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PRINTED: 01/15/2003

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: COMMODORE GROUP

ALTERNATE NAMES:

YAVAPAI COUNTY MILS NUMBER: 267

LOCATION: TOWNSHIP 9 N RANGE 4 W SECTION 11 QUARTER SW  
LATITUDE: N 34DEG 07MIN 59SEC LONGITUDE: W 112DEG 39MIN 01SEC  
TOPO MAP NAME: YARNELL - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

GOLD  
COPPER  
SILVER

BIBLIOGRAPHY:

USGS YARNELL QUAD  
ADMMR COMMODORE GROUP FILE

COMMODORE GROUP

YAVAPAI COUNTY

RRB WR 7/15/83: Jerry Carter, 6609 S. Rita Lane, Tempe, AZ came in to look at the Commodore file near Octave. He is checking it out for a rrined who reportedly owns it.

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## COMMODORE MINING PROPERTY

By Huff E. Kring  
Cons. Beologist.

### LOCATION.

The Commodore Mining Property is located in the southern extension of the Weaver Mountains, in the Weaver Mining District of Yavapai County, Arizona. It is about 15 miles east of Congress, Arizona, and about 3 airline miles east of the Old Octave gold mine. The Hassayampa river flows about 3 miles to the southeast of the Commodore property. The U. S. Highway runs thru' Congress, from Prescott, Arizona, about 35 miles north, to Phoenix, about 65 miles to the south. Congress Junction is about 3 miles south of Congress and is the Railway shipping station on the Prescott & Phoenix Branch of the A.T.& S.Fe Railway.

Congress has one hotel, several cafes, filling stations, etc., and is the nearest post office to the Commodore Mine. The County Highway runs east from Congress to the Octave Mine, a distance of some 8 to 10 miles.

The rest of the way to the Commodore Mine is on a mine road 5 to 7 miles.

### HISTORY.

The Commodore group of 6 claims, quartz lodes, was discovered in 1855 by a famous mining engineer, together with an unknown prospector. This engineer was associated with Tim Foley Mining Company of Colorado in the late 1860's, and early 1870's leaving for Arizona, after organizing an exploration party. Many of his party were killed by Indians, the rest of the party with Mr. Czarnowski, escaping to what was then known as Old Town, San Diego. In 1877 he returned to Arizona and after working with the South Silver King Mine, as Supt. in Pinal County, Arizona, he went to the Weaver Mining District in 1885 and located some 25 lode claims, which he named the Commodore Mine. He explored, prospected and developed the claims for several years, when he leased to the old Leviathan Gold Mining Co., which carried on the work for several years, shipping highgrade oxidized ores to the smelter by wagon trains. No figures are available, on what they shipped but it must have been a very neat sum. Later on the Commodore Mine was leased to the Southwestern Development Company, which company developed the claims and shipped highgrade ores for several years to 1906, when the property was sold to a group of Philadelphia Pa., business men and the mine was put in charge of Col. Knoles Kresky, E.M., who deepened the main working shaft on the Washington Claim to 365 feet in depth, and shipped an estimated \$500,000.00 worth of gold, from the claims, most of this coming from Washington No. 1 and No. 2 shafts. Some very highgrade assays were run on samples from this main shaft, some of them assaying from 6.72 ozs. gold to 10-20 ozs., of gold to the ton.

Pannings of highgrade ore from various levels in this deep shaft went as high as an estimated \$850.00 to the ton at the present price of gold (\$35.00 an oz.)

This property was then shut down in 1908 at the end of the gold boom in that area and except for a small amount of leasing, has laid dormant ever since. During the gold boom in the big gold belt running thru Yavapai County from 1877 to 1908, many gold mines were opened up and put in operation and production. Among these were the Congress Mine, which is about 15 miles west of the Commodore Mine. It has produced some \$300,000,000.00, in gold mostly, with some silver, copper and lead. At the peak of production at this mine, 300 men were employed. Another rich gold mine was the Octave, previously mentioned, which is only 3 airline miles, from the Commodore Mine and produced some \$8,000,000.00, at the old price of gold. (\$20.67) an ounce. Later production at the Octave, after gold went up to \$35.00 an ounce we estimated at \$2,000,000.00. Other famous mines in the area were the Constellation, Senate, O'Brien, King Solomon, Oro Grande, Keystone, Rich Hill Mines, the famous Old Vulture gold mine near Wickenbury, south of the Commodore, which had a production of over \$30,000,000.00 and many others too numerous to mention. These production figures are from Gov't reports and are believed to be accurate.

#### DESCRIPTION.

The Commodore Gold property now consists of a group of 6 lode mining claims with good title. The elevation is 3000 feet above sea level at the old campsite on the Commodore Claim.

#### TOPOGRAPHY.

The topographical features of the Commodore property consists mostly of low flat hills sloping up to the southern foothills of the Weaver Range. These low flat rolling hills are intersperced by small canyons and ravines sloping to the southeast, furnishing a natural drainage of rains from the property. These small dry canyons and ravines furnish dry creeks which drain into the Hassayampa River which is about 3 airline miles to the southeast of the Commodore camp and millsite.

There is no native pine, cedar or juniper timber on the claims, only the usual cacti in several varieties, one very rare, which is found in that section of Arizona. The U.S. Geological Survey map of that area shows that two ranges of foothills, paralleling one another about one quarter to one-half miles apart, rise from 4,000 feet altitude, to the northwest of the Commodore property to 4500 feet. The altitude of 3000 feet at the Commodore mill and campsite increases to 4000 feet where the nearest foothills of the Weaver Range cross the western and northwest part of the Commodore property. Thus, we have an increase of 1000 feet in altitude between these two points. Some of the large quartz veins are found outcropping in the gulches, dry canyons and ravines.

The economics are excellent in many respects on the Commodore gold-copper property. A good year around climate prevails, allowing work every day in the year, if necessary. There is water available in the main working shaft on the Washington Claim, sufficient for a 50 to 100 ton per day mill. A good spring near the mill and campsite, can be developed from domestic use. Two other good springs of pure drinking water, west of the campsite can be developed for any extra water needed for mining or domestic use. The Hassayampa River, southeast of the millsite will furnish water for a large mill. As the quartz veins are long and wide, widening on the surface on one vein to 100 feet in width, the ore can be power shovelled in these. Most of the important veins outcrop from 30 to 60 feet in width on the other claims and the main vein outcrops for over two miles in length. Where underground is done, there is a gouge between the quartz veins and the wallrocks, several feet thick in some of them. None of the veins are frozen to the walls. Very little timbering is required in the shafts as the walls or wall rocks stand up well. Where highgrade oreshoots are mined in the wide veins, the quartz stand up good. All, of these natural economic features, indicate low cost mining and a profitable mine. Good values of gold, copper and silver exist in the veins, these being exceedingly rich in some of the oreshoots. The veins are strong and clear and easy to follow in mining.

The Commodore Mine is only 15 miles from the Railway loading station at Congress Junction. The U. S. Hwy between Prescott and Phoenix, goes thru Congress, insuring easy transportation to labor and supply centers. Low freight rates prevail on ores and concentrates to smelter. Good mining labor can be secured at Wickenburg, about 30 miles from the Commodore Mine. Natural economic conditions on the Commodore property indicate low costs of mining.

#### GEOLOGY.

The geological formations on the Commodore property are mostly granite and schist with some diorite of Mesozoic Era or early Tertiary period. The schists, known locally as the "Yavapai" is of pre-cambrian and so is the granite. The schists, which are composed of both sedimentary and igneous rocks, is believed to be the primary basis rock into which the granite, diorite, granite porphyry and rhyolite-porphyry have intruded.

These intrusive formations are in the form of stocks, batholithic masses of granite with pegmatites, stocks of granodiorite and porphories. The rhyolite dikes cut the granites and schists in a northward direction and are believed to be post-mineralization, but there is no definite proof of this, since in some mining districts thru-out the west, the rhyolite porphories are rich in gold and silver. The rhyolite porphyry dikes are believed to be of Mesozoic or early Tertiary age.

The Yavapai schists formation has been crumpled into generally northeastward-trending belts caused by faulting and other

dynamic earth movement. These rocks have gone thru metamorphic action causing a change in the texture and composition of them. This schist is an altered sedimentary formation with inclusions of igneous rocks (Lava rocks) and plays a very important part in the mineralization of the quartz veins.

The veins on the Commodore property and Weaver District have been formed by invasion of hot molton masses of granite thru the schist formation. These invasions have also caused the formation of granite or quartz porphory veins or dikes to strike out from the granite into the surrounding rocks. These are portions of the granite material, squeezed into the cracks and fissures that opened in the crust around it during its ascent. In other words, these are contact metamorphic rocks.

The metamorphism of the schists rocks has been caused by intense heat, pressure and moisture from the invading molton masses of granite which has caused the formation of quartz veins up to three miles away where one single mass of boss granite has invaded just the Commodore property alone. Part of this has, in my opinion, been caused by overlying masses of igneous rocks of volcanic origin, which has been erupted from volcanoes of past ages over the Yavapai schist formation, before the granites intruded them. Volcanic action close to the Commodore property is proven by Blowout Mountain only five miles to the north which has blown out considerable volcanic material around it consisting of rhyolite, feldspar, and other eruptive rocks. The rhyolite dikes across the Commodore property have been formed from volcanic action and faulting. It is very possible that these rhyolite dikes have played a more or less important part in the mineralization of the veins as on the Commodore Claim, one of these dikes, sidelines the Commodore Vein which has taken a turn from its southwest strike to the northwest, for a considerable distance. Some geologists are of the opinion that these rhyolite dikes are of post-mineralization age, I am of an opposite opinion and believe they were there long before granite invaded the schist rocks, since the schist has inclusions of igneous rocks in many places caused by volcanic action. Briefly the geology of the formations on the Commodore property and surrounding area is very favorable for deep-seated veins going 4000 feet or more in depth, and heavily mineralized with gold, silver, lead, copper, and other minerals.

#### VIENS:

The veins on the Commodore property are composed of quartz of the true fissure type. There are some eight parallel true fissure viens, all of them, except part of the Commodore vein, striking to the northeast, from 45 to 60 degrees and dipping to the northwest about 41 degrees or more. About 3000 feet of the Commodore vein strikes to the northwest with a southwest dip. These quartz viens are from 30 to 100 feet in width, and from 500 feet to 2½ miles in length. They can be traced on the surface on their outcrop.

They are of the meso-thermal type, as they were deposited under conditions of moderately high temperature and pressure at depths of more than 4000 feet below the surface. In general, they have strong and persistent and are characterized by regular form. The wall rocks are granite, schist, granite-porphory and rhyolite-porphory. The veins are not "FROZEN" to the wall rocks but have from a foot to several feet of gouge between the veins and walls.

The Commodore veins are well mineralized, with free gold, silver, and various forms of copper oxides and carbonates known as malachite, azurite and cuprite, with some galena in the oxidized zone. Auriferous iron pyrites, copper sulphides of chalcopyrite silver sulphides and galena are also found in the oxidized zone, where they have withstood lateration by air, surface waters, etc. The exact depth of the oxidized zone is not known in these veins as yet, altho from exploration work in the main working shaft on the Washington Claim, which is down to 365 foot depth, at an angle of 43 degrees, it is believed the sulphide zone will be encountered at 400 foot depth.

Ureshoots from two feet in width to six feet in width have been encountered in this deep shaft and at other places on the property, as well as ten feet in width at one place in the Washington shaft. These are rich in free gold with some silver and copper. The silver usually averages two ounces to the ton, where the gold assays one or more ounces to the ton. All the quartz veins in the Commodore property which have been explored and developed indicate better than average values and also that a vast tonnage of good pay ore is indicated. There is also no doubt of the tremendous tonnage of commercial ores in these large quartz veins outcropping on the Commodore property.

#### ASSAYS:

Over one hundred assays run on samples taken from the shafts, open pits, prospect holes, outcroppings, etc., on the Commodore property give good average values, some of the assays running as high as 6.72 to 10.20 ounces in gold to the ton. Pannings of free gold from the Washington No. 1 shaft have been estimated as high as \$850.00 per ton at the present price of gold. One sheet of 29 assays taken from this shaft gives an average of \$42.94 to the ton in gold. These were not picked samples. Other assays run 3.0 oz., 3.40 oz., 3.65 ozs., 5.16 oz., 2.92 ozs., gold per ton, and so on. Of course there are five samples in the more than 100 assays which show either one or only a trace in gold. There are some ten or more assays on samples during the past two years that I do not show in the engineer's report. One of these taken by an engineer friend showed 0.80 ozs., gold; 5.3% copper, and 2.0 ozs., silver to them.

I have placed an average of \$38.00 per ton gold for the ore in sight and developed in the main working shaft known as the Washington No. 1 shaft, which is 365 feet in depth. This is \$4.94 per ton less than the average ton shown on the 29 assays run on samples taken in this shaft by Col. Knowles Kresky, E.M. who was in charge of the Commodore Mine from 1906 to 1908. One lot of 54 samples taken over six claims comprising selected samples from outcrops and near the surface workings shows an average of \$65.37 per ton in gold. This average is at the old price of \$20.67 an oz.

At the present price of gold this average is \$111.32 per ton. Therefore I believe I could safely say that first class shipping ores, (selected ores) will average from \$75.00 to \$100.00 per ton in gold. This ore is from oreshoots in the big wide quartz viens running in width from two to ten feet in viens from 30 to 60 feet wide. The two terms "oreshoots" and "viens" must not be confused, for when they are, they are misleading. Oreshoots are also known as ore bodies. They are simply concentrations of minerals and metals in the viens.

I will not use the assay figures in this report on the selected highgrade and specimen samples in lots 1 to 4, inclusive on one of the assay sheets, but they are very interesting and show the richness of the Commodore Mines ores in gold.

It is very difficult at this time to give any general average of gold, copper and silver in these large quartz viens without further exploration and development and systematic sampling. But from available information I believe to be reliable, it is believed the viens will average about \$25.00 per ton in gold, and if this turns out to be the case, then we will have a very large and profitable mine, as the ore indicated is of a tremendous tonnage. It is simply a matter of using the proper method of mining and attaining the right mill capacity.

#### DEVELOPMENT:

The Commodore group of six claims is developed by some 12 shafts varying in depth from 20 to 365 feet. There is also a number of open pits, prospect holes, etc., all in the viens on orebodies showing more or less values in gold, silver and copper. The main working shaft on the Washington Claim, known as the Washington No. 1 shaft has an estimated 1000 feet or more of drifts, crosscuts, stopes, etc., showing gold values of \$22.00 to \$27.00 at the 365 foot level and \$21.00 per ton in gold in the northeast drift on the 150 foot level from the last samples taken in it. However, it has produced gold assaying as high as 10.20 ozs., per ton and samples from it have panned as high as \$850.00 per ton in gold. It is believed this shaft has produced over \$500,00.00 in gold from past production. A little development in the drifts and crosscuts on the various levels will undoubtedly open up first class shipping ores again. One group of 29 representative samples taken in the workings in this Washington No. 1 shaft showed an average value of \$42.94 per ton in gold. It is believed that the oreshoots in this shaft which runs from 4 to 6 feet wide will average \$38.00 per ton in gold. Copper and silver should add several dollars to this per ton. Washington shaft No. 2 is 300 feet distant from No. 1 shaft and is 140 feet deep with a 60 foot drift at the 130 foot level. Dump ore from this shaft assayed \$41.80 per ton in gold, copper and silver. The copper assayed 2.45%. This shaft is dry and all in ore, according to reliable information. It is on a vien running parallel to the main Washington vien. The exact width and length is not known. There are two other shafts on the Washington Claim from 50 to 60 feet in depth. There are said by reliable information to be on good orebodies that pan free gold. The Lucille Claim has two known shafts on it from 10 to 75 feet in depth. These are on shafts that show

shafts show good oxidized ores containing gold, silver and copper. These shafts will have to be sampled to get the correct values as to ore in them.

The Lincoln Claim, adjoining the Washington Claim on the southwest, which is on the continuation of the Washington Claim, has two or more shafts each 50 feet in depth. The shaft on the southwest end of the claim is not far from a junction with the Commodore Vein which has a strike to the west. This is the Lincoln No. 6 shaft and ore in it sampled in 1951 showed a value of \$40.61 a ton in gold, silver and copper. The copper assayed 5.35%. A drift should be run from this shaft to contact the junction of the Lincoln and the Commodore veins as undoubtedly there is a concentration of very rich ores in this junction of the two vein. The other 50 foot shaft is on the vein on the northwestern end of the Lincoln Claim and shows oxidized ores, containing free gold, silver and copper oxides and carbonates, and some copper and silver sulphides. I have no assay on this shaft.

The Commodore Claim adjoins the Lincoln and Washington claims on the southeast end, or rather side and has a shaft in the middle of the claim, 50 feet deep on the Commodore vein which parallels the Washington vein until it reaches the southwest end of the claim, when it takes a turn to the west. Ore in the shaft shows free gold. An open pit on the vein shows free gold also. This vein widens to 100 feet wide on its turn and maintains that width for over 600 feet to the west. There is also a 40 foot tunnel started in a wash to this vein. The Commodore vein is rich in free gold but must be sampled to get its values.

Development work on the Grant Claim consists of a 50 foot shaft, a 20 foot shaft, an open pit and other prospect work. The 50 foot shaft shows an assay of 1.68 ozs., in gold and 2.47% in copper, or a value of \$72.63 per ton. The vein shows a width of 30 feet on this claim and extends the full length of the claim, contacting the Commodore vein on its south end. Other development work is on an orebody showing gold and copper, no assays given. The Grant Extension Claim is on the continuation of the Grant Vein to the northeast. This vein which is known as the "MOTHER LODE VEIN" of the Commodore vein system outcrops on the surface to the northeast for 2½ miles. The dip of this vein, like most of the others is 41 degrees to the north. It is developed by one shaft near the center of the claim 60 feet deep on the ore shoot showing free gold and copper. There is an open pit near the northeast end of the Grant Extension claim on a good orebody which assays \$26.95 per ton in gold. Copper and silver sulphides show in this vein. It is about 35 feet in width. There is some other development work on the group of six claims, consisting of open pits, prospect holes etc., not shown on the map as no assays have been made on them. A composite sample taken of mine workings on the Commodore claim in 1951, by an engineer friend gave returns of \$30.36 in gold, silver and copper. The copper showed 1.80%.

## ORE TONNAGE:

It is estimated that there are 14,000 tons of ore in sight and developed in the Washington shaft no. 1, averaging \$38.00 per ton in gold. This gives a total value of \$532,000.00 for this ore. In shaft No. 2 on the Washington Claim, there is an estimated 1300 tons of ore in sight and developed with a possible average of ~~\$\$\$~~ \$41.80 per ton, in gold, silver and copper. ~~1/2~~ This totals \$54,340.00, making a total for the two shafts of \$586,340.00. Ore developed and in sight in the 10 other shafts, open pits, prospect holes, outcroppings, etc., over the six claims, has a possible value of \$750,000.00 to \$1,000,000.00, but of course, the only way to prove this is to sample all these showings properly. However, there is every indication on the group of six Commodore Lode Claims that it will not take long to develop first class shipping ore after the mine is financed.

There is every indication that there is a vast tonnage of commercial ores on the property and that it will be along lived and very profitable mine under good management. And we have the promise of one of the best mine consultants in the United States to manage the Commodore property for us. There is one thing we can be certain of, and that is PLenty OF TONNAGE of good pay ore on the Commodore as indicated by the present mine workings and the big well mineralized quartz veins, outcropping over the property. We plan on acquiring 20 additional claims adjoining the present six claims so as to have a much larger property, and will cover all of the old original Commodore locations. This will give us 520 acres of well mineralized mining land worth possible \$1,000,000.00 at the present time.

These 20 claims will cover practically all of the big Mother Lode system of quartz veins in the immediate area. All of these claims have shafts on the veins, and other work. These shafts are of various depths with good ore exposed in them.

## RECOMMENDATIONS:

It is recommended that the main working shaft, the Washington No. 1, be dewatered and the shaft repaired, and the shaft workings cleaned out so sampling can be done. A hoist and pump with motor and generator will have to be installed. A new map should be made of the shaft and all its work and the geology of the creshoot and vien mapped. ~~1/2~~ The porphory dyke should be studied and sampled for analysis to the southwest at the 150' level.

The ore in this main shaft is six feet wide at the surface, and it is in the sulphide zone, believed to be on the 400 to 500 foot level, then a crosscut should be driven to and thru the five parallel veins to the northwest and to the Commodore vien to the southeast. ~~1/2~~ As there is a large tonnage of ore exposed in this shaft, it should be mined as soon as practical, and the first class ores shipped to the smelter and mill grade put on the dump for the mill which will be built on the millsite on the ~~1/2~~ Commodore claim about 300 feet southeast of the No. 1 shaft. Next, Washington shaft No. 2, should be put into production, as it is in good shipping ore. The 60 foot drift on the 130' level should be driven along the vien, the ore stopped and shipped and at the same time, the shaft should be deepened. It should be sampled first and mapped. Work should be started on other good showings of ore on the other claims that assay good and give indications of opening up good ore bodies of first class shipping ores. ~~1/2~~ Among these are Lincoln

No. 6 shaft, a shaft at the center of the Grant Claim and an open pit, on the northeast end of the Grant Extension Claim. A good sampling job with some prospect and exploration work on the claims will open up other good orebodies of first class shipping ores.

The Washington No. 1 shaft should be developed and ore blocked out for the purpose of building the first 50 ton unit of a proposed 250 ton per day mill. This will be the means of putting the Commodore Mine on a good profitable basis for the next fifty or more years. It will be very interesting to see how the various ore showings on the six claims and the other 20 claims will assay as the exploration work opens up new orebodies on them. There is no doubt of some sensational gold values being discovered from time to time to keep interest at a high pitch as the property is being explored and developed.

It is also recommended that a good comfortable camp be built and an assay office and store room to go with the mill. The road from Octave to the Commodore Mine should be put in good condition for heavy hauling for ore trucks, etc. The county Road Maintenance man has agreed to put this road in excellent condition for a nominal sum.

Unless it is found feasible to install a central power plant near the millsite, then a power line should be run to the Prescott Power line about  $1\frac{1}{2}$  miles southeast of the mill and camp sites where cheap power can be obtained. It might be found to be more economical to install a power plant on the Commodore Mine than to use the electric power from the Prescott-Wickenburg powerline, and this must be investigated.

It is also recommended that the Commodore vein, which has widened to 100 feet on the surface for an estimated distance of over 600 feet should be trenched across at a number of places and if good economical gold values are found, then diamond drill it and prove it for cheap power shovel mining. This would indeed make lots of mill feed which could be sweetened by higher grade ores and brought up to a good profitable grade.

#### SUMMARY AND CONCLUSIONS:

In conclusion I will say, in summing up all the good and bad features of the Commodore Gold property, that it is believed that a very profitable and long-lived mine can be developed on the claims. There are so many favorable features that I do not see any possible chance for failure with this great project, provided we have good management, which will certainly spell the difference between failure and success.

Good management, I have provided for, as we will have a mine manager and consultant who has had world wide experience in opening up and developing mineral and metal deposits with great success. On the Commodore gold property we have nearly all the essential features for excellent economics. Water, power, transportation, climate, good to excellent geology, minimum of timbering, strong well defined veins and oreshoots easy to follow in mining, veins having gouge between wall rocks for low cost mining, good mineralization, even on the surface, veins unusually wide, and some of

them great length, easy to follow on surface where they outcrop.

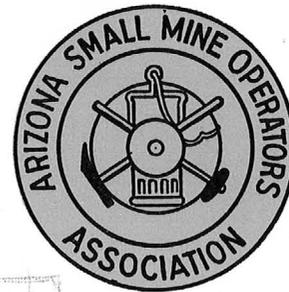
The Commodore Mine is a great gold property with everything in its favor for profits.

Respt. Yours

Huff E. Fring, Cons. M. Geologist

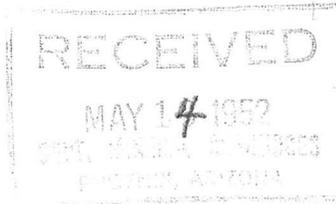
August 24, 1953

# ARIZONA SMALL MINE OPERATORS ASSOCIATION



OFFICE OF STATE SECRETARY  
CHARLES F. WILLIS  
508 TITLE AND TRUST BLDG.  
PHOENIX, ARIZONA

May 13, 1952



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Roger I.C. Manning, Director  
Department of Mineral Resources,  
Mineral Building, Fairgrounds,  
Phoenix, Arizona.

Dear Roger:

Enclosed is my latest letter from Huff E. Kring, received yesterday morning.

Maybe Arthur Flagg can give us some more dope on the subject as Berry reported to Kring what was told to him. I would also suggest that you get in touch with Lund to see what he has to say on the Commodore Mine and Mr. Berry's recent visit.

Please return the Kring letter to me, along with your suggestions.

Sincerely,

*Charlie*  
Charles F. Willis

CFW:VSW  
Enc.

CONTINENTAL VENTURES, Inc.  
Penobscot Building Detroit 26, Michigan



May 25, 1951

Mr. R.E.C. Manning, Chief Engr.  
Department of Mineral Resources  
Minerals Building  
Phoenix, Arizona

Dear Mr. Manning:

A geological engineer by the name of Huff E. Kring has recently called our attention to the excellent possibilities of the Commodore Gold-copper Mine located in Yavapai County, Arizona.

We are entertaining the possibility of helping to finance this mine in order that it may once again be put into operation. Before taking any action however, it has been recommended that we write you relative to this property and that you would be able to give us some helpful information.

If you have any available information relative to the Commodore Mine, we will most certainly be pleased to receive same.

Very truly yours,

CONTINENTAL VENTURES, INC.

*Paul E. Baltzer*  
Paul E. Baltzer

Peb/b

P.S. We are enclosing some descriptive literature on the newest diamond drilling machine of which we are sales representatives.



# California Hydraulic Mining Association, Incorporated

"A NON-PROFIT ORGANIZATION"

Grass Valley, California

August 10, 1940

## OFFICERS AND DIRECTORS

### PRESIDENT . .

GEORGE W. HALLOCK,  
Alleghany, Calif.

### VICE-PRESIDENT . .

C. W. HAFFFEY,  
Colfax, Calif.

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C. S. ARBOGAST,  
Nevada City, Calif.

WM. H. BREEDLOVE,  
Georgetown, Calif.

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North Bloomfield, Calif.

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French Corral, Calif.

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Grass Valley, Calif.

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LaPorte, Calif.

I. E. ROSE,  
Iowa Hill, Calif.

ROSS TAYLOR,  
Downieville, Calif.

A. H. TURNER,  
Colfax, Calif.

Mr. J. S. Coupal, Director,  
Department of Mineral Resources,  
Phoenix, Arizona.

Dear Mr. Coupal:

Thought I would write you concerning a property in your fair state that I hold an option on, and which in my opinion is well worth any prospective mining group considering seriously.

The property is the Commodore Group, owned by the Czarnowski family, comprising 5 claims held by possessory rights with work up to date, and lies about three miles west of Octave, being the continuation of that vein system, with values at or near the surface better than either the Octave or the Congress.

Formation is granite and porphyry containing lead, gold and silver, with the strike of veins being N.E. & S.W. Surface values assay from \$4.00 to \$20.00, with some assays running into the hundreds. The veins are as wide as 50 and 60 feet in places.

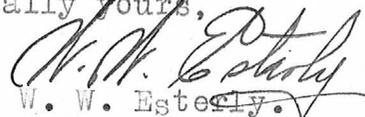
One shaft is more than 300 feet deep, with ore in shaft and drifts. Other smaller shafts on property at other places.

Some equipment that could be used for small-scale development is now on the property, and prospecting has opened up more ore in the past year.

Price is \$50,000, with terms that would suit a development and producing operation.

If you think your organization could do anything with this property, I would be glad to send additional data. I also expect to send some of my clients down to look it over.

Cordially yours,

  
W. W. Esterly

MC-860

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
OWNERS MINE REPORT

Date August 10, 1940

- 1. Mine Commodore Group
- 2. Mining District & County Weaver Mining Dist.  
Yavapai County
- 3. Former name
- 5. Owner Czarnowski Family.
- 7. ~~Operator~~ W. W. Esterly (Lessee)
- 9. President
- 11. Mine Supt.
- 13. Principal Metals Lead, Gold, Silver.
- 15. Production Rate
- 17. Power: Amt. & Type
- 18. Operations: Present
- 4. Location 3 miles west of Octave
- 6. Address (Owner)
- 8. Address ~~(Operator)~~ Grass Valley  
California
- 10. Gen. Mgr.
- 12. Mill Supt.
- 14. Men Employed
- 16. Mill: Type & Cap.
- 19. Operations Planned
- 20. Number Claims, Title, etc. 5 claims
- 21. Description: Topography & Geography
- 22. Mine Workings: Amt. & Condition 1 shaft 300 ft. deep, opencuts and drifts.

23. Geology & Mineralization **Granite and porphyry. Continuation of vein system of Octave**

AMERICAN  
MINERS MINE REPORT

24. Ore: Positive & Probable, Ore Dumps, Tailings

24-A Vein Width, Length, Value, etc. **Vein 50 to 60 ft. wide in places.  
Surface values \$4 to \$20.**

25. Mine, Mill Equipment & Flow Sheet **Some equipment on property which could be used  
for small scale development.**

26. Road Conditions, Route

27. Water Supply

28. Brief History

29. Special Problems, Reports Filed

30. Remarks

31. If property for sale: Price, terms and address to negotiate. **For sale, \$50,000 with terms that  
would suit development and producing operation.**

32. Signed **W. W. Esterly**

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
OWNERS MINE REPORT

Date

Aug 10, 1940

1. Mine 7

2. Mining District & County WILLOW, YAVAPAI

3. Former name

5. Owner CZARNOWSKI

7. Operator W.W. Easton (Leasee)

9. President

11. Mine Supt.

13. Principal Metals lead, gold, silver

15. Production Rate

17. Power: Amt. & Type

18. Operations: Present

4. Location 3 miles west of Octave

6. Address (Owner)

8. Address (Operator) Gross Valley, Calif.

10. Gen. Mgr.

12. Mill Supt.

14. Men Employed

16. Mill: Type & Cap.

19. Operations Planned

20. Number Claims, Title, etc.

5 claims

21. Description: Topography & Geography

22. Mine Workings: Amt. & Condition

shaft 300' deep, open cuts & drifts

23. Geology & Mineralization

Granite + Porphyry  
Continuation of vein system of Octave.

24. Ore: Positive & Probable, Ore Dumps, Tailings

24-A Vein Width, Length, Value, etc.

Vein 50' to 60' wide in places  
Surface values \$4.00 to \$20.00

25. Mine, Mill Equipment & Flow Sheet

some equipment on property  
which could be used for small scale development

26. Road Conditions, Route

27. Water Supply

28. Brief History

29. Special Problems, Reports Filed

30. Remarks

31. If property for sale: Price, terms and address to negotiate.

For sale \$50,000 with  
terms that would suit development and production  
operation

32. Signed

W.W. Easterly (Lessee)

33. Use additional sheets if necessary.

June 4, 1951

Mr. Paul E. Baltser  
Continental Ventures, Inc.  
Penobscot Building  
Detroit, 26, Michigan

Dear Mr. Baltser:

In reply to your letter of May 25th seeking information on the Commodore Gold-copper Mine located in Yavapai County, Arizona, this property is known as the Commodore Group and is located in the Weaver Mining District of Yavapai County, approximately 3 miles west of the town of Octave.

According to our records, it is owned by the Osmarnowski family.

The property consists of 5 claims developed by one shaft 300 feet deep with several open cuts and drifts. The vein is approximately 50 feet wide and according to a report forwarded to us by a Mr. W. W. Esterly, the outcrop carries values varying from \$4.00 to \$20.00 per ton.

No one connected with this office has ever sampled this property.

Very truly yours,

R. I. C. Manning,  
Chief Engineer.

RIGM:lp

14 August 1940

Mr. W. W. Easterly,  
California Hydraulic Mining Association, Incorporated,  
Grass Valley, California.

Dear Mr. Easterly:

Replying to your letter of August 10, I am enclosing herewith blank Mine Owners Report, which I should suggest that you fill out in detail and return to this office so that information may be available on the Commodore Group.

Upon receipt of this report, I shall be glad to refer it to anyone making inquiry for a property such as yours.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal  
Director

JSC-jrf  
encl..

HUFF E. KRING  
CONSULTING GEOLOGIST  
P.O. Box 141  
Williston, S.C.

RECEIVED  
MAY - 6 1952  
DEPT. MINERAL RESOURCES  
PHOENIX, ARIZONA

May 3, 1952.

Manager, Arizona Bureau of Mines,  
Phoenix, Arizona.

RE: COMMODORE GOLD-COPPER MINE  
Weaver Mining District,  
Yavapai County, Arizona.

Dear Sir:

WAITING

This morning I received a letter from Mr. Melvin T. Berry of Providence, R.I. now stopping at the Westward Ho Hotel, in Phoenix, that he had called at your office in Phoenix and was advised by someone in your department that he had asked for information on the Commodore gold-copper mine in Yavapai County, and had received a very poor report on this property but that your department had reports on many mines for lease or sale equally as good or better. I hold the Commodore mine thru a mining lease with option to purchase. Now I think that if your department is going to be a real help to those who are spending their time and money in the effort to attract capital to invest in Arizona mines the least they could do would be to advise any interested prospective investor who comes to them for information is to tell them to get a qualified mining engineer to show them the mine in question and advise them on it. I went to considerable time and expense to get Mr. Berry to Arizona to visit the Commodore mine and had made an appointment with a well qualified mining engineer in Phoenix at his own request to show him this property, sample it for him and advise him on it. This engineer is Mr. P.H. Lund, 3411 North 14th Place, Phoenix. Mr. Lund undoubtedly lost two or more days of valuable time on Mr. Berry. I also had upon request by Mr. Berry advised my caretaker at Congress, Arizona, a Mr. Geo. W. Thomason to meet Mr. Lund and Mr. Berry and show them the Commodore mine. Upon Mr. Berry's arrival in Phoenix he had confirmed my appointments with Mr. Lund and Mr. Thomason by both personal appointment and by telephone. It was just too bad for him that he took your advice instead of mine or Mr. Lund's. Mr. Lund examined the Commodore gold-copper mine last September 1951 and wrote me that it ~~was~~ had a very extensive system of large and well mineralized quartz veins indicating an enormous tonnage of commercial ores. I also met Mr. Berry in Columbia, S.C., upon his request and showed him reports by three different eminent mining engineers and an assay sheet (three assay sheets and certificates) of over 100 assays on samples taken all over the Commodore mine and these showed an average gold value of \$42.94 per ton and copper high as 5.35% in value. Mr. Lund's samples assayed high as 0.80 ozs. gold and 5.35% copper and 2.00 ozs. silver and I have a copy of his assay certificate from the Arizona Testing Laboratories on his samples and know whereof I speak. If he had had sense enough to have asked you to call up Mr. Lund on the phone and give you first hand information on the Commodore mine you could have advised Mr. Berry properly on it. I would like to have a copy of your report on this mine and the name of the engineer or geologist who took it. I wrote Mr. Butler in Tucson several months ago about the Commodore mine and he advised me that they had very little information on this property and to his knowledge none of the engineers or geologists from his office had ever been on the mine. I would like to know the source of your information, *THAT YOU GAVE TO MR. BERRY,*

If your office is going to continue giving prospective investors discouraging advice on mines in your state, what is the use of men wasting their time and money in Arizona mines. Such treatment will discourage investment in the state. I have spent almost two years on research work on the Commodore mine, the Weaver district, on Yavapai County and on mines over Arizona, and all of my information is from reliable sources and I have to my knowledge ~~and~~ misrepresented the Commodore mine in any respect. My two years time of work and research, money, etc. was all wasted by your office in a few moments time by giving Mr. Berry the wrong advice. In the future I would advise you to tell any any prospective investor who comes to your office seeking advice to get in touch with some good qualified mining engineer in Phoenix and have him to show the mine in question and sample and advise him on it before you start in undoing some good persons hard and sincere work covering some two years besides a great deal of expense. Try to earn your pay and do things to help the man who is trying to interest capital in the mines of your state. Mining is the chief industry in Arizona so please try to help good sincere people who believe in your mines.

Manager, Arizona Bureau of Mines, (2)  
Phoenix, Arizona.  
RE: Commodore Gold-Copper Mine.  
May 3, 1952.

I am sending you a copy of the engineers reports on the Commodore mine with assays for your information and would like for you to read it over carefully and know whereof you speak before you discourage any more prospective investors I send to Arizona to see my gold-copper property. In the future please advise them to get in touch with Mr.P.H. Lund of the P.H. Lund Engineering Corporation, in Phoenix if they want reliable first hand information on the Commodore mine. Mr.Lund is a very capable mining engineer and geologist and will give them an unbiased opinion on it.

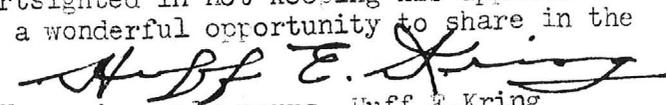
Mr.Berry in his letter to me advised that he was writing the New York newspaper in which I advertised for finance and advise them against allowing me to interest other men in financing my Commodore property. You can see what damage you might have caused by giving Mr.Berry the wrong advice. I have written the New York newspaper and advised them of the true facts of the case and offered to supply them with copies of the engineers reports if they want them.

I have five other men well financed who are waiting for me to give them the word to either come to Arizona to see the Commodore mine or send their engineers in to see it. In fact a representative of an old and well established New York concern has already written a connection of their office in Phoenix to contact Mr.Lund in regard to the Commodore mine. They will have the next chance to investigate the mine. They have Mr.Lund's name and address and phone number and will contact him in the near future. If they should call your office about this mine, kindly advise them to contact Mr.Lund in regard to it as he has examined the property and can advise them right on it. I will very much appreciate your help and cooperation in the matter. Evidently some clerk in your office who had very little dependable information on the Commodore mine advised Mr.Berry wrongly on it. It is a rich property and surface values assay unusually good in the big quartz veins in the high grade ore shoots. The Commodore mine is in the center of a Mother Lode system of big quartz veins ranging in width from 30 to 100' and will pan free gold wherever the quartz shows red iron ~~oxide~~ oxides and black iron hematites. Some of the veins are rich in copper carbonates and copper sulphides right on the surface. This mine has real merit and anyone who will take the trouble to go and see it will soon see that it has real merit. I am trying to raise capital to put this mine into production and realize that it is "an old sleeper" mine and in my long experience in mining in most of the mining states I have <sup>known</sup> a number of old sleeper mines <sup>To</sup> become great producers. The famous Mojave Gold Queen in Kern County, Calif. is one of many. I could name dozens of them.

All of the four eminent mining engineers who have examined the Commodore mine state in their letters and reports that it will open up into a great mine providing it is properly financed and well managed. What more evidence do you want as to its merit?

If Mr.Berry had been fair and honorable with me and kept his appointments with Mr.Lund and my caretaker, he would have seen a very richly mineralized gold-copper mine and the caretaker could have hand ~~panned~~ samples of the ore and showed him how rich the mine really is. Mr.Lund could have sent the caretaker down in the shafts (only one shaft has water in it) with a rope to sample them for him and I will guarantee they would get a lot of mighty fine samples that would have assayed good in gold and copper. My assays show high as 10.20 ounces in gold and 5.35% in copper. What more evidence do you want of the richness of the property. Three of the engineers who examined the Commodore mine and approved it so highly, compared it with the famous rich old mines in the Weaver district, the Octave and the Congress mines and stated that the veins on the Commodore mine were many times wider than on the other two mines and that surface values many times richer. You should know the records of the Octave and Congress. The Octave mine is only three air miles from the Commodore mine. The formations are the same on all three mines and they are all on the same great richly mineralized ore belt extending thru Yavapai County on South to the Monte Cristo mine and others and the Jerome, United Verde and United Verde Extension on the North. The Commodore mine has the makings of a great mine and that is the opinion of myself and all of the engineers who have examined it. Mr.Berry was indeed very shortsighted in not keeping his appointments and going to see the Commodore mine. He missed a wonderful opportunity to share in the profits of a very rich mining property. I am,

cc TO G.M. Buler, Director, Tucson office,  
cc to R.H. Lund cc to Chas.F. Willis.

  
Very sincerely yours, Huff E. Kring

Memo: Visit of Messers Kinner and Berry to the Department of Mineral Resources, Monday April 28th, 1952.

On Sunday evening Mr. Kinner phoned A.L. Flagg at his residence. Said he was from Providence, Rhode Island and had been told by Claude E. McLean of the Arizona Testing Laboratories that I could examine a mining property for him. I suggested that he come to the office about 11:00 Monday morning.

Monday morning, sometime after 11:00, Kinner and Berry came into the office.

They asked what we knew about the Commodore Mine in Yavapai county.

The file contained "Owners Mine Report" (MC56) signed by W.W. Easterly, lessee. Property owner: Czarnowski Family. A letter from R.I.C. Manning to Paul E. Baltzer, Continental Ventures Inc., Penobscott Bldg., Detroit, Mich., in reply to a letter from Baltzer, referring to correspondence with Huff E. Kring, who had mentioned the Commodore to Baltzer seeking financial aid. There was a letter also to Sam Coupal from Mr. W.W. Easterly, giving a very brief description of the mine and naming a sale price of \$50,000. Sam's reply is also in the file.

I told Mr. Berry that I had never seen the property neither had I heard of it, therefore could give no first hand information.

The question of title came up. Berry said the owners guarantee a perfect title. I told him it would be easy to check on affidavits of labor etc in the office of the County Recorder at Prescott, explaining that the property would be indexed under the name of the owner and the name of the property.

In reply to a question from Mr. Berry as to what sort of an engineer Mr. Lund is I said that I knew him and knew that he was registered in Arizona.

Mr. Berry said that Lund reported a vein ~~100~~<sup>50</sup> ft wide averaging \$50 in gold. I told him that the A S & R had operated the Octave for several years and they

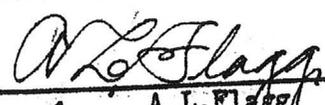
probably knew all about the property. My opinion was that anything of that size averaging over \$50 in gold should be worked. They knew nothing about any other development than the 300-ft shaft but said there were numerous other exploratory workings which they could not describe. They produced no report by Lund or anyone else.

The question of an independent engineer to check the property came up. I gave him a mimeographed list of engineers in Phx. Read down the list, scratched off Sam's name, said that Jaquays was in Chicago to return possibly next day or Wednesday and that Travis Lane had been in the office very recently. Berry said that McLean had recommended Jaquays. (Wednesday Jaquays phoned me to say that he could not reach Berry at the Westward Ho)

Berry asked if we knew of other properties for sale or for lease. I pointed to the files and said we had information on about 3000 different properties. On some we had not as much or less than we had on the Commodore. On others we had a great deal of information but it is not the business of this Department to recommend engineers or properties. We could and would help in other ways but we do not select a specific engineer for any client, neither do we say that one prospect is better than another. The files are open to inspection always.

Kinner and Berry stayed until after 12:00 noon. Left saying they would return. They did come back in before leaving the building to ask about calling a taxi. We told them there would be one standing at the Main Gate or one could be called from the phone right beside the gate.

C  
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A.L. Flagg

May 6th, 1952.

My Berry said that Lund reported a vein 100' wide averaging 500 lb gold  
told him that the A J had worked the lode for several years and that

Page - 2 - Mr. Willis

We are returning herewith the letter to you from Mr. Kring dated May 9, 1952.

Sincerely,

R.I.C. Manning,  
Director

Enc.

RICM:lp

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May 19, 1952

Mr. Charles F. Willis,  
508 Title & Trust Building  
Phoenix, Arizona

Dear Charlie:

Upon receipt of your letter of May 15th, regarding the Huff E. Kring correspondence, I phoned Mr. Lund to get his slant on just what happened. Mr. Lund states that he met Mr. Berry in Phoenix and explained to him that he would not again drive his car to the Commodore property, but would accompany Mr. Berry to the property, provided Mr. Berry furnish the transportation. The reason for this was that the road to the property has been badly washed out and Mr. Lund stated that he practically ruined his personal car on his first trip.

According to Mr. Lund, he informed Berry that the shafts were inaccessible, that it would be practically impossible to take any underground samples, and that the assay results he had furnished Mr. Kring were from specimen samples gathered from the dump. He said he made no statement at any time to either Kring or Berry as to the probable ore, the length of the vein, or its value. He does not have a copy of his report available, but states that he informed Mr. Kring and Mr. Berry that in his opinion this was a raw prospect and that there were many others in the State like it.

Mr. Lund further stated over the phone that he had told a Mr. Borden several months ago, who was also apparently sent here by Kring, that he personally would not invest any money in the Commodore Mine.

I am of the opinion that the Bureau of Mines office that Mr. Berry visited in Phoenix is our office. The statements that he made to Mr. Kring, however, regarding what he learned here are wrong, and I am certain that he is not too sure as to what was told him by Lund and what was told him by Flagg. It appears to me that perhaps Mr. Berry was seeking some way out of a possible situation whereby he may have lead Mr. Kring to believe he was very much interested in this property. In casting about for a valid excuse to drop the whole deal, he apparently wrote a letter in haste to Mr. Kring and was not too careful as to whom he credited with the statements supposedly made in Phoenix.

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Y

Heavy <sup>P.A. Lund</sup> contact

Promoter

Made report

Shop  
couldn't get  
underground -  
take numbers off  
stamp.

talked to  
Borden  
told him  
he would get

my money in  
it.  
recommended killing

May 27,

COMMODORE GROUP

Yavap

This property idle.

MARK GEMILL

92

COMMODORE MINE  
YAVAPAI COUNTY, ARIZONA  
REPORT  
BY  
GEORGE L. HOLMES

C O P Y

Cable address "Glaich"  
Code Bedford M. Neill  
1908 Edition

GEORGE L. HOLMES  
Consulting Engineer  
PLACER DREDGING  
San Francisco

185 Stevenson Street,  
San Francisco  
June 20th, 1928.

W. A. Bruton Esq.,  
1607 Sixteenth St.,  
Sacramento, California

Dear Sir:-

I hand you herewith a short report on the Commodore Group. I trust that it will cover the ground and I believe that if the recommendations are carried out you will eventually have a real mine.

It is seldom that one sees a mine with as many favorable indications on the surface as this property has. It is simply too bad that it has not been in the hands of someone with sufficient capital to develop it properly and put it in active production. Of late years the property has been very much neglected and little has been done towards its up keep and nothing toward its development or improvement. It will look much better after a little real work is done and more of the underground opened up.

I trust that your associates will decide to at least unwater this property and make a thorough examination and sampling of this property and that the results will be what I anticipate.

Yours very truly,

/s/ G. L. Holmes

THE COMMODORE GROUP OF QUARTZ CLAIMS,  
YAVAPAI COUNTY  
ARIZONA.

The Commodore Group of Quartz Claims is situated in the Weaver Mountains, Weaver Mining District, Yavapai, County, Arizona, about seven miles by road from the old town of Octave and eighteen miles from Congress Junction, the nearest railroad station. In an air line it probably is very close to three miles due East of the Old Octave Mine around which the town of Octave was built. The elevation above sea level at this point is approximately three thousand feet as shown on the contour map of the State of Arizona published by the Arizona Bureau of Mines.

The roads throughout the county, with the possible exception of the short stretch from Octave to this property are very good. The road from Octave to the mine has been used formerly for some heavy hauling but has been allowed to go without repair for some years and is in need of considerable work before it will be again passable for heavy trucks. It can be negotiated with a light auto at present but the necessity of repairing it before work on the property commences is apparent to anyone who traverses it.

The present shaft on the property is said to make about 6000 gallons of water a day and further development may increase this amount. A spring near the camp furnishes a small, further amount for domestic purposes. This spring can probably be opened up and the flow of water increased. As development work progresses, other shafts will be sunk and the water supply augmented and possibly enough for milling purposes can thus be secured. If not, it will be necessary to pump from the river. I am inclined to the belief that the mine will eventually make sufficient water for a 100 ton milling plant and possibly more. The spring will furnish enough for domestic purposes for a crew of eight or ten men.

There is a main power transmission line within a mile and a half of the property and energy is procurable at 2 1/2 cents per kilowatt hour. A connecting line would not be expensive to build.

The claims comprising this group are unsurveyed and lie in an unsurveyed portion of the County. They are held by location and the assessment work has been done and recorded on a portion of them for the year ending July 1st., 1928 and the work on the balance will be done and proof of labor filed before the end of the mining year.

The Group originally comprised some eighteen or nineteen claims but, being held under one ownership and the annual labor and recording being too costly for the present owner he has allowed his holdings to dwindle to five claims on which he has the principal showing and most work done. These five are known as the General Grant, Abe Lincoln, Washington, Lucile, and Commodore. They are approximately full claims, staked on the strike of the formation and properly monumented. I consider it advisable however, to have these claims properly surveyed, the monuments moved to such points as will make them exactly full claims, and amended location notices filed to correct errors in the former locations. The claims on which the title has been permitted to lapse are still open for relocation and it may be advisable, on further examination, to relocate part of them, possibly all of them, as the formation can be traced for a considerable distance on the general strike of the veins thus far uncovered and there is undoubtedly valuable minerals on the claims which have lapsed, by reason of neglect in doing the annual labor, to the Government. As soon as this work can be done on the present group of five claims, they should be Patented.

The present development consists of a shaft on the Washington Claim, said to be 313 feet in depth on the dip of the vein. From compass at the

collar of the shaft the strike of the formation is Northeast-Southwest and the dip of the shaft is about  $42^{\circ}$ . This shaft is filled with water to within 20 ft. of the collar and hence the description of the underground workings is from hearsay, from the owner of the property, and from the report of C. E. Butler, E. M., who examined the mine in 1901. On the 150 ft. level, a drift has been run northeast one hundred feet and to the southwest fifty-four feet to a dyke of rhyolite porphyry, sixty seven feet through the dyke and the vein picked up again beyond the dyke. A crosscut has been started and it is proposed to continue this crosscut through the footwall vein and also through others which crop on the surface on the hanging wall side. On the 300 ft. level drifts have also been run to the northeast and the southwest on the strike and ore bodies uncovered. The other outcrops have been prospected in places with shallow shafts from five to one hundred feet in depth. The Washington vein, on which the shaft has been sunk, is quartz and schist lying between granite walls. All of the veins appear to be accompanied with a gouge on either side and not "frozen" to the wall rock. They are all of sufficient width for economical mining and, for comparison, the veins of the district have been found to increase in width and value with depth. The Octave Mine, the nearest to this property which has been worked to any depth is worked to the 2200 ft. level. The Congress mine has been worked to a depth of 4000 ft.

The general geology of the section is similar in many respects to that of the Bradshaw Mountains lying to the northeast and north and described in the Bradshaw Mountains Folio, U.S.G.S. and in Bulletin No. 782 entitled "The Ore Deposits of the Jerome and Bradshaw Mountains, Quadrangles, Arizona, by Waldemar Lindgren and V. C. Heikes, published by the Government Printing Office in 1926. In the specific instance of the property under consideration

we find a granite formation, fissured and cross fissured, the veins running in a general northeast southwest direction and traceable for considerable distances even though the surface be covered with rock fragments and alluvium to a considerable depth. The owner, confidently states that the veins can be traced, on the strike for considerably over a mile. The cross fissuring seems to be post mineralization dykes of rhyolite porphyry. I assume them to be post mineralization from the fact that they cross the formation on the surface and on the 150 ft. level, are apparently barren, where one has been traversed by a drift on the 150 level the vein and ore shoot has been picked up beyond it approximately on the strike of the formation. Also, where some superficial exploration has been done on the surface on the contact of the dyke with the wall rock there is apparently no mineralization.

The main object of the examination being to determine the presence of veins bearing pay minerals and the time being so short, nothing but a rather casual examination into the local geology was possible. The geology must be carefully studied during the unwatering of the property and should be mapped and recorded as the development work progresses. There can be no doubt of the presence, the mineralization, and the continuity and permanence of the known veins, of which there are several. A number of samples were taken for assay some years ago, from the Washington vein, by eastern people who had an option on the property at that time. Their average value, as determined by the 29 samples assayed, is given as \$24.37 in gold, or in gold and silver \$24.54 and several of their samples carried copper up to as high as 1.35% in one instance. We do not know how or where these samples were taken in the property and hence can consider

them as indicative only. No assay map was made at the time and it is highly probable that these samples were taken at random, without system, and hence of small value in the determination of the value of the mine.

The underground being inaccessible, I took four samples only, from the dumps on the surface, for character samples and these when assayed by the California MacVan Company of Sacramento, gave returns as follows:

- No. 1, Sample from dump at the mouth of shaft 100 ft. deep, on Washington claim, app. 100 ft. west of main shaft, and on a vein paralleling the Washington vein, Gold .30 oz. per ton; Silver, trace. . . . . \$6.20
- No. 2, Float samples from near prospect hole on surface of General Grant Claim, Gold 1.68 oz. per ton, Silver a trace (This also carried 2.47% copper). . . . \$34.73
- No. 3, Surface sample, on Washington Claim on 4 ft. quartz ledge, Gold .18 oz. per ton, Silver a trace. . . \$3.72
- No. 4, Sample of ore from dump of main shaft on Washington Claim. Gold .42 oz. per ton. Silver a trace. . \$8.68

Sufficient pulp was retained for check assays if desired or for running tests to determine metallurgical processes to be used later. I however advise such tests being left until such time as the underground is accessible and can be properly sampled and an 'average' sample taken for such purposes.

I consider the property a promising prospect and I believe that with development it will make a mine at least as valuable as the Octave. The vein on the Washington can be considered as being at least 4 ft. in width at the surface at the collar of the shaft and it widens with depth and also, towards the northeasterly portion of the property it widens on the surface. The present shaft will answer for further development and prospecting with depth but it is highly probable that after such development work is accomplished it will be found desirable to sink a working shaft further to the northeast on the strike of the formation.

It will be necessary to establish a camp, rebuild the road, and unwater the underground, sample the exposed ore bodies, map the surface and as much of the geology as can be determined during the period of unwatering and sampling. From the present showing I consider the apparent value of the property to be such as to warrant the risk and expense of doing the above outlined work. I consider that the probabilities of the results of the examination being favorable warrant the expense of permanent and sanitary camp and sufficient tools and appurtenances to do the work economically and to continue the development of the property after the outlined work has been completed. I consider it advisable to complete the crosscut on the 150 level as a part of the preliminary work.

As before stated, from the examination of the surface and what can be learned of the underground; from the locality and proximity and similarity in geological structure to other good producers in the District, I advise serious consideration of this property and believe that it will justify the risk and expense of further development. It seems to me to have the makings of a big mine and a profitable one.

All of which is respectfully submitted.

/s/ G. L. HOLMES  
Consulting Engineer

185 Stevenson Street  
San Francisco  
California  
June 20th., 1928

C O P Y