



THE "AMO" PIPING

Photographed March, 1901



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## SUNSET MINING COMPANY MINES

### Location of the "Amo" Group

This group of mines is situated in Butte County, California, three miles east of Oroville, on Cherokee Ravine, and one mile from the Feather River, a distance of 153 miles from San Francisco. They are reached by rail to Oroville, 150 miles, thence over a good road, by private conveyance, to the mines. Altitude, 250 feet, and directly in the citrus belt of California, where it never snows or freezes in the winter beyond a white frost, hence can be worked all the year under the most advantageous circumstances. Population of Oroville is 2,000.

### Area and Title

The property consists of 220 acres of mineral lands, to which the title is perfect, 140 acres of which is patented land direct from the U. S. Government, and 80 is held by virtue of location, and a quiet, undisturbed possession for six years under the mining laws of the United States.

There are on the property three buildings, all in perfect condition, which are used and known as the "Amo" Mining Camp. They consist of a cook-house, and dining-room, a bunk-house and office, a blacksmith shop, a stable with sheds for the wagons and lumber, and a commodious wood house, with other necessary outhouses; also a small, but sufficiently large, isolated powder house.

### Character and Extent of Auriferous Deposits

The "Amo" Mine, which is operating, being hydraulic, the character of the deposits is gravel and is an ancient river channel, of which there is 100 acres, all of which is gold-bearing, the value of which varies from 15c. to \$2.00 per cubic yard. From the hydraulic work done during the past year and the numerous test holes made over the entire 100 acres, we place the average value at 25c. per cubic yard. The majority of the shafts which have been sunk to bed rock are 130 ft. to 150 ft. deep. There is, however one portion of the auriferous gravel consisting of about 40 acres on which there is considerable of a hill where the gravel is 225 feet to 250 feet deep. We estimate the average depth of the entire auriferous gravel deposits, all of which are in the ancient river channel, at 100 feet, which gives a total of 16,133,300 cubic yards, valued at 25c. per yard amounts to \$4,033,325.

This property faces on the Feather river and extends up Cherokee ravine about one mile into which the tailings are dumped. The present hydraulic operations are located in a gully which empties into Cherokee ravine at the upper end of the Company's properties. The location of the giant at the upper end of the sluice boxes is about a



third of a mile up this gully through which the sluice boxes extend nearly the entire length.

The water which is used for hydraulicing is taken from one of the branch ditches of the Palermo Land & Water Company which crosses the Company's property and is conducted to the Giant by a pipe 18 inches in diameter at the upper end and 12 inches at the lower end, a distance of about 600 feet where a fall of 110 feet is obtained.

The gravel in the old river channel that we are hydraulicing consists mostly of fine material, and stones well water-washed and rounded, none of which are so large that they cannot be lifted by one man, consequently they are readily carried through the sluice boxes by the force of the water. There are no large boulders found in any of the test holes that have been sunk anywhere on the property. This is a feature which is very advantageous to hydraulicing, and successful working of the mine because all of the gravel can be readily washed into the sluice boxes and carried through to the dump without the aid of being blasted and moved by means of derricks as is frequently done in hydraulicing mines. About 600 feet of this sluice box is through a cut made through solid rock, part of which is 20 feet deep and is known in mining parlance as the "rim rock" of the ancient river channel. This ancient river channel has been known to exist there since the early '50's and was probably the feeder of the extremely rich pan and rocker diggings which were found in Cherokee Ravine, and on which it is reported there were at one time 1,000 men encamped washing out the gold, the product of which is reported to have been over \$1,000,000. This ancient river channel is readily traced through the connecting lands to the river front of the Feather river on the Company's properties, where there was a large hydraulic mine opened and operated during the early days of California, which was so profitable that the Company brought its water through ditches and flumes a distance of about 40 miles and paid labor at the rate of \$10 per day. This mine was successfully operated until the Debris Law was passed in California some years ago, when it was compelled to stop work because the tailings were dumped directly into the Feather River. This old hydraulic mine consists of about 20 acres of auriferous gravel, which is 60 or 70 feet deep, and will average 25c to 40c per cubic yard. As this mine is on a bench which has a rock bottom and is about 40 feet above the water of the Feather river, here is an excellent chance to install a modern electric gold mining dredge, of which there are now eleven operating within a radius of six miles of Oroville. These dredges cost \$60,000 to \$100,000 each.

### **The "Amo" Hydraulic Operations**

The present hydraulic operations of the "Amo" Mine enables us to wash out 800 to 1,000 cubic yards per day. At this rate it would take about eighty-five years to wash out the gravel which we have. What we want to do is to install an additional



hydraulic plant three times the size of the present one, with all the modern appliances. This we can do by taking water from the main ditch of the Palermo Land and Water Company, across Cherokee Ravine, by putting in a pipe line about 2,000 feet long. This would give three times the amount of water we are now using, and a pressure of about 150 feet. With such an equipment as this we could wash 2,500 to 3,000 cubic yards per day with the same force of men that it requires to run the present mine. This would yield \$500 to \$600 per day, with a working expense not to exceed \$75.

### **Another Valuable Feature**

The location of these additional unequipped mines of the "Amo" group, all being within one mile of the present "Amo" Mining Camp, where we have an experienced mining man as Superintendent, Mr. Ira A. Pease, who would superintend the entire group of mines, which would all be operated from this camp. This is an economical and advantageous feature of the whole situation.

### **Special U. S. Franchise Granted the Sunset Mining Company**

About fourteen years ago a law was passed in California stopping all hydraulic mining, which caused the gold output of the State to fall from about \$60,000,000 annually to \$12,000,000, and entailed a heavy loss to the hydraulic miners. The reason of this was because the tailings went into the rivers and impeded navigation, also caused them to fill up and overflow agricultural lands. About four years ago a special U. S. Commission was appointed to grant special license to hydraulic miners in this State when they complied with certain conditions. These conditions having been complied with we were then given this franchise. This is valuable because it enables us to prosecute this form of mining in our present location to almost any extent, and, as hydraulic mining is by far the most economical and profitable, we are in a position to make a good deal of money.

### **An Option**

We have an option to purchase 480 acres of adjoining property at \$15 per acre, about 150 acres of which is auriferous gravel of the same ancient river channel we are mining. We can purchase this when we want it because we have the key to the whole situation in owning Cherokee Ravine, the dumping ground, and the debris impounding dam with the United States franchise to pursue hydraulicing.

### **"Amo" Quartz Vein Proposition**

About one-half the way down Cherokee Ravine, on the Company's properties there is a quartz ledge containing gold on which there are several old prospect holes, one of which is about 30 feet deep, the quartz from which assays \$3.00 to \$18.00 per ton. This quartz ledge, which comes to the surface at this point, and then sinks again as it crosses the company's property, runs northeast and southwest, and is in direct line





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"CLEAN-UP" STATION AND FLUME OF "AMO" AT LOWER END OF THE RIM-ROCK CUT

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with the Banner Mine, which is about two miles across the Feather river. It is presumed to be the same vein that the Banner Mine is operating. This mine was first opened in 1858, and has been operating almost continuously from then until the present time, and is now operating with a complete mill of 40 stamps, with all of its attendant paraphernalia, such as hoisting works, concentrators, rock drills, machine shops, etc. About ten years ago this mine was sold to an English company, who now operate it, for \$750,000.

We want to install a small electric hoisting works on the "Amo" quartz vein and find out what is in it.

### **The "Amo" Gold-Dredging Proposition**

The value of the gravel on which we would like to install a modern electric gold-mining dredge, which would be operated from a movable track, is about \$1,500,000. The expense of installing the dredge would be about \$75,000. As this dredge would handle an average of 1,500 cubic yards per day, which, valued at 25c per cubic yard, would yield \$375 per day.

Dredge operating expenses per day, at \$50, net profit.....\$ 325 00  
" " " " month (30 days) net profit..... 9,750 00

There being eleven of these modern gold dredges at work within six miles of Oroville, and four more in course of construction, two of which will cost \$125,000 each, we have sufficient data of the most conclusive kind as to just what we can do, particularly as we have an interest in two dredges that are operating, by means of which we keep close data of what they are doing.

### **Electricity**

The electrical energy to operate these dredges is supplied by either of two companies, who bring their wires into Oroville from the mountains, a distance of fifty miles, and are ready to supply us at our mines with all the power we wish to operate both dredge and quartz mills at the cost of \$5.00 per month per horse-power. This is about one-half of the cost of steam in that locality.

### **Sunset's Other Properties**

When the Sunset Company succeeded the Orange Mining Company in March, 1900, it took all of the Orange mines that are located in the northern portion of California, and which consist of four quartz properties that have been tested and are known to be good, none of which, however, are equipped. Two of them were operated for seven or eight years by the Little Orange Company as shipping mines; that is, the ore was taken out by means of a small hoisting equipment, after which it was sorted and the valuable portion of it hauled to the railroad and sold at a profit, which enabled the payment of dividends for about six years to its few shareholders.



When the Sunset acquired these properties it was deemed best to stop work on them and push work on the "Amo" group near Oroville. These Orange properties are all good and should be equipped with modern hoisting works and mills as soon as we have the money to do so. They can be made to yield a monthly profit of \$10,000 to \$50,000 each.

### Important

When the Sunset Company acquired the Orange properties it issued in payment thereof 150,000 shares of its stock, but this stock does not rank for dividends until all of the stock which has been sold for cash, together with this 150,000 shares, can receive dividends of not less than 50% per annum. As these 150,000 shares are held by the present managers and officers of the Sunset Mining Company, it is to their interest to push as rapidly as possible the equipment of the other properties in order to bring their stock to a paying basis; but until this is done they do not receive any benefit from their stock. We believe that we can bring this about within two years, and maintain the payment of dividends on the basis of not less than 50% per annum for the next twenty years. In order to bring about these results we desire to sell as quickly as possible 200,000 shares of Sunset stock. Fortunately, we are in a position to pay dividends of 2% per month to all new stockholders from our present workings.

### 17,000 Mines

There are in California 17,000 mines, only a few of which are equipped and working. A few months ago we sent out word that we wanted to invest in mining, the result of which was, 600 mines were offered us. We believe there are many good mines among them which we would like to take hold of if we had the money, but we must first equip and put on a paying basis those which we already own, after which we can investigate and invest in those which we deem best and advisable; hence it can be seen there is no limit to successful gold mining business to be done in California.

### Come and See

We invite everybody to call on us at our offices and go with us to see our mines in operation. It is very interesting to those who are not acquainted with this kind of business.

### 100,000 Shares

As soon as we have sold 100,000 shares of stock we wish to commence the equipment of the additional hydraulic mine, as we consider this beyond all pale of risk and speculation. The result of this one equipment would be a daily output of from \$500 to \$600, which amounts monthly to.....\$15,000

Expense per month at \$75 per day..... 2,250

Net profit.....\$12,750



Working eight months in a year (we always have to stop this hydraulic work in the summer about four months on account of low water) gives us an annual net profit of \$102,000. Presume we sell the entire 200,000 shares within the next six months, this would require for dividends \$50,000 and leave a surplus of \$52,000. Estimate the annual net profit of the dredge when installed at \$100,000 the total net profit would be \$202,000.

Again, in conclusion, would say that we are very sure of this position because we have been operating the "Amo" hydraulic mine about a year and know what it does.

### Statement

Sunset Mining Company of California. Authorized capital.....\$10,000,000  
10,000,000 shares.....\$1.00 each

### Resources

"Amo" group of mines.....\$4,000,000  
50 per cent. off for working expenses, (net).....\$2,000,000  
Estimated value of additional mines..... 150,000  
Interest in gold mining dredges..... 2,000  
Cash on hand..... 20,000  
\$2,172,000

### Liabilities

Stock outstanding which does not rank for dividends.\$ 150,000  
Stock, receiving dividends..... 12,000  
Indebtedness, none .....  
\$ 162,000  
Value of resources over liabilities.....\$ 2,010,000

### Summary

Total number of shares authorized..... 10,000,000  
Total number of shares issued..... 162,000  
Remainder in treasury..... 9,838,000  
To be sold as occasion requires to acquire and equip mines.

### Officers

(MRS.) K. E. ALLINGTON, *President*,  
16 State street, Rochester, N. Y.,  
Real Estate and Loans. (Handles her  
own property only.)

FRANK ROGERS, *Consulting Director*,  
Retired Miner, San Francisco, Cal.

IRA A. PEASE, *Vice-President*,  
Superintendent of Mines, Oroville, Cal.

HENRY ARMSTRONG, *Consulting Director*,  
Mining Engineer, Retired, San Francisco,  
California.

G. W. RUMBLE, *General Manager and  
Secretary*,  
Company's Office, Chronicle Building,  
San Francisco, Cal.

San Francisco, Cal., March, 1901.





UNITED STATES OF  
AMERICA

# State Mining Bureau

A. S. COOPER, State Minerologist

Address all communications: STATE MINING BUREAU, SAN FRANCISCO, CAL.

—TRUSTEES—  
W. S. KEYES, . . . PRESIDENT  
THOS. B. BISHOP, VICE-PRESIDENT  
J. E. DOOLITTLE  
J. F. PARKS  
ALEX. F. MORRISON

SAN FRANCISCO, CAL., Dec. 8, 1900.

MR. G. W. RUMBLE,

*Secretary Sunset Mining Co., Chronicle Bldg., City—*

DEAR SIR: In compliance with your request I stopped at Oroville, Butte County, on my way to San Francisco, to examine your mines, the "Amo" group, three miles east of that place, and to give you my opinion regarding them.

You own an area of several hundred acres of gold-bearing gravel. I cannot state their actual value, not having time to make a detailed examination, but experience has proven that all gravel beds in this vicinity are rich in gold (rich enough, in fact, to be paying propositions in the early days when labor commanded \$10.00 per day).

The present workings consist of a sluice-way cut through the rim rock to tap the gravel in an ancient river channel from 60 to 160 feet deep. You are piping with 600 inches of water and have ample space to dump all waste material.

On the banks of the Feather River, within one mile of your present camp, you own a gravel deposit which was worked at a profit before the debris law came into effect. You are in a position now to re-open this mine by means of a modern electric mining dredge placed on a movable track, as you can dump the waste material on your own ground and not interfere with the debris law. This part of your property probably contains more gold than all the rest combined, as it is on the first shelf above the river.

On the west of your claim is a gulch with steep slopes. I recommend you to start an opening here with two giants, with 1,000 to 1,200 inches of water, and tap the gravel bed at this point. Water for this purpose can be had from the main ditch at a nominal cost, requiring only a pipe line about 2,000 feet. The cost of this pipe line and the installation of sluice-boxes and giants would, no doubt, soon be repaid as the gravel at this point appears particularly good and is from 90 to 150 feet deep.

Walking over the ground I noticed several old prospect holes, which disclose stringers of rich gold quartz, which I recommend you to prospect and equip as proposed.

Very truly yours,

FRED C. MATHYAS, C. E.,

*Field Assistant State Mining Bureau.*