<table>
<thead>
<tr>
<th>NAME</th>
<th>OLD NAMES</th>
<th>PRINCIPAL ORE</th>
<th>MINOR MINERALS</th>
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<tbody>
<tr>
<td>Camp Carson Claims</td>
<td>Se Carson Hill Claims</td>
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<tr>
<th>Township</th>
<th>Range</th>
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<th>UNION COUNTY</th>
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<th>DISTANCE TO SHIPPING POINT</th>
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<tr>
<th>PRESENT LEGAL OWNER (S)</th>
<th>OPERATOR</th>
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<th>EQUIPMENT ON PROPERTY</th>
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<td>Name of claims</td>
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<tr>
<td>Name of claims</td>
</tr>
<tr>
<td>Name of claims</td>
</tr>
</tbody>
</table>

**PUBLISHED REFERENCES**

- Bulletin 14-A, page 111
- Lindgren 01:676

**MISCELLANEOUS RECORDS**

**OPERATOR**

**ADDRESS**

- La Grande, Oregon

**PRESENT LEGAL OWNER (S)**

- Anne Oliver

**5 S.** | **36 E.** | **28** |
<table>
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</table>

**COUNTY**

- Union

**AREA**

- Camp Carson

**ELEVATION**

- 1900 feet above sea level

**DISTANCE TO SHIPING POINT**

- Road to property from railroad or highway

**UNIVERSITY OF MINNESOTA**

**GEOLOGY DEPARTMENT**

**MINOR MINERALS**

- Gold
DEPARTMENTAL RECORDS on file in P'land C.P. Baker

REPORTS
- Report on Camp Locals, Union C. Oregon - D. N. Esdaile, NE, 1908
- Report on Placer of French Grade, Union C., Oregon - H. L. Hoge, B. B., Montana, June 20, 1914
- Camp Carson Gold, Oliver Holderby, July 23, 1926
- Letter by Mr. Oliver, July 29, 1926 - Giving very early history of property
- Copy of Coast Order giving title to 63 claims, date right, etc. to Mr. Oliver
- Letter describing property operations - By Harry Howells - Mar 6, 1938
- " " " " (but different), " " Feb 19, 19??

SHIPMENT AND ASSAY RECORDS
- List of samples - average and test data - signed by L. J. Hartog, Assayer, Montana State School of Mines - (accompanying H. L. Hoge's report, see above)
- Want receipt for shipment by Howells to Seattle, WASHINGTON - No. 1922 Sept 7, 1937

MAPS
- Blue Print of French Grade Lake - Onton
- Blue Print of French Grade, Union C. - H. L. Hoge
- Blue Print - Description of French Grade, Union C. - H. L. Hoge
- Blue Print of Oliver Holderby's Camp Carson and others - unsigned and undated - but contains 1934 claims
- Mining Map of Eastern Oregon showing hydraulic claims, to accompany Report
- Correspondence: " " " " (but different)

See also Correspondence.
<table>
<thead>
<tr>
<th>Name of claims</th>
<th>Area</th>
<th>Pat.</th>
<th>Unpat.</th>
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<th>Pat.</th>
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</table>

**COUNTY**

**AREA**

**ELEVATION**

**ROAD OR HIGHWAY**

**DISTANCE TO SHIPPING POINT**

**PRESENT LEGAL OWNER (S)**

**Address**

**OPERATOR**

**EQUIPMENT ON PROPERTY**
Mr. Timothy P. Hopkins,
Gordon Land, C.E.
Seattle, Wash.

Dear sir:-

Hereewith please find tabulated statement showing results found in the examination of the under-current material from the Camp Carson Placer Mine of Union County, Oregon.

Our instructions were to ascertain what values in gold, other than free gold, existed in the iron pyrites, of which there is a considerable proportion. With this object in view, the "ore" was sized into three classes finer than 20 mesh. Bash size was separately concentrated on a Wilfley Table. Each concentrate so obtained was then passed through a Wetherill Magnetic Separator to remove a heavy percentage of garnets and other magnetic material. By this plan, the iron sulphides, some silicious gangue and free gold, became what are termed as non-magnetic tailings.

The three concentrates so obtained were then assayed, as shown in the statement.

To determine whether gold was present, not in an apparent free state, several different methods were tried, all of which are reported herewith.

RESULTS:

Gross weight received -- 9 --- sacks 531.5 lbs
Weight of sacks 5.55
Net weight 526.0

Without crushing, the ore was then dry screen sized as follows;

\[
\begin{array}{l|c|c|c}
\text{Percent} & \text{Weight.} & \\
\hline
+ 10 mesh & 148 lbs & 28.73\% \text{ Discarded.} \\
-10 " + 16 mesh & 118.25 lbs & 22.95\% \text{ Reserved.} \\
-16 " + 20 " & 40.75 " & 7.91\% " \\
-20 " & 208.25 " & 40.41\% " \\
\hline
\text{Wilfley tailings from all sizes discarded.} & \text{100.00\%} & \\
\end{array}
\]

Total to Wilfley table concentrates from

\[
\begin{array}{l|c|c|c}
\text{Percent} & \text{Weight.} & \\
\hline
-10 + 16 mesh & 2991 grams = 6.59 lbs \approx 27.66\% \\
-16 +20 " & 876 " \approx 1.93 " \approx 8.10\% \\
-20 " & 6945 " \approx 15.31 " \approx 64.24\% \\
\hline
\text{Wilfley tailings from all sizes discarded.} & \text{100.00\%} & \\
\end{array}
\]

Wetherill Magnetic Separation at 2.60 amp.

\[
\begin{array}{l|c|c|c|c|c|c|c}
\text{Magnetic} & 244 grams & 5.41 lbs. & 4.68 " \text{ Au} & 5.20 \text{ Oz.} \\
\text{Non-magnetic} & 2130 " & & \text{Metallics} & 1.20 " \\
& & & \text{per ton} & 5.40 " & $128.00 \\
\end{array}
\]
-16 +20 mesh.

<table>
<thead>
<tr>
<th>Magnetic</th>
<th>157 grams</th>
<th>0.25 lbs</th>
<th>Au</th>
<th>16.90 oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-magnetic</td>
<td>712 &quot;</td>
<td>1.568 &quot;</td>
<td>3.86 &quot;</td>
<td>$415.20</td>
</tr>
</tbody>
</table>

Metallics per ton: $20.76

Combined Concentrates.

<table>
<thead>
<tr>
<th>Magnetic</th>
<th>4245 grams</th>
<th>9.34 lbs</th>
<th>Au</th>
<th>31.48 oz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-magnetic</td>
<td>2700 &quot;</td>
<td>5.94 &quot;</td>
<td>3.15 &quot;</td>
<td>$698.60</td>
</tr>
</tbody>
</table>

Per ton: 34.93 "$698.60

Concentration ratio - 42.27 tons into one.

While we are aware that material gold values remain in the +10 size which has not been treated, we have already from the other three sizes recovered $2.70 which calculating back to the 515.25 lbs. is equivalent to a gross value of $10.50 per ton of material.

1000 grams of the non-magnetic tailings after a current of 2.6 amp. were then passed again through the Wetherill at higher strength to determine the possible presence of monazite. The percentages quoted below are in comparison with the product that was treated and not as compared with the original 515.25 lbs. The amounts by such comparison are insignificant and the attempt to locate monazite was abandoned - although some is present.

RESULTS.

Magnetic at 3 amp. 126 grams 12.60%
  " 4 " 1st pole 43 " 4.30%
  " 4 " 2nd " 49 " 4.90%
  " 4.8" 1st " 15 " 1.50%
  " 4.8" 2nd " (25) 228 " 23.80% (2.50)

Non-magnetic tailings 736 " 73.80%
Loss 4 " .40%

1000 " 1000.

Following this, a series of special examinations were made to settle the main issue as to the presence of gold - not free - in the iron sulphides.

(A) Panned sample from the -20 mesh concentrates, i.e. non-magnetic tailings from the Wilfley concentrates. Weight panned - 50 gram Au

Assay of tailings 3.92 oz. $79.40 per ton.
(B) Amalgamation test of the non-magnetic tailings from the -20 final product.

Au
Assay of tailings after anal. 4.50 oz. $90.00

Fineness of the amalgamated gold - 906.
Value per ounce of the gold $18.73
Percentage of free gold in these concentrates subject to ordinary amalgamation 87.12%

#
#
#

(C) Examination of hand assorted clean iron pyrite taken from the -10 size of the original lot.

Weight treated - 1.5 lbs.
Wgt. of concs. 31 grams
Ratio - 21.9 tons to 1.

Assay of concentrates 0.04 oz. $0.80 per ton.

#
#
#

(D) Special examination of the final concentrates obtained from -10 -16 mesh size.

Weight of concentrates treated 500 grams.

" after roasting 443
Loss (sulphur) 57 " 11.4%

Wetherill magnetic product at 0.20 amp. 346 grams (Au 0.04 oz, $0.80 69.3%
Wetherill mag. prod. @ 5 amp. 95 gms. 19.0%
Non-mag. tailings, 1 gram .2%
99.9%

Concentration ratio of the magnetic iron product - 1.44 tons to 1. 69.3% by weight of these concentrates assaying 80¢ per ton indicates an original value of 55¢ per ton in the concentrates existing otherwise than as so-called free or visible gold.

#
#
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(E) The results obtained from a concentration of the -10 size, amounting to 28.75% by weight of the original lot, will be reported later. This size contains 0.91% of iron pyrite.

#
#
#

In our opinion these various tests prove definitely that the gold existing in this placer material is not in combination with the iron.

Very truly yours,

The Henry E. Wood Ore Testing Co.

By Henry E. Wood
At the request of parties interested in the development of mining operations at Camp Carson, I visited the property to determine the available pay-gravel tonnage to be handled by a combination of hydraulic mining and a system of separation by wet sizing in gravity tubes and screens before passing to wet magnetic separators.

I found the deposit large, and free from an excess of heavy boulders, a light overburden, an unusual amount of iron sulphides and garnets, together with magnetic sand.

A feature to be noted by the tests made was the certainty of finding gold colors in every pan, no matter where taken.

The object of my visit was not to report on the geology of the gravel deposit, but solely as to available material which was gold-bearing in paying quantities and of great tonnage. I found every condition ideal for successful mining operations, plenty of water, ample fall for disposal of tailings, pay gravel enough for many years of extensive mining. The presence of such heavy iron concentrates has in the past in a measure prevented the recovery of much of the fine free gold by filling the riffles and thereby excluding or crowding out the fine flaky gold carried in the sand and gravel. By a system of hydraulic separation it is now possible to save all of these rich iron concentrates and either ship to a smelter or separate the gold at the mine. I submit an estimate based on the handling of 1000 cubic yards per day of twenty-four hours (owing to the excess of iron sulphides and garnets, this mine material will weigh two tons to the cubic yard), or, say, a daily output of 2000 tons of crude sand and gravel.

By concentrating 100 to 1 it is possible to obtain 20 tons of gold bearing iron sulphides every day, which will sell for $200. per ton at the Tacoma smelter. A series of separations made recent-
netic separation removes both the iron and the garnets, but not the free gold nor the sulphides. The tube classifiers precede the wet magnetic separators and get rid of all sand and light materials. A system of sluices captures all the free gold and washes all the material before passing over the grizzlies. Undercurrent riffled sluices take the one-fourth inch undersize to separating tables, which are stationary, having very steep grades and small angle-bar riffles, passing thence to the tube classifiers, finer grizzlies remove all oversize to one-eighth inch. The classifiers reject the lighter material and separate all the heavy. The classifier product passes on to the magnetic separators, where the final separation occurs.

Other reports on this property fully set forth the physical conditions, which I found to be as stated. The mine is equipped to handle 3000 cubic yards daily, but I do not deem it best to install a recovery plant to handle more than 1000 cubic yards, which will furnish 2000 tons to be treated.

Very truly,

Gordon Land.

April 25-1914.
The following is an extract of the report published on the Camp Carson Mines.

The mines comprise about 1700 acres of mining ground near the head of the Grand Ronde river, Union County, Oregon.

The property is located 55 miles by wagon road from La Grande and 48 miles from Hilgard, and 27 miles from North Powder, all being stations on the main line of the O.R.& N. Railway in Eastern Oregon. La Grande is a town of about 5000 people, and is in the center of the famous Grande Ronde Valley, an ideal farming section and is the main source of supplies.

The ground is surveyed and recorded. The water rights are of 35 years standing, and there are no liens, mortgages, suits or any other incumbrances against the mines.

The district is mountainous but not rough and is exceptionally well watered. The entire region is heavily timbered with pine, fir and tamarack. In the winter the snow fall is from 1 to 6 feet on various parts of the property, but in summer the climate cannot be excelled. The altitude varies from 4500 feet at the river to about 5500 feet at the upper end of the mine. At the source of the water supply, about 3 miles distant, a more lofty range rises to a height of about 9500 feet above the sea. These mountains are locally known as the North Powder and Grande Ronde Peaks, and receive a snow fall of ten feet or more, thus ensuring a large and steady water supply through the summer. Several small mountain lakes exist in this region and have been dammed and use as reservoirs by the mine.

The formation immediately surrounding the property is a rather coarse grained diorite granite, probably Archaen in age. This forms the bed rock of all deposits. The ancient river channel (to be hereafter noted) is probably Pleistocene in age and contains much carbonized and silicified wood, and such curious remains as animal bones and elk and mountain sheep heads of post-tertiary origin. The genesis of the deposits is undoubtedly identical with the so-called blue lead of California, the Horsefly and Quesnelle River gravels of British Columbia, and in general with the immense auriferous gravel deposits of the world, wherever found. No gold bearing quartz veins are known to exist in the immediate vicinity, but a number of small high grade silver veins of high value have been recently opened. The source of the gold has evidently not been in the granites themselves, but rather in the immense belt of auriferous slates of the Juna Trias lying far to the southward in Grant County. Particular evidence of this theory will be advanced a little later. This consists of two separate and distinct portions, which will be taken up separately. First and most prominent is the extinct Pleistocene River previously mentioned, and now left high and dry a full thousand feet above the present river system; secondly, a distance of several miles below where it cuts the ancient river. About one-half of the Company's holdings cover the old channel, the balance comprising the more shallow, but in some respects richer placers along the Grande Ronde. It is, however, upon the really enormous showings of the upper channel that the mine is presented.

This is identical in type and character with the preglacial river beds of California, which have proven such immense and lasting sources of gold. The present workings of the Carson Mines have opened the deposit for upwards of a mile in length, mainly on the rim rock of the channel. The river bed is shown by the working pits.
to be certainly not less than 800 feet in width and the banks now
being worked have an average height of 60 feet, and the old Carson
pit is now 1500 feet long, and the banks are 120 feet in height.

It is believed that when the mine is fully opened that the banks
will not be less than 200 feet in vertical height, the working faces
through the mine growing deeper with great rapidity it is evident from
the survey of the workings that the direction of the flow has been
from the south, also that the up-lifting of the North Powder moun-
tains has sufficiently tilted the upper portions of the channel to
form its natural outlet on Grande Ronde river as indicated on the map.

Most of the surface is deeply covered with soil and heavily
timbered, but the various prospect pits clearly define the source
and immense width of the old river channel. So far only the east
rim of the channel has been worked, and five pits in all have been
opened.

Reference is hereby as to the map of the mine for their respect-
ive positions. These pits vary from 400 to 1500 feet in length, and
from 200 to 600 feet in width. Old Camp Carson or the so-called big
pit, being the largest, and in many respects, the best showing.

New Carson is, however, a large fine pit. The upper pit, while long,
(about 1000 feet) is only 200 feet wide, and rather shallower
than the rest. The gravel is, however, a trifle better in grade.

This is so distinctive that no trouble is ever experienced
in recognising the Carson "wash". The bed rock gravel is generally
from 8 to 30 feet in thickness, and consists almost exclusively of
rounded masses of hard, flinty quartz, locally termed "Glass bould-
ers". They are of various colors, nearly spherical and of a very
uniform size, averaging about 20 to 30 pounds in weight. They all
go through the flumes when using the Evans riffles. Their presence
is so absolutely a sign of payable gold contents, that wherever
seen they mark beyond a doubt a "spill" or other indication of the
Carson channel.

Some large slate fragments are at times met with, blended with
the same character of quartz, showing beyond doubt that the deposit
had its origin in the grinding of glaciers or glacier river, upon the
net work of suriferous veins in the state region, far to the south-
ward, and in what was then the source of the pleistocene river.

All the work in the old channel has yielded to date an average of
17 cents per cubic yard. In no where upon the entire property can
a pan of gravel be taken that will not yield a payable product.
This is really remarkable when the immensity of the deposit is con-
sidered. No large pannings were obtained but always average about
the same showing merely what can be extracted from the gravel with
the present methods and equipment. The gold in the top gravel and
the sand streaks is generally fine, and in the blue gravel somewhat
coarser but smooth and worn, some small nuggets or from $3. to $5.
are cleaned up off the bed rock.

There is also an iron sulphide carrying from $19.80 to $1926.61
of gold and 9.92 ounces of silver per ton that could be saved with
a good concentrator, after the material is ground to a 40 mesh
screen, and in order to save all the values, all material that will
go through a 1/2 inch grizzly should be ground, this material can all
be put into mill by rotary hydraulic, and at a very small cost per ton.

Another interesting feature of this property is the power that
can be generated thereon and may be estimated within the new reser-
voir and lakes mentioned above, to not less than 2000 H.P. This
property is situated between three cities, Baker City, La Grande and
Pendleton, which are short of power and will need more every year to
come. It is estimated that a pole line would reach La Grande within
25 to 30 miles. A new wagon road has been built by a mining company
within the last few months which will carry 20 freight cars at a time, and
will be completed within 90 days, when a regular line of three freight
trains in a day can be operated between the mine and La Grande, with
a total pay of $2500.00 per day.
Gentlemen: -

The sample of coarse placer concentrates left by you, has been tested by amalgamation and concentration, with the results as follows: -

<table>
<thead>
<tr>
<th>Assays</th>
<th>Heads: 2.50 ounces gold per ton</th>
<th>$51.68</th>
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</thead>
<tbody>
<tr>
<td>Tailings</td>
<td>0.89 &quot; &quot; &quot; &quot;</td>
<td>18.39</td>
</tr>
<tr>
<td>Amalgamation</td>
<td>1.68 &quot; &quot; &quot;</td>
<td>34.73</td>
</tr>
</tbody>
</table>

The tailings from this amalgamation were crushed to pass 40 mesh and concentrated 8. to 1.

<table>
<thead>
<tr>
<th>Assays</th>
<th>Heads: 0.89 ounces gold per ton</th>
<th>$18.39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentrates</td>
<td>4.81 &quot; &quot; &quot;</td>
<td>99.43</td>
</tr>
<tr>
<td>Tailings</td>
<td>0.07 &quot; &quot; &quot;</td>
<td>1.45</td>
</tr>
</tbody>
</table>

Saving by amalgamation

64.4%

Saving by amalgamation and concentration, based on assay of the final tailings

97.2%

I believe that practically all the gold in this gravel and sand is metallic, but that some of it is so coated with rust that it does not amalgamate readily.

Yours truly,

(Sig.) C.M. Fassett,
Assayer.
In this report we wish to add the following information:

The main stream, consisting of the Grande Ronde River are as follows:
The East Fork of the Grande Ronde; The West Fork (or Big Gulch or Deep Creek) and the Clear Creek.

The company owns the following ditches:
The North Powder Ditch (which brings the water from Powder Creek to the main Grande Ronde. The Main Grande Ronde Ditch (which is the nucleus of this water system and brings the water of Powder Creek to the reservoir of the company at Camp Carson. This ditch is one of the best made ditches that can be found in any mountain district and has been blasted for a good part of it out of solid granite and it is in first class condition and will carry 1800 mining inches of water.)
The Clear Creek Ditch (which carries water from Clear Creek to the reservoir at Camp Carson.

Besides these ditches there are others, mainly one on the East Fork.

There is a reservoir built strongly and of the following dimensions. Length of dam 375 feet; height 20 feet in the center. Length of reservoir back of dam 325 feet; length of upper end of reservoir is 200 feet with a depth of only 2 feet. Other meadows and lakes could be appropriated to make reservoirs of great extent from 40 to 60 acres each.

There is a dump of 800 feet from the placer gravels down to the Grande Ronde River. The equipment includes about 15 buildings on different parts of the ground. A house costing $5500. Everything is in first class condition, good barns, good steam saw mill. There is also about 4000 feet of good steel pipe in good condition, 600 feet of 36 inch wood stave pipe, all in use today. 1000 feet 18" steel pipes with flanges 1/10; 2000 feet steel pipe from 20" diameter down to 11" 1/14 and 1/16 gage, and giant hydraulic etc.

An interesting feature of these placers is the flat placers at the foot of the upper camp on the Grande Ronde river, where a great quantity of black sands have piled up for some forty years.

In the tailings of the gravels which have been worked by hydraulic power, the most of these tailings have gathered in a gulch called Tanners Gulch, below Camp Carson, and on the river flat, at the junction of the Grande Ronde with Tanners Gulch. This is a new feature as the values of the black sands in different materials, magnetite, chromite, monazite, tungsten, titanium, zircon and sometimes platinum has been discovered and the way of parting these minerals has been found through the magnetic separator, only these last years, at the same time making easier the recovering of the fine gold kept by these black sands; The quantity of the black sands piled up in the tailings has not been ascertained yet, but enough is known of it to say that a serious consideration and study of it should be made.

These placers have been examined the last years by different experts who have reported favorably, Messrs. W. N. Basel of Boston; R.J. Jory of Los Angeles; Francis Ogilvy Wood and Jas. R. Himandorf of Los Angeles and last of all by Mr. Geo. R. Evans of Brockenridge, Cal.

Inventor of the magnetic separator is considered the most prominent expert in the U.S. for placers.
Mr. Young,
City.

Dear sir:-

The result of my assays on samples of gravel left with me are as follows:-

<table>
<thead>
<tr>
<th>Marked</th>
<th>Value Gold Per Yard.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0.45</td>
</tr>
<tr>
<td>2</td>
<td>.064</td>
</tr>
<tr>
<td>3</td>
<td>.258</td>
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<tr>
<td>4</td>
<td>.30</td>
</tr>
<tr>
<td>5</td>
<td>.022</td>
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<tr>
<td>6</td>
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<td>7</td>
<td>.55</td>
</tr>
<tr>
<td>8</td>
<td>.40</td>
</tr>
<tr>
<td>9</td>
<td>.30</td>
</tr>
<tr>
<td>10</td>
<td>.52</td>
</tr>
<tr>
<td>11</td>
<td>.71</td>
</tr>
<tr>
<td>1-T.G.</td>
<td>.42</td>
</tr>
<tr>
<td>2-T.G.</td>
<td>.10</td>
</tr>
<tr>
<td>3-T.G.</td>
<td>.03</td>
</tr>
<tr>
<td>4-T.G.</td>
<td>.26</td>
</tr>
<tr>
<td>1-B.F.</td>
<td>.17</td>
</tr>
<tr>
<td>2-B.F.</td>
<td>.17</td>
</tr>
<tr>
<td>3-B.F.</td>
<td>.39</td>
</tr>
<tr>
<td>1-U.F.Pit.</td>
<td>.19</td>
</tr>
<tr>
<td>2-U.F.Pit.</td>
<td>.16</td>
</tr>
<tr>
<td>3-U.F.Pit</td>
<td>.48</td>
</tr>
<tr>
<td>5-T.G.</td>
<td>.13</td>
</tr>
</tbody>
</table>

Value per ton.

| 6-T.G.  | $6.00                |
| 7-T.G.  | 702.20               |
| 1-C     | 1.20                 |
| 2-C     | 1.60                 |
| 1-R     | .40                  |
| 2-R     | 492.60               |
| 1-E.R.  | 12.20                |
| 2-E.R.  | 3.20                 |
| 3-E.R.  | 826.40               |
| 4-E.R.  | 333.00               |
| 5-E.R.  | 8.                   |
|         | 258.20               |

Respectfully,

C.E. Bogardus.
ASSAY CERTIFICATE.
MONTANA STATE SCHOOL OF MINES.
Butte, Montana.

Mr. Hoyer,
Butte, Montana.
June 29-1914.

The samples submitted assayed as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Gold oz.</th>
<th>Gold &amp; Sil.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Screened ore Big Pit Wt. 18-11 oz.</td>
<td>0.01</td>
<td>$0.20</td>
<td>33¢ per cu.yd. solid.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20¢ per cu.yd. loose.</td>
</tr>
<tr>
<td>2</td>
<td>Grab sample Big Pit Wt. 11-5 oz.</td>
<td>0.01</td>
<td>0.20</td>
<td>33¢ per cu.yd. solid.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20¢ per cu.yd. loose.</td>
</tr>
<tr>
<td>3</td>
<td>Side flume concentrates.</td>
<td>0.61</td>
<td>12.20</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Flume concentrates.</td>
<td>0.78</td>
<td>15.60</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Gravel &amp; fine stuff 7 lbs. 8-3/8 oz.</td>
<td>0.02</td>
<td>0.40</td>
<td>66¢ per cu.yd. solid.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40¢ per cu.yd. loose.</td>
</tr>
<tr>
<td>6</td>
<td>Tanna Gulch. 8 oz. from 25 lbs.</td>
<td>0.89</td>
<td>17.80</td>
<td>Ratio of concentration 50 into 1</td>
</tr>
<tr>
<td>7</td>
<td>&quot;</td>
<td>0.78</td>
<td>15.60</td>
<td>Ratio of concentra-</td>
</tr>
<tr>
<td></td>
<td>&quot;</td>
<td></td>
<td></td>
<td>tion 53 into 1</td>
</tr>
<tr>
<td>8</td>
<td>Concentrates from flume.</td>
<td>2.70</td>
<td>54.00</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>&quot;</td>
<td>2.95</td>
<td>59.20</td>
<td>Silver $0.40 oz.</td>
</tr>
</tbody>
</table>

Calculations per cu.yd. based on the weight of 1 cu.yd. as follows; Solid undisturbed ground............3300 lbs. 1 cu.yd.
As it goes into the sluice............2000 " 1 " 

(Sig.) Prof. L. J. Hartzell, Assayer.

Gold @ $20. per oz.
Silv. @ 56¢ " "

Dear Kammerer;- I leave this copy for you at the Firler Hotel.
You have seen the original, as you can explain to Mr. Morony. I left 

" " You have talked with Hoyer and