesite hangingwall. In width it varies from two to seven feet and can be traced on the surface 3000 feet. The vein filling is composed of clay, angular fragments of a dark gray andesite and particles of crushed quartz. The values, principally gold, are in the quartz. The average value of the ore developed so far would probably be $11 per ton, with gold at $20.67 per oz. It may be remarked here that all values mentioned in this report are based on gold at $20.67 unless otherwise noted.

There is no measurable tonnage of ore blocked out; tho it is safe to say that there are from several hundred to one thousand tons in sight. Development work has been done by prospectors in a hap-hazard fashion, so that very little ground has been opened up.

Some labor is available in the camp, but for a formal operation competent miners should be imported.

A small amount of water has been developed by one of the shafts (several hundred gallons per day) and more will undoubtedly be encountered in sinking.

No timber grows in the district and it, with all other supplies would be trucked to the property from Las Vegas, 58 miles; or from Nipton, 25 miles, the nearest railroad point.

From the showings of ore and the geological conditions this prospect is a most attractive speculation. For an expenditure of not more than $50,000, and possibly considerably less (depending on the flow of water encountered in sinking) a development program can be carried out which would prove conclusively whether or not it will make a mine, probably within a year.

The financial set-up and expectations should be more or less as follows: Assuming that an initial expenditure of $50,000 developed enough ore to warrant erection of a 50-ton mill; and that another $50,000 were spent in building the mill and providing additional mining equipment, as well as taking care of property payments as they came due, the total investment up to the start of production would be $100,000.

Assuming further that the mill heads would run $11, with an 80% extraction and a total mining and milling cost of $4.50 the net operating profit per ton would be $4.30, which on a 50-ton production and a 300-day year would indicate a yearly profit of $64,500, thus returning the entire investment in slightly more than a year and a half after production started. This is based on gold at $20.67/oz.

Should the price remain at its present level of $35.00 the cost of production would be practically the same but the indicated operating profits would jump to $163,500 per year.

LOCATION and ACCESSIBILITY:

The Searchlight Mining District in in the southern part of Clark County, Nevada. The attached road map of the Automobile Club of Southern California shows in detail the highways and railroads in the vicinity. The road to the Oakland group, 3 miles from Searchlight, is rough but quite passable for all-year operation. Searchlight is served by three state highways, maintained in excellent condition.

Mail is delivered to Searchlight daily except Sundays by auto from Nipton.

Telegraphic communication is by telephone over a privately owned line from Nipton, entirely unreliable. There is no long-distance telephone connection.

GENERAL:

The Oakland group is in the heart of the Opal mountains, being a short group of hills on a roughly north-south axis. They are composed of quartz-monzonite flanked by andesite flows of various colors and textures, which are cut by dikes of a more basic composition.

The terrain is of low relief, composed of small rounded knolls on a gently sloping plain. Elevation at the shaft is about 3800 feet.

Vegetation and climate are typical of the Southwestern desert country, with little rainfall and a range in temperature of from a few degrees below freezing in winter to a maximum of 110 degrees in the hottest summer months.

There is no electric power available in the camp at present, tho it will be supplied by Boulder dam (distant 35 miles) when completed. At present fuel oil for diesel power can be delivered for about 5¢ per gallon.

Production of the various properties in the camp is as follows:

Pompeii M. & M. Co. - - - - - - - - -	$ 50,000
Southern Nevada M. & M.Co. - - - - -	80,000
Searchlight M. & M. Co. - - - - - - -	300,000
Santa Fe M. & M. Co. - - - - - - - -	60,000
Cyrus Noble M. Co. - - - - - - - - -	500,000
Duplex M. Co. - - - - - - - - -	1,300,000
Quartette M. Co. - - - - - - - - -	5,000,000
Blossom M. Co. - - - - - - - - -	1,000,000

The Quartette mine was worked to a depth of 1400 feet on the slope of the vein and, according to reports, is just entering the primary zone. It is being reopened at present. The Duplex went into a barren zone at 700 feet and has not been prospected deeper; but the last ore mined was partly oxidized.

Mining conditions in the camp are favorable, with no excessive flows of water to pump; and wall rocks that stand fairly well with little timbering.

Property and Ownership:

The Oakland group consists of five claims as follows:

Side Line
San Mateo
Oakland
Gold Reef
Cabell Total acerage: 98.91

These claims are not patented but are held by annual assessment work. They have been held by the present owner for thirteen years and the necessary Proof of Labor has been recorded each year; so that clear title can be passed.

There are three prospect shafts on the contact vein, all within a hundred feet of each other, besides numerous trenches and open cuts along the strike of the vein. Two of the shafts mentioned extend to water level, while the third one is thirty or forty feet deeper. This last one was cleaned out and deepened by a leaser who was on the property last year. This man put in a mill with four Nissen stamps and some miscellaneous, worn-out machinery, most of which has since been removed as he had not paid for it. He made a number of mill runs but at such shallow depth did not have enough water developed with which to mill continuously and could not have gotten by working on development ore even if he had had enough water. He was forced to give it up and since then the shaft has caved at the water level.

GEOLOGY:

The general geology of the Searchlight district has been described by Ransome in Bulletin 303 of the U.S,G.S. In addition to this information a very thorough geological and petrological study was made of the district in 1907 by Mr. James Stirling, an Australian geologist. A copy of his report is attached and particular reference is made to pages 3 to 10 in it.

Most of the known mines in the Searchlight district are on the west flank of the Opal Mountains. A glance at the transverse section through these mountains, as made by Ransome, will show that geological conditions are the same on the east flank where the Oakland group is located. There are two differences in local conditions on the Oakland from those in Searchlight which, in the writer's opinion, are more favorable than in Searchlight proper: In Searchlight the veins are all formed by replacement or infiltration of the "Bird's Eye" andesite, while on the Oakland there is the strong contact vein, well defined and traceable on the surface for a greater length than anything in Searchlight. The hangingwall rock of this is the same "Bird's Eye" andesite as that on the west flank of the Opals.

This contact vein strikes almost east-west and dips about 41 degrees to the south. To the south of it, in the Bird's Eye, and striking north-south, so that they intersect (and stop at) the contact are a number of parallel veins, all of which pan free gold at the surface. The junction of these with the contact should all make orebodies. There are no such intersections as these in Searchlight.

As already noted, the vein filling of the contact is composed of a ferruginous clay matrix in which are angular fragments of decomposed andesite and quartz particles. In sampling, of course, the entire vein filling is included in the sample. However, a simple washing of any given sample will halve the weight of it and approximately double the value of the residual quartz. The results of a number of such tests are shwon on the attached table of assays; and suggest a way to increase mill capacity as long as this crushed condition of the vein holds.

It will perhaps be noted that the writer does not stress the values shown in the tables of assays. This is because he does not know from where they came on the property or the parties who took them. However, the four samples shown on the sketch map of the three shafts were taken and assayed by the writer and are therefore vouched for by him. Since none of the samples represent any tonnage they are important only because they show that there is mineralization of commercial grade and width, which, together with the favorable geological conditions would indicate that there xxx is every chance of developing enough ore for a 50-ton daily production.

RECOMMENDATIONS:

Should the property be taken over from the owner the writer would recommend the following as a development program: Straighten and enlarge the prospect shaft which has the most ore showing in it and sink it to the 400-ft. level along the slope of the vein. Drift along the vein at the 200 and 400 foot levels; and from a certain point on the east drift of the 200 cross cut to the north to study a fault which has displaced the vein at the surface. With adequate equipment a complete and comprehensive program could be finished within a year.

Searchlight, Nevada
13 February, 1934.