

Flanagan mine handbook page 94

Delinquent Tax list ⁽¹⁹³⁸⁾ shows it
in the name of Flanagan Mining Co &
Viola Flanagan.

Lots 5, 6 & 7 Sec 35 T 35 S R 7 W

RECEIVED
APR 19 1940

FLANAGAN MINE (placer)

STATE DEPT. OF GEOLOGY GRANTS PASS DISTRICT
& MINERAL INDS.

see also: Bybee Mine; Flanagan & Emerson Mine; Emerson Mine

Owner: Held principally by Lester Briggs, Rt. 2, Box 520, Grants Pass, Oregon; others include M. M. Houston, Portland; Walter G. Paul, Roseburg; William Roth, Coquille, Oregon.

Location: sec. 35, T. 35 S., R. 7 W.; secs. 2 & 3, T. 36 S., R. 7 W., on the west bank of the Rogue River.

Area: 200 acres, covered by patent (Bybee mine) and by location.

History: The mine was originally opened by Mr. Bybee and the upstream portion is still known by that name, locally. The Bybee ground, and additional location were held by W. H. & Viola Flanagan, and sold, in part, to Lester Briggs in 1923. Three years ago (1937) Mrs. Flanagan sold a portion to a group of men, as given under ownership.

"About 10 miles west and 3 miles north of Grants Pass the Flanagan and Emerson placer mine is located on a gravel terrace on the west side of Rogue River about 30 feet above the water. It is owned by Dr. W. H. Flanagan, of Grants Pass. According to Diller:

'The mine face exposed 50 feet of fine gravel containing a small amount of sand near the middle and top. On the river side of the mine a portion of the gravel appears to have been washed away and replaced by a later deposit. The slate bedrock is much twisted and faulted. The strike is N. 20° E. and the dip is 45° S. E.'

"Near this mine to the south in secs. 2 and 11, T. 36 S., R. 7 W., there are ~~extensive~~ extensive deposits of alluvial gravels which have been tested by Clarence H. Mace. He reported 25 cents to \$1.60 per cubic yard with a channel 600 to 700 feet wide and the richest streaks on the concave side of the river. Conditions here seem to be favorable for the introduction of dredging. The gold is coarse with rough edges, which indicates that it has not traveled far. For the most part the boulders are small, averaging under 6 inches in diameter, and there is no clay except in part of the overburden. There are places along the present channel where the gravel is only 4 feet thick, and others where it is evidently at least 30 feet, but where the ancient channel is exposed by ~~the~~ hydraulic operations it varies from 75 to 150 feet in thickness. Bedrock consists of upturned slate beds."

The mine has not operated in the last three or four years.

Development: Ten acres were mined in the Bybee mine; about 25 acres in the present Flanagan property. The water right, which extends back prior to 1900, calls for 1500 miners inches of water.

Equipment: Two #3, and one #1 giants; 2000 feet of 24 inch to 11 inch pipe;

BLANAGAN MINE (continued)

4½ miles of ditch, the water coming from Shan Creek; 7½ miles of ditch with water coming from Limpay Creek.

Geology: The bedrock is slate, probably Galice formation; no clay. The boulders are of average size, very few will weigh over 500 lbs. The gravel will average 30 feet in thickness with 20 feet of overburden. The gold is on bedrock and in a zone about 17 feet above bedrock. The overburden carries enough gold to justify sending it through the sluices. Briggs reports that the gold is small in size and is placer type.

Reference: Parks & Swartley, p. 94, 1916 (quoted)

Informant: Lester Briggs, 4/16/40

Report by: RCT

RECORD IDENTIFICATION

RECORD NO..... M060786
RECORD TYPE..... K1M
COUNTRY/ORGANIZATION. USGS
DEPOSIT NO..... DDGMI 100-200
MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.
UPDATED..... 81 05
BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... FLANAGAN
SYNONYM NAME..... BYBEE, FLANAGAN & EMERSON, EMERSON

MINING DISTRICT/AREA/SUBDIST. GRANTS PASS

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... JOSEPHINE
DRAINAGE AREA..... 17100310 PACIFIC NORTHWEST
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 01 49

QUAD SCALE QUAD NO OR NAME
1: 62500 SELMA
1: 62500 GRANTS PASS

LATITUDE LONGITUDE
42-28-57N 123-30-05W

UTM NORTHING UTM EASTING UTM ZONE NO
4703257.7 458787.0 +10

TWP..... 36S 035S
RANGE..... 07W 007W
SECTION.. 02, 03 35
MERIDIAN. WILLAMETTE

POSITION FROM NEAREST PROMINENT LOCALITY: WITHIN WILD AND SCENIC RIVER CORRIDOR

DRE MATERIALS (MINERALS, ROCKS, ETC.):
SMALL GOLD

ANALYTICAL DATA (GENERAL)
FINE GOLD

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. B

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

PLACER

FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL

MAX THICKNESS..... 50 FT

COMMENTS (DESCRIPTION OF DEPOSIT):

GOLD IS ON BEDROCK & 17 FT ABOVE

DESCRIPTION OF WORKINGS

COMMENTS (DESCRIP. OF WORKINGS):

HYDRAULIC, 35 ACRES MINED

PRODUCTION

YES

SMALL PRODUCTION

CUMULATIVE PRODUCTION (DRE, COMMOD., CONC., OVERBUR.)

23 AU, SML SOME 1900-1940 AU

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... QUAT

HOST ROCK TYPES..... TERRACE GRAVEL

GEOLOGICAL DESCRIPTIVE NOTES. BEDROCK IS SLATE

GENERAL REFERENCES

- 1) RAMP, L. AND PETERSON, N.V., 1979, GEOLOGY AND MINERAL RESOURCES OF JOSEPHINE COUNTY, OREGON; ODGMI BULL. 100, 45P
- 2) OREGON METAL MINES HANDBOOK, 1942, ODGMI BULL. 14-C, VOL. 2, SEC. 1, P.71

RECORD IDENTIFICATION

RECORD NO..... M055856
RECORD TYPE..... X1M -
COUNTRY/ORGANIZATION. USGS
INFORMATION SOURCE... BAILEY, E. H.
MAP CODE NO. OF REC..

REPORTER

NAME..... PETERSON, JOCELYN A.
DATE..... 75 08
UPDATED..... 81 01
BY..... FERNS, MARK L.; (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... EMPIRE

MINING DISTRICT/AREA/SUBDIST. PICKETT CREEK

COUNTRY CODE..... US
COUNTRY NAME: UNITED STATES

STATE CODE..... OR
STATE NAME: OREGON

COUNTY..... JOSEPHINE
DRAINAGE AREA..... 17
PHYSIOGRAPHIC PROV..... 13

QUAD SCALE QUAD NO OR NAME
1: 62500 SELMA

LATITUDE LONGITUDE
42-28-21N 123-30-50W

UTM NORTHING UTM EASTING UTM ZONE NO
4702150. 457750. +10

TWP..... 036S
RANGE..... 007W
SECTION.. 03
MERIDIAN. WILLAMETTE

POSITION FROM NEAREST PROMINENT LOCALITY: 13 MI. W. OF GRANTS PASS

LOCATION COMMENTS: NW/4 SEC 3

OCCURRENCE: 100
ORE MATERIALS (MINERALS, ROCKS, ETC.):
CINNABAR

ANALYTICAL DATA (GENERAL)
ASSAYS SHOWED 0.3 AND 0.5 LB/TON HG

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. 2
PROPERTY IS INACTIVE
YEAR OF DISCOVERY..... 1931
BY WHOM..... LESTER R. BRIGGS
PRESENT/LAST OWNER..... LELA BRIGGS, 1963

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
MINERALIZED FRACTURE ZONE
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT..... SMALL
COMMENTS (DESCRIPTION OF DEPOSIT):
TWO ADITS, 80 FT AND 45 FT LONG; 35 FT SHAFT; OPEN CUT.

DESCRIPTION OF WORKINGS
SURFACE AND UNDERGROUND

COMMENTS (DESCRIP. OF WORKINGS):
WORKINGS NOW CAVED

PRODUCTION
NO PRODUCTION

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... JUR
HOST ROCK TYPES..... MASSIVE AND SCHISTOSE GREENSTONES

LOCAL GEOLOGY
NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES
1) NAME: GALICE
AGE: JUR

SIGNIFICANT ALTERATION:
PARTIAL ALTERATION OF THE ROCKS TO LIMONITE AND CLAY MINERALS

GENERAL COMMENTS

GENERAL REFERENCES

- 1) BROOKS, H. C., 1963, QUICKSILVER IN OREGON: OREGON DEPT. OF GEOLOGY AND MINERAL INDUSTRIES, BULL. 55, 223 P., P 95, P 95
- 2) MERCURY IN OREGON, 1965, USBM IC 8252
- 3) OREGON METAL MINES HANDBOOK, 1942, ODGMI BULL 14-C, VOL 2, SEC 1, P 71
- 4) RAMP, L AND PETERSON, N V, 1979, GEOLOGY AND MINERAL RESOURCES OF JOSEPHINE COUNTY, OREGON: ODGMI BULL 100, TABLE 1, NO 199

SUPPLEMENTAL STATEMENT

During four months that I spent on this mine making a working test of its gravels and a thorough examination of the entire property I worked in making the test, as closely as it can be computed, between 3500 and 4000 yards of the lower grade gravel, 4000 yards being the extreme maximum yardage that could possibly have been handled with the equipment and water available during the period, and for the purpose of safety the outside maximum yardage of 4000 yards is used on which to base the results obtained as given herein. The gravel tested was as low grade as any opened on the property and was put through just as the Giants cut it from the bank, to determine a safe average value, none of the rich gravel mentioned in my report was included with the material tested. This test was made with the old equipment on the mine, used just as it was, no alterations being made, there were no under-currents for saving the fine gold and valuable sand concentrates, none of which are figured in the results given, only the gold actually recovered in the boxes, and that on the bedrock which rightfully belongs to the gravel put through the boxes is figured in the results given. These boxes are set at entirely too low a grade, having only 4-1/2 inches drop to 12 feet of length, they are consequently entirely too flat, and a source of constant trouble and loss of values, the riffles being continually blanketed with sand and fine material, so that much of the finer gold passes over them and is lost in the tailings.

From the test run made I cleaned up \$1755.20 in free gold, and approximately \$50.00 in Platinum, which is still in my hands unsold, so I have not its exact value.

Before I could clean up the bedrock uncovered by removal of the gravel tested, the water quit and the bedrock could not be cleaned for this reason. I estimate the gold on this bedrock, which should be figured in with the gold actually recovered to determine the value per yard of the gravel handled in making the test, at from \$800.00 to \$1200.00 gold, and it may reach \$1500.00. As most of the platinum lies in the bedrock there would be a minimum of three ounces to six ounces of platinum recovered, worth at the lowest, not less than \$100.00 per ounce, so that I consider an estimated recovery of \$1600.00 from this bedrock would be conservative, and this added to the \$1755.20 gold, and \$50.00 worth of platinum that I have, would give a recovery from the gravel worked of \$2805.20, or over 70 cents per yard of gravel handled.

If the valuable sand concentrates and fine gold lost could have been saved, instead of being unnecessarily lost through lack of proper equipment, I am confident they would have exceeded in value the free gold and platinum recovered, including the estimated recovery from the uncleaned bedrock.

High water in "Rogue" River does not flood the pit or prevent working the mine or on bedrock, the adjacent bottom lands on the opposite side of the river being lower than that on which the mine is situated it is overflowed during flood periods instead of the mine. Being a snow fed stream the Rogue is not subject to extreme flood conditions sufficient to cause serious trouble.

Electric power is available throughout the district, supplied by Oregon-California Power Co.

/s/ G. F. Rodfish, E. M.

Address

Rogue River, Oregon

Box 115

Rogue River, Oregon, Dec 10th, 1929.

Grants Pass, Oregon, Oct. 14th, 1933

I personal know G.F. Rodfish, and that this is a true copy of the original report, and the signature of G.F. Rodfish

/s/ M. F. Ireland, Notary Public

My commission expires Aug. 1935.

REPORT ON HYDRAULIC MINE

I have spent years in mining and examination work, and during the past two years have examined most of the mining properties of any size in Jackson, Josephine, Douglas, Coos and Curry Counties, Oregon, and those in the border Counties of northern California, and I have no hesitation in saying that in size, character of the gravel deposit, values in gold and platinum, and metals of the platinum group, found in the gravels and sand of this property it has no superior, if indeed its equal can be found in either Oregon, or California.

As a hydraulic property this mine stands in a class by itself, combining as it does high gold content in the ancient river channel that contains the gravel mined, absence of large boulders in the wash, freedom from cemented gravel, with abundant water available at small cost to permit working the property the entire year, a condition rarely found on any hydraulic mine in the West, while climatic conditions are all that could be asked and permit working, at high efficiency the entire twelve months.

This mine is delightfully situated on the western bank of Rogue River, some fifteen miles from the City of "Grants Pass", County Seat of Josephine County, Oregon, and easily reached over good roads by Automobile in forty to fifty minutes of pleasant driving. Supplies of all kinds are readily and cheaply obtained in Grants Pass, a growing city and one of the principal stations of the S.P. Railroad in Southern Oregon, the State highway from San Francisco, California, to Portland, Oregon passes through the City.

The Mine lies along the west side of Rogue River for two miles and comprises over 400 acres of ground, in which lies the old channel of the "Rogue", that contains the gravels now mined, and evidently back or west of this, but within the confines of this property, there is an ancient channel of the "Applegate" River, a stream which now has its confluence with the Rogue some distance above the mine here considered.

The gravel of this old channel of the Rogue that forms the mine is proven at both the upper and lower ends of the property and at several points between, conclusively showing its continuity and extent throughout the ground. The point now being worked lies near the center of the property, and is about one mile from either end. At the extreme lower end the bank of gravel is exposed fully sixty feet in height, with the same character of gravel and as uniform good values as elsewhere on the mine, and freedom from large boulders which make working so expensive on many mines. These gravels are free washing and require no crushing or treatment other than running them through the boxes to recover the values they contain.

I feel safe in saying that these gravels will average 60 cents per cubic yard for a height of 30 feet above bedrock (Any hydraulic miner knows what this means in profit) while there is much gravel that will run even higher. The present face of exposed gravel, now being worked, has a width of 750 feet, and the back rim is not reached or in sight, indications are that the gravel will continue several hundred feet further back, or westerly in width, until the true slope of the hill is reached, as the gravel bank is as strong and high along the west side of the present workings, this side plainly marking the extreme width across the channel yet exposed, the bedrock still shows no sign of rising but continues level, or dipping slightly to the west, indicating that the trough of the channel is not yet reached, or the rim near.

The course of this old channel through the property considered is northerly and southerly, the width or cross-section being east and west, with the present river on its east side, so that the west side or bank of exposed gravel is the point of greatest width, and the western rim of this channel, not yet reached, will determine its width. This west rim has

Along the west side of the workings a body of "blue gravel" is cut across for a width of 200 feet, it is evidently older than the wash further east, and apparently marks the entrance into an older section of the river bed. This blue gravel is very rich, running from \$2.00 to \$4.00 per yard, and carrying in addition to the gold, good values in free platinum. There is every reason to believe that this rich blue gravel will prove to be continuous clear to the south end of the property, proving both rich and extensive, with strong probability that the western rim of the old channel may develop some surprising values before it is reached.

This mine has heretofore been worked in a most careless out of date manner, with antiquated equipment and methods, resulting in great waste and loss of values, through having the boxes too flat to hold and save the fine gold and platinum, no undercurrents or other method is proved for saving the valuable sand concentrates, worth hundreds of dollars per ton, all of which have been permitted to go to waste in the dumps. The water supply has only been enough to operate during the rainy season, being obtained from two short mountain streams, which furnish a good head of water during rainy weather, but quickly run down when the rain ceases, the working season has varied from six weeks to three to five months, at most each year, according to whether the winter was wet or one of light rainfall.

There are three methods by which an adequate water supply can be placed on this property, all of which I have carefully investigated, and either can be used as desired. The first is to use the present system of irrigation ditches and pumps owned by a large ranch taking water from a permanent stream, which water they use during the three summer months, to get the water into their high-line ditch, the one that would have to be used to place this water on the mine under sufficient head to be of use, they require two pumping plants, each lifting the water about 45 feet, this plant is installed, and the pumps are operated by electric current supplied by a power line. I have secured their consent to the use of their ditches and pumps, as well as water rights, if I will keep the ditches and pumping plant in repair, and during the irrigation period, pump at my own cost enough water for them to irrigate 160 acres of their land, for which they use the pumping plant and high-line ditch, this would furnish the mine a nine months water supply, and will cost to dig the necessary ditch to convey the water from their property to the mine, and enlarge their present pumping plant to really adequate capacity, around \$15,000.00.

The second, the right to use which is also secured, is to utilize the water rights and ditch of an association of farmers, who use the water during the summer months for irrigation purposes; this will deliver water on the mine under sufficient head for all purposes for nine months of the year, the cost will be the entire up-keep of the main ditch, its enlargement, and the digging of not less than eight miles of ditch to place the water on the mine, I would estimate this to cost \$20,000.00 at an outside figure.

The last, and that which I most heartily recommend, is the installation of a pumping plant in Rogue River, on the mine's own river frontage, taking the pressure for the giants right from the pump, with a lower pressure pump to supply by-wash water, the lift to the gravel face will not exceed 22 feet, and this will give the mine water with which to work at high efficiency every day in the year, the supply being inexhaustible and quantity limited only by the size of pumping plant installed, with no one to interfere or bother the water in any way. I estimate the cost of this installation at the outside not to exceed \$20,000.00, to this I would add \$5,000.00 more with which to equip the mine with elevator, proper boxes and undercurrents, and concentration to recover the values in the sands. I believe the pumping plant can be installed for less than the figure given, but without obtaining prices on the equipment it is impossible to give the exact cost.

In the tailings dumps on this mine are over 300,000 yards of tailings which carry excellent values in gold and the platinum group of metals, these dumps can be worked over rapidly and at small cost, to recover the free gold and valuable sand concentrates therefrom, at I am sure a handsome profit, which I estimate will be sufficient to more than pay for the property, and its equipment, besides returning a liberal dividend above this and the working costs.

With an adequate water supply provided as herein outlined, 2000 yards of gravel should be readily worked per day of 24 hours during a period of ten months annually, or if the Rogue river water is pumped as suggested mining will be continuous for the entire twelve months each year. I am confident the gravel will average 60 cents per yard for a height of ten yards, or 30 feet from bedrock upward, this will include the bedrock under the ground worked, while the "blue" gravel lying along the west side of the channel, heretofore mentioned in this report, will certainly average \$2.00 per yard or better.

For the purpose of showing what may be expected from operation of this mine in an efficient manner, and figured at 60 cents gold recovery per yard of gravel worked, with the high grade blue gravel not considered, and based on the working of 2000 yards of gravel daily over a ten months working period annually, the following four estimates are submitted for comparison, with the last or minimum estimate placed at a figure so low that even the most pessimistic can find no fault with it.

By 2000 ^{YARDS} yards of gravel worked each 24 hours yielding a gross recovery of 60 cents per yard, equals per day	\$1200.00
Less working costs as follows:	
To wages of 10 men at \$4.00 per day each	\$40.00
To salary of Manager, per day	10.00
To upkeep and incidental expenses daily	10.00
To total cost per day	<u>\$60.00</u>
By net daily profit	<u>\$1140.00</u>

The above shows a working cost of 3 cents per yard of gravel worked.

SECOND ESTIMATE

By 2000 yards of gravel worked each 24 hours, Gross recovery 60 cents per yard, per 24 hour day	\$1200.00
To working costs at 5 cents per yard, per day	\$100.00
By net daily profit - - -	<u>\$1100.00</u>
By net monthly profit, 30 days per month	<u>\$33,000.00</u>
By net profit for 10 months working period	\$330,000.00

THIRD ESTIMATE

By 2000 yards of gravel worked per 24 hour day, gross recovery 35 cents per yard, per day	\$700.00
To working costs at 5 cents per yard, per day	\$100.00
By net daily profit - - - -	<u>\$600.00</u>
By net profit per month of 30 days	<u>\$18,000.00</u>
By net profit for 10 months working period	<u>\$180,000.00</u>

FOURTH ESTIMATE

By 2000 yards of gravel worked per day of 24 hours, gross recovery 17-1/2 cents per yard, per day	\$350.00
To working costs at 5 cents per yard, per day	\$100.00
By net daily profit - - - -	<u>\$250.00</u>
By net profit per month of 30 days	<u>\$7,500.00</u>
By net profit for 10 months working period	\$75,000.00

the encountering of gravel of lower grade than 60 cents per yard, and is putting it so low that its safety can not be doubted; yet even at the low recovery of 17-1/2 cents per yard a profit of \$75,000.00 is shown for a ten months working period, or an annual net return of 75% on an investment of \$100,000.00, a sum sufficient to secure the property and pay for its equipment.

In considering the preceding estimates of production and working costs based on a supply of gravity water, and while I believe the figure given of 5 cents cost per yard of gravel worked is sufficiently high to cover, or almost cover, the additional cost of pumping water from the river with which to work the mine, I would add 3 cents per yard of gravel worked to the working cost figured of 5 cents per yard and call it 8 cents per yard to safely cover pumping of the water and incidental costs, this will add \$60.00 per day to the cost of operation if 2000 yards of gravel is worked daily, and is more than a safe estimate to cover the cost of pumping all water required, to off-set this additional cost it is to be remembered that with the pumping plant installed, the mine can work efficiently for the whole twelve months each year, instead of only ten months as figured in the estimates submitted, and the profit derived by working two months longer each year will cover all the extra expense and leave the net annual income and profit but little changed. On all but the last and lowest, or "Fourth Estimate", the annual income would be increased, while the net annual earning of the fourth estimate would be reduced by \$6000.00 only, but as we have no gravel as low in value as 17-1/2 cents per yard this need not be a source of worry.

While on this subject it must not be forgotten that all the production estimates given are based on free gold recovery alone, and no account is taken of the values to be recovered in the concentrates which are very valuable on this property, and probably will exceed in value the free gold recovered.

Mention has been made on page 2 of this report that the tailings dumps on this property contain all of 300,000 yards of material, from which if worked over I would expect a gold recovery of 35 cents per yard. this dump material can be rapidly and cheaply worked at a cost not exceeding 5 cents per yard: Three hundred thousand yards is a most conservative amount at which to place the yardage in these dumps, and it will greatly exceed this figure. Gravel weighs from 3000 pounds to 3500 lbs per cubic yard and 300,000 yards would equal at least 450,000 tons, if the concentrates are saved in working over the dumps a much higher recovery than 35 cents per yard may be confidently expected. Confirming this statement the following results obtained in metal actually recovered through treatment of 100 pounds of these sand concentrates, which were carefully made for the purpose of determining their real value in recoverable metal content are respectfully submitted herewith.

The concentrates were made by panning, only the fine heavy black and gray sand being retained: All free gold and platinum that could be removed by the pan was first recovered, quicksilver was then introduced and the remaining gold that would amalgamate was taken out, the concentrates were then placed in a solution to clean the rusty gold that the quicksilver had not taken up and then again amalgamated, after this had been done 100 lbs of concentrates was carefully weighed out and treated with the following result.

By Gold recovered	-71 Grains	-Value-	\$3.05	-or per ton	- \$61.00
By Platinum "	-15 Grains	-Value-	4.05	" "	- 81.00
By Iridium "	- 9 Grains	-Value-	5.74	" "	- 114.80
By Ruthenium	- 6.9 "	-Value-	.94	" "	18.80
Total recovery from 100 lbs					- \$13.73-val per ton \$275.60

Gold figured at	- \$20.67	per oz.
Platinum "	120.00	" oz.
Iridium "	400.00	" oz.
Ruthenium "	50.00	" oz.

of concentrates or a total value of \$13,78 from the hundred pounds treated, and this multiplied by twenty gives the value per ton of \$275.60.

By the method of treatment employed an estimated loss in recovery of 25% of the values was incurred, but with a furnace in which to fuse the concentrates treated this loss would be reduced to 5% or less, and a correspondingly higher extraction and recovery of values could be made at less cost than by the treatment used.

A recovery of 1% of concentrates may be safely figured in working these gravels, either from the bank as it is mined, or from the dump material, this equals one pound of concentrates to each 100 lbs of gravel handled, or 20 lbs of concentrates to each ton worked, giving one ton of concentrates to each 100 tons of gravel, and this recovery would be made almost automatically at trifling cost while working the gravel, these concentrates would have a gross value, based on the recovery made, of \$275.60 per ton, as one yard of gravel will equal 1-1/2 tons of gravel this would be equivalent to \$4.12-1/2 per yard of gravel worked. (At one half of this value these concentrates would be very profitable and must be saved) On this basis of 1% concentration there would be recovered from 300,000 yards of material in the dumps, which is equal to 450,000 tons, or 4500 tons of concentrates, worth at \$275.60 per ton - \$1,240,200.00.

A furnace capable of treating the concentrates recovered can be installed on the property at a cost inside of \$5000.00, this furnace would recover the metal content as a matte, or button from the pour, in which all the metals would be together, from this the various metals can be separated and recovered chemically, the cost of this treatment and method of recovery will be about \$30.00 per ton of concentrates treated, and leaves a very handsome margin of profit, at half the value shown a nice profit would still remain after all costs are paid.

I have the metal recovered from the 100 lbs of concentrated and can duplicate this result at any time when necessary to verify this statement. When we consider that this dump material can be rapidly and cheaply handled it becomes alone a most attractive proposition.

If we figure the working life of this property at only twenty years, a most conservative estimate, and take the net annual recovery at \$75,000.00 as shown by the fourth estimate given in this report, putting the total investment required to secure and equip this property at \$100,000.00, then each dollar invested would return the investor a net of \$15.00 or 75% annually on his money for twenty years. That the mine will have a longer working life than twenty years I am confident. By the purchase of 200 acres additional land that adjoins the ground considered, and through which beyond any possible doubt the old channel now worked in this mine passes, the life of the mine can be increased many years. The ground referred to can be had at a low figure if bought in the near future.

In concluding this report I wish to add that I will take a contract to work this property on the basis of 2000 yards per 24 hours if gravity water is placed on the property, or at 8 cents per yard if the pump is installed and do my own pumping.

The facts stated in this report can be proven on the ground to any competent mining man and I will undertake to do this.

Respectfully submitted,

/s/ G. F. Bodfish, E. M.

Rogue River, Oregon, December 9th, 1925

Address G. F. Bodfish, E. M.
Box 115,
Rogue River,
Oregon.