

PLACER MINE OPERATIONS IN OREGON

1935 through 1955

	<u>Connected Bucket Dredges</u>	<u>Total Placer Mines Producing</u>	<u>Total Material Treated (cu. yds.)</u>	<u>Total Gold Recovered</u>		
				<u>Fine Ounces</u>	<u>Value</u>	<u>Average Per Cubic Yard</u>
1935	5	268	6,290,000	32,704.03	\$ 1,144,641	\$.182
1936	5	166	8,862,000	39,421.00	1,379,735	.156
1937	4	150	7,831,000	34,219.00	1,197,665	.153
1938	5	157	11,355,000	54,331.00	1,901,585	.167
1939	5	201	13,322,000	60,779.00	2,127,265	.160
1940	6	192	16,684,000	71,577	2,505,195	.150
1941	7	153	14,646,000	60,430	2,115,050	.144
1942	6	83	8,150,000	38,336	1,341,760	.165
1943		16	41,000	208	7,280	.178
1944		10	30,200	293	10,255	.340
1945	3	10	1,941,000	3,986	139,510	.072
1946	4	37	5,519,000	16,502	577,570	.105
1947	2	49	5,150,000	17,648	617,680	.120
1948	2	38	4,012,750	12,522	438,270	.109
1949	3	29	4,157,300	14,465	506,275	.122
1950	2	42	3,247,200	9,022	315,770	.097
1951	2	21	2,753,600	7,164	250,740	.091
1952	1	25	2,596,500	4,896	171,360	.066
1953	1	21	2,213,750	7,289	255,115	.115
1954	1	26	1,501,390	4,992	174,720	.116
1955	-	21	32,950	203	7,105	.216

**Gold Produced at Placer Mines, 1946-50 (average), and 1951-55.
by Classes of Mines and Methods of Recovery**

Class and Method	Mines	Material	Fine	Gold Recovered	Average
	Pro- ducing	Treated		Value	Value per
	1/	(cubic yards)	Ounces		Cubic Yard
Surface placers:					
Gravel mechanically handled:					
Bucketline dredges:					
1946-50 (average).....	3	3,804,360	10,655	\$ 372,918	\$ 0.098
1951.....	2	2,719,900	6,775	237,125	.087
1952.....	1	2,548,700	4,571	159,985	.063
1953.....	1	2,176,000	6,935	242,725	.111
1954.....	1	1,382,000	4,685	163,975	.119
1955.....	-	---	---	---	---
Dragline dredges: 2/					
1946-50 (average).....	7	486,930	2,522	88,284	.181
1951.....	1	6,500	47	1,645	.253
1952.....	1	5,000	27	945	.189
1953.....	-	---	---	---	---
1954.....	1	3,000	11	385	.128
1955.....	-	---	---	---	---
Nonfloating washing plants: 3/..					
1946-50 (average).....	4	28,220	247	8,645	.306
1951.....	-	---	---	---	---
1952.....	-	4/	5	175	---
1953.....	-	---	---	---	---
1954.....	2	2,610	44	1,540	.590
1955 5/.....	-	---	22	770	---
Gravel hydraulically handled:					
1946-50 (average).....	16	82,580	374	13,090	.159
1951.....	11	16,550	115	4,025	.243
1952.....	9	27,600	147	5,145	.186
1953.....	9	27,500	209	7,315	.266
1954.....	16	101,300	170	5,950	.058
1955.....	8	24,400	103	3,605	.148
Small-scale hand methods: 6/					
1946-50 (average).....	8	11,760	194	6,783	.577
1951.....	5	9,850	207	7,245	.736
1952.....	13	15,200	146	5,110	.336
1953.....	10	9,800	138	4,830	.493
1954.....	7/ 5	12,400	60	2,100	.169
1955.....	12	8,400	64	2,240	.267
Underground placers (drift):					
1946-50 (average).....	1	400	9	308	.770
1951.....	2	800	20	700	.875
1952.....	-	---	---	---	---
1953.....	1	450	7	245	.544
1954.....	1	50	22	770	9.600
1955.....	1	150	14	420	2.800

1/ Includes all sources of gold from surface placers.

2/ Includes bucketline dredges, dragline dredges, and other types of dredges used in surface placers.

3/ Includes all types of nonfloating washing plants used in surface placers.

4/ Includes all types of floating washing plants used in surface placers.

5/ Includes all types of small-scale hand methods used in surface placers.

6/ Includes all types of small-scale hand methods used in surface placers.

7/ Includes all types of small-scale hand methods used in surface placers.

8/ Includes all types of small-scale hand methods used in surface placers.

- Gold

September 4, 1959

Mr. LeRoy C. Kimmie
Keogan and Kimmie
Attorneys and Counsellors
607 Empire State Building
Spokane 1, Washington

Dear Mr. Kimmie:

We have in this office no record of production from the Thornbury or Thornburg placer operation. We are, however, sending a copy of your letter to Mr. N. S. Wagner of our field office in Baker, Oregon, and you will be hearing from him concerning any information he may have on this property and placer possibilities along the North Fork of the John Day River.

Enclosed is a paragraph quoted from our Miscellaneous Paper 5, Oregon's Gold Placers, describing briefly the John Day region. In a separate envelope we are sending you two issues of our monthly publication, The Ore.-Bin, containing articles on early-day mining in Grant County and geology of the John Day country.

We will be happy to send you a copy of our Bulletin 1, Mining Laws of the State of Oregon, upon receipt of the purchase price of 50 cents.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.
cc N. S. Wagner

"(This area embraces parts of the Canyon, Granite, Greenhorn, Middle Fork, North Fork, Quartzburg, and Susanville mining districts.) Included in the area are the John Day River and the headwaters of the Middle and North forks of the John Day with all their tributary streams. The placers here are predominantly of the river and gulch type although some Tertiary placer exists, such as that represented by the French diggings. No western boundary can be given to this area with the information that is available. Gold is known to extend considerable distances down these drainages to the westward, but evidence concerning the limit of economic concentrations is lacking."

NORTHTOWN
HUDSON 3-6488

LAW OFFICES OF
KEOGAN AND KINNIE
ATTORNEYS AND COUNSELLORS

DOWNTOWN
MADISON 4-8475

LARRY T. KEOGAN
LEROY C. KINNIE

DOWNTOWN
607 EMPIRE STATE BUILDING
SPOKANE 1, WASHINGTON

NORTHTOWN
NORTH 4910 DIVISION

August 25, 1959

Department of Geology and
Mineral Industries
1069 State Office Building
Portland 1, Oregon

ATTENTION: Ralph S. Mason,
Mining Engineer

Dear Mr. Mason:

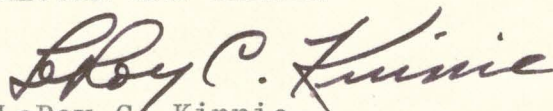
We are currently investigating the Placer possibilities in Grant County along the North Fork of the John Day River. Pinpointing the location we are interested in the several claims adjoining the old Thornbury, or Thornburg, Placer operation which we are informed ceased operation in 1906. We are especially interested in the total production of the Thornbury mine, the average per yard as shown by its assay reports, why it stopped operating, how long it operated, and how many men were employed in that operation.

I am also interested in obtaining a pamphlet if you have any containing the Law of Oregon with respect to Placer mining, both hydraulic and dredge. I would like, also, any pamphlet or publication you may have concerning this portion of the North Fork of the John Day River with respect to Placer possibilities.

Thank you very much for your kind cooperation and if we can be of further service - please advise.

Very truly yours,

KEOGAN AND KINNIE


LeRoy C. Kinnie

LCK/clp

P106 14-B

NO OWN REF

Gold

March 30, 1959

Mr. LeRoy C. Kinnie
Keogan and Kinnie
Attorneys and Counsellors
607 Empire State Building
Spokane 1, Washington

Dear Mr. Kinnie:

Thank you for your inquiry concerning recovery of flour gold from the southwestern Oregon beaches.

Flour gold has always presented a problem to placer miners, particularly in the coastal areas. The presence of small quantities of oil or grease will float flour gold and it will be lost over the lip of the riffles or gold pan.

Numerous schemes have been tried over the years and perhaps the most effective has been the use of impact amalgamation equipment or amalgam barrels. Generally speaking, these attempts have not been successful. The main difficulty appears to be not in the recovery of the gold so much as it is in the small amount of gold contained in the sands. In other words, most of the gold can be saved but the cost of moving large quantities of very low-grade sand is prohibitively expensive.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

NORTHTOWN
HUDSON 3-6488

LAW OFFICES OF
KEOGAN AND KINNIE
ATTORNEYS AND COUNSELLORS
DOWNTOWN

DOWNTOWN
MADISON 4-8475

LARRY T. KEOGAN
LEROY C. KINNIE

607 EMPIRE STATE BUILDING
SPOKANE 1, WASHINGTON

NORTHTOWN
NORTH 4910 DIVISION

March 23, 1959

Director
Oregon Bureau of Mines
Salem, Oregon

Dear Sir:

We would like to obtain any publications and reports you may have on the recovery of flour gold from river sands and beach sands in and around the Gold Beach area and the Coos Bay area.

Any information you may have available will be greatly appreciated. Please bill this office for any costs involved.

Very truly yours,

KEOGAN AND KINNIE

LeRoy C. Kinnie
LeRoy C. Kinnie *c.s.l.*

LCK/clp

RECEIVED
MAR 27 1959
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

COPY

*Note
Gnd*

STATE DEPARTMENT OF GEOLOGY AND
MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

April 26, 1962

To: Staff
From: R. S. Mason
Subject: Gold Nuggets

Mr. R. M. Bielenberg, Avon, Montana, operates a small dragline washing plant in Montana. From time to time he has fair quantities of gold, which runs about 960 fine, for sale. He asks about \$45 an ounce but have the feeling that this would be shaded a bit for fairly large sales. Most of the gold is quite fine, but he finds an occasional pumpkin-seed sized or larger nugget.

This information is for your files against the time that someone comes in and wants to know where to get some placer gold.

RSM:lk

Gold

February 9, 1962

Mr. Michael Harrison, Vice President
5301 Corporation
901 Arrott Building
401 Wood Street
Pittsburgh 22, Pennsylvania

Dear Mr. Harrison:

This is in response to your letter of February 6 regarding the unpatented mining claims held by the Cornucopia gold mine properties.

The question you ask is a legal question and properly should be referred to a mining attorney. Our comments on this should not be considered as official nor bearing any legal weight.

It would be my opinion that you could take the standard procedure of commencing your assessment work and filing in the County Court House without loss of your claims provided that no one had made a location in the interim between 1957 and when you do begin your assessment work. Of course, to have a valid mining claim you must have a discovery and so even though you have 20 mining claims included in the property, it does not necessarily follow that they are valid mining claims.

Another manner in which you could approach this is to file amended locations on your claims. Here again you must have a valid discovery of ore in place.

I am sending you a copy of an article we had in our monthly publication, THE ORE.-BIN, on what constitutes assessment work. I am sure you will find this of interest.

Once again I caution you to refer your question to a mining attorney.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
Encl.

5301 Corporation
901 Arrott Building
401 Wood Street
Pittsburgh 22, Pennsylvania
Grant 1-0904

February 6, 1962

State Geology & Mineral Industries Dept.
Salem
Oregon

Gentlemen:

This company has recently acquired title to the Cornucopia
Gold Mine properties in Baker, Oregon.

This property includes 800 acres of unpatented mining claims.
The Appraiser's report indicates that no title has been maintained
by the performance of annual labor since the close of the assess-
ment year in 1957.

Will you please advise if this has invalidated the claims and if
so, what is required to have them reinstated.

Yours very truly,



Michael Harrison
Vice President

f

*Don't copy to
May 24*

RECEIVED
FEB 8 1962

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Gold

December 27, 1960

Mr. Robert L. Miller, Secy.-Treas.
Monica Mining & Development Co., Inc.
338 West 11th Street
Eugene, Oregon

Dear Mr. Miller:

Thank you for your letter of the 15th. At the present time there is only one full-fledged underground gold mining operation in Oregon. The Boaz Mining Company is running the Buffalo Mine at Granite over in Grant County. Mr. J.P. Jackson Jr. is in charge of the work and he may be addressed at Granite.

We are sending you a recent copy of our monthly publication the Ore.-Bin which contains an article on small mine costs. I hope that it is of interest and help to you. The April issue of Mining World, 500 Howard Street, San Francisco, 5, California, contains a complete list of all mining operations in the U.S. Copies of this issue cost one dollar.

Sincerely yours

Ralph S. Mason
Mining Engineer

RSM:r

GALE M. ROBERTS CO.

COMMERCIAL BUILDING CONTRACTORS - - TELEPHONE DIAMOND 3-2032

338 WEST 11TH AVENUE
EUGENE, OREGON

December 15, 1960

State of Oregon
Department of Geology and
Mineral Industries
1069 State Office Building
Portland 1, Oregon

Att: Ralph S. Mason
Mining Engineer

Gentlemen:

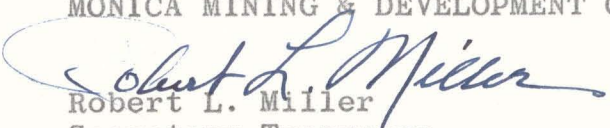
Our attorney wrote you on October 17th inquiring relative to rules and regulations administered by your department in connection with a mining operation. He has turned over your letter of reply dated October 25th for our files.

The incorporation of our new company, "Monica Mining & Development Co., Inc." that he was performing, is the entity we are using to handle our investment in a mining lease we purchased. The lease covers property at Ashland, Oregon. We are presently pumping out the shaft of a mine vacated at the beginning of the 2nd world war.

You mentioned in your letter that you do a lot of research and service work for miners and prospectors. We would like information on the location of existing gold mines in Oregon or the Pacific Northwest. The reason is to try to determine mining and milling costs. Perhaps you may have some information on these costs. We would like to visit actual mines if possible and talk to the owners.

Any information you may have relative to this would be appreciated.

Yours very truly,
MONICA MINING & DEVELOPMENT CO., INC.


Robert L. Miller
Secretary-Treasurer

MONICA MINING & DEVELOPMENT CO.
Owner & President is: Gale M. Roberts

McCoy & PEARSON LETTER 10/17/60

RECEIVED
DEC 16 1960

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Ralph

Gald

Make a copy
of this letter
& send to
NSW

WJ

May 8, 1961

Mr. Hubert Asher
Spray
Oregon

Dear Mr. Asher:

Thank you and your associates for your letter of May 1.

We are pleased to know of your ownership of the French Pit
and that you are going to work it this summer.

After calling your letter to the attention of members of the
Department, I will send it to Mr. N.S. Wagner, field geologist
in charge of our Baker field office.

If we get substantial people who express an interest in this
type of operation, you can be assured we will refer them to
you.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr

Spray, Oregon
May 1, 1961

State Department of Geology
and Mineral Industries
Portland, Oregon

Dear Sirs:

In connection with your service of supplying data for underwater gold deposits we would like to submit the following information.

We call your attention to the lake lying in the historically famous French Pit, located on what is now known as the Carson claims in Union County on the Grande Ronde river.

As you perhaps know, this lake was formed as a result of a placer operation in the early days of Oregon mining. Initially, a tunnel was driven through a granite dike on the lower side of the gravel deposits. Large hydraulic rams were used to wash the gravel through the tunnel and into the sluice boxes located below the dike. This operation continued for many years. Eventually it was found that the tunnel through the granite was at a higher elevation than the bottom of the gold bearing gravel on the upper side of the dike. In an effort to force the gravel along the bed rock and up through the tunnel a considerable depression was formed that filled with water which created the lake in question. This obstacle caused abandonment of the French pit and operations were started on other sections of the property.

Through the years efforts have been made to recover the gold that supposedly collected in the lake bottom. This included an attempt to amalgamate the gold with mercury which reportedly failed. Estimates range up to a million dollars in values that are deposited there.

RECEIVED
MAY 8 1961
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

We, the undersigned, as present owners of the property are planing an operation with modern suction equipment of the type mentioned in a recent newspaper article inspired by your department. We feel that it would be pertinent to inform you of our intentions and that you might pass this information on to interested inquirers. This property is available for lease to competent operators with adequate equipment.

The names and locations given here are for your department files. We respectfully request that this information be withheld from amature seekers. This property will be closed to itinerant week end vacationists and only capable operators, able to give serious and sustained effort are solicited. Anyone interested in further information may contact one of the undersigned.

Thanking your department for former favors and hoping to avail ourselves of your further cooperation and services.

Respectfully yours,

Hubert Asher
Spray, Oregon

Mitchell Chapman
Spray, Oregon

C. M. Wagner
Heppner, Oregon

9. HOW CAN I LOCATE A PLACER CLAIM OVER RIVERS AND STREAMS SO THAT I CAN MINE THE BED OF THE STREAM BY USING A SKIN DIVING OUTFIT?

Beds of navigable waters are subject to laws of the State in which they are situated and they are, therefore, not subject to location under the United States mining laws. Title to the beds of meandered nonnavigable streams is in the riparian owner. The beds of unmeandered nonnavigable streams are subject to location under the United States mining laws if they are unoccupied, as are also the beds of meandered nonnavigable streams where the abutting upland is still owned by the United States.

Where the abutting lands of meandered nonnavigable streams or lakes have been withdrawn for power site purposes, and those abutting lands are owned by the United States, the bed of the stream or lake and abutting uplands are open for location under the United States mining laws, and have been open since August 11, 1955. There are, however, special requirements about which the locator of such claim should know before beginning mining operations on such a location, otherwise, he may find that his mining operation is in trespass. For reference see 43 CFR 185.172, etc. All contained in Circular 2007.

It appears, therefore, that the skin diver, where he expects to carry on extensive operations in the bed of a stream, should make it his business to know the status of the land.

From - A compilation of the questions asked by mining claimants at the Medford District Office during 1960, p. 10-11. (U. S. Bureau of Land Management)

Gold Min News

9-12-60

Mon. Rept

TO: HMD
FROM: RSM

Re: Minerals Reduction, Inc.

This morning Mr. J.P. Schnell, who has been running a slackline placer outfit on Grave Creek between Big and Little Boulder, came in with a tale of woe. Seems that Schnell and partners took several hundred pounds of their cleanup to Minerals Reduction and ended up--after many diversions and delays--with a few ounces of concentrate worth about \$26/ton. They claim that they had a lot of free gold in their sample but when they showed up the next day and watched the boys run it over a table that there was little gold but considerable free quick. They are very unhappy.

They left us a sample similar (but not identical to) the cleanup handed to Minerals, also a tail sample. I told them that we would run them but that we did not want to get involved in any legal action. Schnell is going to G.P. this weekend and will get a lawyer for waht good it will do.

r.

Gold

September 7, 1960

Mr. James A. Burgen
9185 S.W. 66th Avenue
Tigard 23, Oregon

Dear Mr. Burgen:

Thank you so much for your letter of September 5 calling our attention to your placer claim located in T. 34 S., R. 8 W., sec. 26.

I am sure that there are other claims we did not include in our report. Southwestern Oregon covers a large area and, try as we may, we are not always successful in covering the area adequately.

I am calling your letter to the attention of Mr. Len Ramp, our field geologist in charge of our Grants Pass office, and I am sure that he will be contacting you and visiting your claim in the near future.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr
cc Len Ramp

COPY

9185 S.W. 66th Avenue
Tigard 23, Oregon
September 5, 1960

Dear Sirs:

I see by the Ore.-Bin that twenty nine Oregon placers were in operation during the 1959-60 season. My claim would make thirty (30). It is situated in Township 34 S., Range 8 W. Section 26. I purchased this claim and the adjoining claim in March of this year.

The Last Chance is an old claim, dating back to the original discovery in 1914. It was a drift mine from the 1920's to the war.

It was under lease from '52 to '57 and in a few months in 1956 they piped to their sluice boxes about \$7,500.00's worth of placer gold.

I would appreciate any information that can be had from your department. And also how do I get it on record as an active placer gold mine?

I intend to work this claim each year or until I can acquire more water for a longer season of operating.

Yours truly,

/s/ James A. Burgen

Last Chance placer 26 - 34 - 8 James A. Burgen Galice - pump, giants, sluice.

Galice sediments - bench placer

Lonely Willows Mark Site Of Once Brawling Gold Rush Town

By LANCASTER POLLARD

Oregon Historian

Past U.S. Census reports are one of the historian's most valuable sources and current census reports, in addition to providing front page news stories, suggest all sorts of historical reflections. The population decline in many large cities and the rise of suburbs suggested the parallel of Jacksonville and Medford, for Jacksonville was originally the county seat and the area's largest town to which Medford was not much more than a suburb. There are other examples.

However, in reading about them I was lured away to our ghost towns, so stories of those "declined" communities must wait their turn here until after accounts of such once important and no longer existing towns as Auburn, Cake and Malheur City. These were min-

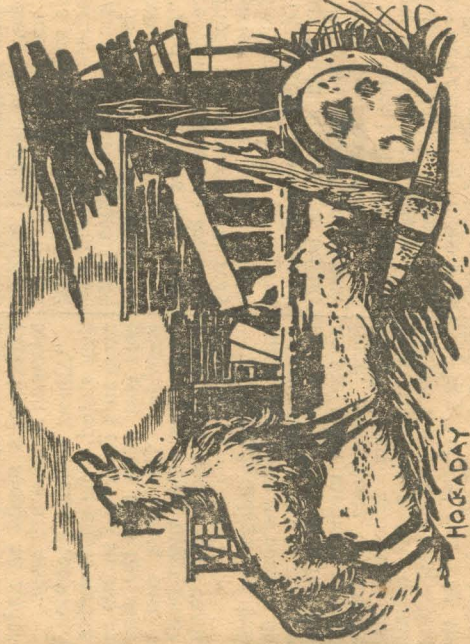
ing camps in northeastern Oregon and among the earliest settlements in the district. (Jacksonville, itself, was near to becoming a mining ghost town cater-corner across the state.)

Not a great deal has been written about Auburn and not all of that is consistent. The unquestioned facts are that the town was along Blue Canyon about eight miles southwest of present Baker, and that it grew up almost overnight to supply the needs and pleasures of miners in that section of the Blue Mountains. Gold had been discovered thereabouts in 1861.

Largest Mountain Town

In June of 1862 the town was laid out and in November of that year it became the first post office in northeastern Ore-

gon. When Baker County was created in September, 1862, Auburn became its county seat. Within a year or so, when the population reached an estimated 5,000, the mining camp became the largest community in the Pacific Northwest between the Cascades and the



Rockies, and the second largest in Oregon.

For another few years Auburn held its position as the metropolis of the district, but was in decline by 1866 when a post office was established in its suburb of Baker City, which also became the county seat. As the gold rush into Idaho in the late 1860s drew miners from the worked-over Blue Mountain district, and as ranching increased in eastern Oregon, the gold camp gradually disappeared. However, the post office was maintained until the turn of the century for the convenience of settlers in those pre-automobile days when a few miles was a considerable distance.

In its heyday, Auburn was "a magnet for gamblers, bunco men and their ilk," and for "questionable" characters of both sexes. It might have

been the setting for a TV Western and did, in fact, support three cemeteries, two for Chinese and one for Occidentals. (This seems fanciful to me, but it has been gossiped that one of the Chinese cemeteries was later mined.) There were a few hangings ordered by miners' courts for ungentlemanly killings. During an Indian scare a blockhouse was added to protect the saloons and dance halls, the "merchandise establishments" and hotels for men and horses.

One of Lewis A. McArthur's correspondents informed him that in 1945 no building was left there. A writer in the Oregon Guide reporting a decade earlier turned poetic and said that the site "is marked by a grove of weeping willows, a few plum trees, and a single apple tree." That is a fitting epitaph.

EXCERPTS FROM
A HISTORY OF PLACER GOLD MINING IN OREGON
1850-1870

by
Christian August Spreen

The first discovery was made by a party of Oregonians hurrying to the California gold mines.⁵ The first mining in Oregon was done by a party of prospectors who came from California in 1850. After prospecting several streams on both sides of the state line, they crossed again into Oregon into the Illinois River Valley, where at the junction of Josephine Creek and the Illinois River gold was found in July 1850. The Illinois River received its name because five members of the party had come originally from that state. Among the members of this party were: Luther Hasbrouck, Nathan Giles, John Collins, and John Twentyman.⁶

The gold discovery which was responsible for the stampede to southern Oregon, however, was that made at, or very near what is now the town of Jacksonville. This discovery was accidental, as was the case with many another famous mining camp. This site was a favorite camping place for those "would-be" miners who were hurrying southward to California from the Willamette Valley. In December 1851, two packers were camped here on Jackson Creek. They were packing from Scottsburg to the mines of Northern California, carrying flour and other goods. One of them, while washing their tinware, saw a small nugget. They attached so little importance to their find that they did not stake claims. Sometime later they told Jim Cluggage and J. R. Poole of this find. In January 1852 Cluggage and Poole camped there and found coarse gold at Rich Gulch. The news spread like wildlife and soon the gulch was staked. By February, farmers in the Willamette Valley were heading for the gold fields, and miners in California were deserting their claims for the richer new field.⁷

The Kerbyville district is another of those which may claim the honor of being among the first localities in which mining was carried on. This district or town came into being as a result of the "strike" at the junction of Josephine Creek and the Illinois River, April 2, 1851.¹⁵ Miners very soon poured into this camp, as to the other new diggings, so that in 1856 Kerbyville was designated county seat of Josephine County. Before the county was officially designated, Sailors' Diggings had been the unofficial county seat. Kerby won the election on this point by a huge majority.¹⁶

In the spring of 1853 a great rush followed to Althouse Creek where the bed of the stream was found to be uniformly rich.¹⁹

5 Leslie Scott, "Pioneer Stimulus of Gold"; Ore. Historical Quarterly (18:150).

6 Oregonian, August 24, 1902; p. 21; Reports published in the Oregonian, Sept. 6, 1851 indicated that the mines of Rogue River Valley are yielding a fair compensation to the miners for their labors.

7 Thomas Frazer, Journal (unbound) University of Oregon Historical Archives; 1852; p. 42. Frazer states that one of the packers was George Frazer. See also: Fred Lockley's Oregon Trail Blazers, pp. 6-7.

15 The previously mentioned strike at this place in July 1850 apparently did not attract much attention.

16 Dennis Stovall, "Kerbyville", Pacific Monthly, 1903, 10: 287-90.

19 Sidney Norman, Northwest Mines Handbook (Spokane: 1918) p. 297.

Numerous other gold discoveries in southern Oregon followed those just mentioned. From Jacksonville, Kerbyville, and Waldo prospectors set out in all directions, and made rich strikes at such places as Bunkum, Salmon Creek, Coffee Creek, Ashland Creek, Phoenix, Applegate Creek, and Canyonville. These were all located and mined within a very few years after discovery of gold in the Rogue River Valley.²⁰

20 I have been unable to find the exact dates of these discoveries, or names of the discoverers.

Gold

THE OREGONIAN

September 2, 1959

Oregonian Loses Gold Price Appeal

SAN FRANCISCO (AP)—The U.S. Court of Appeals, ruled Tuesday that Congress and the secretary of the treasury were acting within constitutional powers in regulating the sale and processing of gold in the United States.

The law was challenged by Mrs. Gladys Laycock, majority interest owner in the Dixie Meadows group of mining claims in Grant County, Ore.

She had appealed from a Portland, Ore., federal district court dismissal of her suit challenging legality of the treasury action under the Gold Reserve Act of 1934. The appeals court upheld the dismissal.

The appeals court's opinion, written by Gilbert H. Jertberg, said Congress acted within its constitutional powers authorizing it to provide a "sound and

uniform currency for the country."

Mrs. Laycock had contended that, as a result of the treasury regulation holding the price of gold at \$35 a troy ounce, she could not operate her mine at a profit. She said the mine remains idle and has had practically no resale value as a gold mine although 240,000 tons of ore has been blocked out.

Mrs. Laycock's allegation "that the price has ruined the gold mining industry, even if true, is beside the point," the appeals court said.

"The act was not intended to encourage gold mining; it is concerned only with the monetary system of the United States. Under it the secretary is not required to consider the condition of the gold mining industry in setting the price; he need only be concerned

with carrying out the policy of Congress as expressed in the act."

The appeals court said that this policy "may be found wanting in a purely political matter, the wisdom of which is not for this court to decide. Our concern ends upon a showing that Congress in adopting a policy acted within its constitutional authority."

The case had stirred great interest not only in gold mining centers of the United States but in other parts of the world.

Gold

September 8, 1959

Mr. Norman L. Easley
American Bank Building
Portland, Oregon

Dear Norm:

Thanks so much for your letter of September 4 recounting the efforts you have made on behalf of the gold miners.

The sacrifice which you have made I am certain is not appreciated in the least by the rank and file prospector. I would like you to know, however, that there are some who recognize the real contribution that you have made and I wish to add my thanks to theirs.

It is unlikely that I would appreciate the legal problems in the copy of your amended complaint but I do want you to know that it was not enclosed in your letter.

Thanks so much for giving me the outline.

Sincerely yours,

Hollis M. Dole
Director

HMD:jr

MAURICE W. SEITZ
NORMAN L. EASLEY
STEWART M. WHIPPLE

LAW OFFICES OF
SEITZ, EASLEY & WHIPPLE
AMERICAN BANK BUILDING
PORTLAND 5, OREGON

TELEPHONE
CAPITOL 3-7378

September 4, 1959.

RECEIVED
SEP 8 1959
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Mr. Hollis M. Dole,
Department of Mineral Industries,
State Office Building,
Portland 4, Oregon.

Dear Sir:

On August 10, 1954, we filed in behalf of Mrs. Gladys Laycock a damage action under the Tucker Act against the United States for damages. The action was filed in Oregon upon an implied contract for compensation for property taken in violation of the due process clause of the United States Constitution. The action was dismissed, an appeal was taken and on June 11, 1956, the Court of Appeals affirmed the dismissal. We thereupon took out a writ of certiorari to the Supreme Court of the United States, without success.

The foregoing action was a damage action at law and the result conclusively showed that plaintiff was without a remedy at law. Thereafter, on June 28, 1956, we filed a declaratory judgment in a suit for injunctive relief against Mr. George Humphrey, Secretary of the Treasury. After having been served in Washington, D. C., Mr. Humphrey refused to make an appearance and therefore we did not have jurisdiction. Thereafter, on August 30, 1956, we filed the same against Mr. Humphrey's representative in Oregon, Frank J. Kenney, asking the court to enjoin him from enforcing the Gold Reserve Act of 1934 and the Gold Regulations issued thereunder. Since an act of Congress was involved, the statute required a three judge court. On April 8, 1957, our motion to convene the three judge court to decide the constitutionality of the Gold Reserve Act was denied. We thereupon applied to the Supreme Court of the United States for a writ of mandamus to enforce the calling of a three judge court. That writ was denied. Thereafter, we amended the complaint against Mr. Kenney, who incidentally is the head of the Secret Service in Oregon, and eliminated any reference to the Gold Reserve Act of 1934. Rather we challenged the constitutionality of the Gold Regulations which are promulgated by the Treasury Department of the United States. Upon exhaustive

Mr. Hollis M. Dole
Page 2
September 4, 1959

hearings the motion allowing dismissal of that complaint was entered. Thereafter, we appealed to the Court of Appeals in San Francisco, with the result noted in the news item, which prompted your call. It will be our next step to appeal to the Supreme Court in the hope that our justiciable claim will be recognized. We are handing you a copy of our amended complaint for your information.

out { In the meantime, two people were arrested for possession of gold and ultimately convicted here in Oregon. We represented the defendants and presently have the conviction upon appeal to the Court of Appeals in San Francisco. These people were sentenced to 18 months each in the penitentiary and it is incomprehensible to me that such should happen in a free country. Gold is not opium.

The foregoing is the disappointing history of our crusade with total and complete financial loss.

With best personal regards.

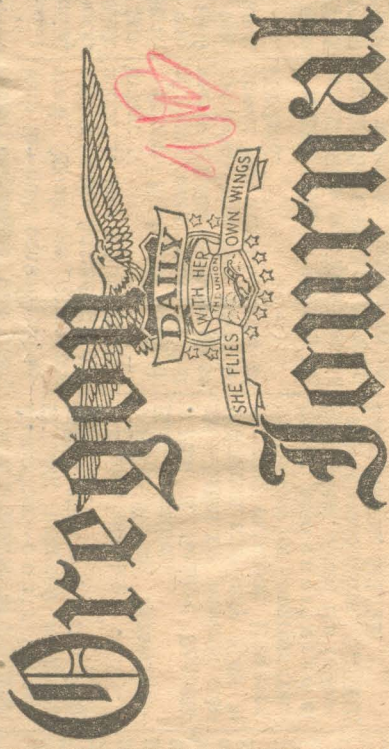
Very truly yours,

SEITZ, EASLEY & WHIPPLE

Norman L. Easley
Norman L. Easley

NLE/hc
encl.

Late
SPORTS
Final



PORTLAND, OR., FRI., OCTOBER 31, 1958

Today's
NEWS
Today

STATE GOLD STRIKE EYE

YED

Lane Area Prospector Lists Find

COTTAGE GROVE, Oct. 31.—After 65 years of prospecting, Floyd Day may have found the end of the rainbow. Only time and digging will tell.

The 82-year-old Bohemia area prospector has reported what he believes is a major gold discovery in one of the oldest producing mines in the state. Day said he has discovered a vein on the east slope of Fairview mountain east of here, with visible gold in the ore at nine feet below the surface. Although the ore is not yet assayed, Day said, he estimates its value at about \$500 a ton.

THE LOCATION is the old Champion mine, which has been active sporadically since well into the last century. The vein adjoins a group of claims which Day said he bought from Jim Sears in 1932.

Day described his vein as 5 feet wide and surrounded by amethystine crystals — a characteristic of the Champion vein. Day plans to sink a shaft 8 more feet and then start "drifting."

The Portland office of the state department of geology and mineral industries admitted cautiously that \$500-a-ton ore would be a good strike—if it lasts.

VERY FEW assays of \$500-a-ton or higher in recent years have proved to be more than "a handful of ore," a spokesman for the department said. Often such ore dwindles into \$30 or \$40-a-ton quality, necessitating a closedown until more money can be raised for further development and search for another pocket or vein.

CLASS II

NAME OF PROPERTY

REFERENCE

Amalgamated Mines Co.	Bulletin 14A	Page 43	Unpublished report H.K.L.7/10/40
Analulu Mine	14B	34	
Bay Horse Mine	14A	22	
Belcher Mine	14A	54	See Golden Gate
	14B	64	
Belle of Baker Mine	14A	34	
Big Lode	14A	65	
Bi-metallic Group	14B	73	
Black Jack	14B	41	
Black Hawk	14B	138	
Blue Bell Group	14A	45	
Blue Ribbon	14B	42	
Boulder Group	14B	110	
Brazos	14A	103	
Buckeye Mine	14A	14	
Buckeye Mine	14A	35	
Buck Gulch	14B	111	
Central Mine	14B	46	
Chloride Mine	14A	86	
Climax	14A	36	
Crystal Palace	14A	47	
Cyclone Group	14A	104	Press reports on file
Del Monte Mine			
Durkee Gold Ridge Mining Co.	14A	66	
East Eagle Mining & Milling Co.	14A	48	Unpublished report H.K.L.7/23/41
Eureka-Dio Gracia Group	14B	76	
Evening Star Claims	14A	105	
Friday Mine	14A	106	
Gallagher Groups	14A	23	
Gem of Sparta	14A	92	
Gold Bug	14A	15	Unpublished report H.K.L.8/29/41
Golden Chariot Mining & Milling Co.	14A	96	
Golden Gate Mine	14A	77	
Grull Mine	14B	111	
Homestake Group	14A	143	
	14B		
Miller & Lane Group	14A	66	
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	14B	76	
	14A	105	
	14A	106	
	14A	23	
	14A	92	
	14A	15	
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NAME OF PROPERTYREFERENCE

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Kent Mine	14A	16	
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Mammoth Group	14A	79	
Mayflower	14A	29	
McIntyre Group	14A	49	Unpublished report N.S.W. 6/24/43
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Miller & Iane			
Minty Group	14B	120	
Molly Gibson Mining & Milling Co.	14A	20	
Moon Anchor Mines Co.	14A	20	
Morning Glory Mine	14A	55	
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North Powder Mine			Unpublished report N.S.W. 3/3/43
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Ophir Mine	14B	58	
Ora Marmo	14A	80	
Paddy Creek Mine	14A	49	
Present Need	14B	122	
Princess Mine	14B	146	
Queen of the West Mines Co.	14A	30	
Quick Action Group	14B	88	
Randall	14A	82	
Reagan Mine	14A	83	
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Regal Group	14A	82	
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Simmons Mine	14A	31	Press clipping
Stalter Mine	14B	92	
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Sterling Mine	14B	93	
Sutton Creek			Unpublished report H.K.L. 5/6/41
Tillicum Mine	14B	64	
Timber Canyon Mine			Unpublished report 5/6/39
Vindicator Gold Mines	14A	112	
Western Union	14A	90	
Yankee Boy	14B	127	

see East Eagle M & M Co.

see Red Boy

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Amalgamated Mines Co.	T6S, R44E, Sec.35	Eagle Creek	21 unpat. claims	6000	About 50 mi. Baker	W. Burnham Box 1925 Spokane, Wn.
Analulu	T9S, R37E, Sec.6	Cracker Creek	4 claims, 1 millsite	5320	9 mi. Sumpter	Bert Piper, Baker, Ore.
Bay Horse Mine	w. of Snake River 7 mi. below Huntington	Conner Creek		About 2200	on U.P. Branch	U.S. Metals Co. Portland, Ore.
Belcher Mine	See Golden Gate					
Belle of Baker (Mammoth)	T8S, R36E, Sec.1-2	Cracker Creek		About 5800	About 8 mi. Sumpter	H.J. Dingman 330 Bay St. Toronto, Canada
Big Lode Mine	2 mi. NW Weatherby on Chicken Creek	Lower Burnt River	4 claims	Moderate	2 mi. Weatherby	
Bi-metallic	T10S, R35E, Sec.6-7	Greenhorn		About 6500	9½ mi. Tipton	M.O. Carson Elm St. Baker, Oregon
Black Jack	T9S, R35E, Sec.14	Red Boy Granite	3 unpat. claims	high		Mrs. T.J. Sheedy Willis Wall, Clarence Merritt Baker, Ore.
Black Hawk	East of Bull of the Woods	Susanville	2 full & 1 fraction pat. claim	1500		Mose Fuchs, Baker, Ore.
Blue Bell (Daddy Lode)	T7S, R43E, sec. 23	Eagle Creek	10 unpat. claims		about 27 mi. Baker	D.W. French E.B. Cochran D.W.C. Nelson Baker, Ore.

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Blue Ribbon	T8S, R35E, NW 1/4 Sec. 14	Granite	3 unpat. claims	About 6000	About 22 mi. Sumpter	Clair Tardiff, 409 W. Alter St., Pendleton, Ore.
Boulder Group	on point of Dixie Mt. 4 mi. from E. Dixie Creek	Quartzburg	7 claims			Lew Robert, Prairie City, Ore.
Brazos Mine	T10S, R41E, Sec. 11	Virtue		About 3700	About 2 mi. Pleasant Valley	Albert Geiser, W.C. Fudge, Baker, Ore.
Buckeye Mine	T7N, R40E, Sec. 6	Baker	4 pat. claims	About 3500	About 8 mi. North Powder	
Buckeye Mine	on Divide between Rock Creek & head of E. Cracker Creek--2 mi. N.E. Bourne	Cracker Creek		About 8000	About 8 mi. Sumpter	James E. Sipe, 516 Federal St. Pittsburg, Pa. (Pres.)
Buck Gulch Group	T12S, R33E, NW 1/4 Sec. 11	Quartzburg	2 unpat. claims			Arthur E. O'Brien Prairie City, Ore.
Central Mine (Shipman)	T8S, R35E, NW 1/4 Sec. 23	Granite	5 unpat. claims		About 19 mi. Sumpter	Robert Graham, St. Cloud, Minn.

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Chloride Mine	T8S, R37E, Sec. 24-13	Rock Creek	2 pat. claims, 1 mill site, 1 fraction	5500 to 6000	About 12 mi. Haines	Chloride Consol. Mine, P. H. Ash Es- tate, Hamilton, Ut. Bank Bldg. Nashville, Tenn.
Climax Mine	600-800' n. Columbia Golconde Mines	Cracker Creek		5500	About 6½ mi. Sumpter	Grayson Hinchley
Crystal Palace Mine	2½ mi. SW Sparta	Eagle Creek		About 4000	About 30 mi. Baker	Dr. Ruckman, Baker, Ore.
Cyclone Group	7 mi. E. Baker	Virtue	3 unrat. claims	Moderate	7 mi. Baker	Molly Harpham, Baker, Ore.
Del Monte		Sparta			35 mi. Baker	Geo. W. Eddy Es- tate, Boston, Mass.
Durkee Gold Ridge Mining Co.	T12S, R43E, Sec. 9	Lower Burnt River	10 claims		6 mi. Durkee	J. E. Rogers, Pres. Durkee, Ore.
East Eagle Mining & Mill. Co.	T6S, R44E, Sec. 17-18	Eagle Creek	4 loc. claims-5 held under bond & lease	5000	43 mi. Baker	Newell, Bethel, Miles, Edwards, Durkee, Ore.

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Eureka-Dio- Gracia Group	T10S, R34E, Sec. 22	Greenhorn	6 unpat. claims	5000		Ira Lemmon, Austin, Ore.
Evening Star Claims	14 mi. E. Baker	Virtue	2 unpat. claims	moderate	14 mi. Baker	E. C. Rea, Baker, Ore.
Friday Mine	10 mi. E. Baker	Virtue	1 unpat. claim	About 3500	10 mi. Baker	
Gallagher Group	T11S, R44E, Sec. 2	Comer Creek		About 6500	12 mi. Durkee	James Barrie, Durkee, Ore.
Cem of Sparta	T2S, R44E, Sec. 17-20	Sparta	10 unpat. claims & fractions	About 4200	About 30 mi. Sparta	Cem Mines, Inc. Tacoma, Wn. H. C. Kloppen- stein, Pres.
Gold Bug OF	Blue Canyon Creek-1½ mi. S. of old town of Auburn	Baker	7 unpat. claims	moderate	12 mi. Baker	A. B. & J. C. Moe, Seattle, Wn.
Golden Chariot Mining & Mill. Co.	T9S, R37E, Sec. 34	Sumpter		4500	2 mi. Sumpter	Golden Chariot Mining Co. O. E. Connor, Jr., Sec. Sumpter, Ore.

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Golden Gate Mine	2 mi. N. Greenhorn T9S, R35E	Greenhorn		About 6000	9 mi. Tipton	John W. Donce, 4227 5/4 Burns Ave, Los Angeles
Grull Mine	T6S, R42E, Sec. 2	Medical Springs		Moderate	2 mi. Medical Springs	Andy Grull, Medical Springs, Ore.
Homestake Group	T10S, R33E, Sec. 7-8	Susanville	5 pat. claims			Bradley Mining Co. San Francisco
Innaha Mine	T3S, R42E, Sec. 10	Snake River			40 mi. Joseph	
Kelly Mine	T8S, R37E, Sec. 15-or 16	Rock Creek	5 unpat. claims	8000		Mrs. Mary Kelly, Baker, Ore.
Kent Mine	T9S, R39E, Sec. 20	Baker-		About 6000	About 9 mi. Baker	Geo. & Chester Bardner, Baker, Or
Listen Lake	T10S, R35E, SW 1/4 Sec. 27	Greenhorn	4 quartz claims 1 placer claim	5000	6 mi. Sumpter Valley RR at Austin	Harvey Jekyll, Portland, Ore.

CLASS II	NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
	Magnolia Mine	T6S, R35 $\frac{1}{2}$ E, SW $\frac{1}{4}$ Sec. 22	Granite		5000	About 21 mi. Sumpter	W.A. Boyer Estate San Francisco
	Mammoth Group (Black Eagle)	T13S, R41E, Sec. 19-20	Mormon Basin				Theo. Glenn-Baker Ed Graves & Lam- bert, Durkee, Ore.
	Mayflower	T6S, R45E, Sec. 26	Cornucopia		6500	About 25 mi. Robinette	Cornucopia Gold Mines
	McIntyre Group	T7S, R43E, near Sanger Mine	Eagle Creek	11 unpat. claims	About 5000	About 16 mi. Medical Springs & Lumber Co. railroad	C.B. Silar, 4058 S. G St., Mr. Rice, 1410 N. 6 St. Tacoma, Wn.
	Miller Mountain Mine	T14S, R31W, SE $\frac{1}{4}$ Sec. 22	Canyon	5 unpat. claims	5380	5 mi. from hwy. at Canyon City	Neil Nivin, Q.L. Patterson, Canyon City, Ore.
	Miller & Lane (see East Eagle Mining & Mill. Co.)						Mr. Mile Edwards, Yakima, Wn.
	Minnie McDow- ell	4 mi. N. W. Sumpter	Sumpter	5 unpat. claims	high	4 mi. Sumpter	

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Minty Group	T12S, R33E, Sec.2	Quartzburg	8 unpat. claims			A.W.Ward, Mrs. Louise King, Prairie City, Ore.
Molly Gibson Mining & Mill. Co.	T8S, R36E, central part	Cable Cove	2 claims		15 mi. Sumpster	T.V. Williams, Newcastle, Pa. (Pres.)
Moon Anchor Mines Co.	about T8S, R36E	"	3 claims	about 7500	approx. 15-20 mi. Sumpster	Mike Zenger, 681 1st St. Portland, Ore. (Pres.)
Morning Glory Mine	12 mi. N.W. Whitney	Greenhorn	5 unpat. claims	high	about 12 mi. Whitney	M. Knudeson, Whitney, Ore.
North Powder Mine	T6S, R39E, E $\frac{1}{2}$ Sec.24	Baker	963 acres deeded	3300	2 mi. North Powder	Dr. A.M. Koester, Baker, Ore.
Norway Mine	T6S, R45E, Sec.9	Cornucopia		6400	about 30 mi. RobINETTE	Mrs. Fred Stein, L.J. Usher
Norwood Mine	T9S, R41E, Sec.8	Virtue	2 claims	moderate	9 mi. Baker	

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Ophir Mine (Valley Queen)	T8S, R36E, on Baldy Creek 1 1/2 mi. E. of Monumental	Bald Mt.		6000 6500		
Ora Marmo	T13S, R41E, S.E. corner Sec. 21	Mormon Basin	4 unpat. claims 2 fractions	4950	21 mi. from RR	Mrs. D.D. Smith, J.W. Bowden, Wm. Donald Kempfer, Unity, O
Paddy Creek Mine	T7S, R44E, Sec. 15	Eagle Creek		high		Mrs. A. Whitaker, Baker, Ore.
Present Need	W. fork Dixie Creek 1 mi. above forks	Quartzburg				Scotty Ross, Prairie City Ore.
Princess Mine	T9S, R35E, Sec. 32-33	susanville	2 unpat. claims		About 30 mi. Austin	Princes Mines, Inc. W.I. Merritt-Pres Susanville, Ore.
Queen of the West Mine	near Cornucopia	Cornucopia		high	about 30 mi. Robinette	Cornucopia Gold Mine, Inc.
Quick Action Group (Ornament)	T10S, R34E, W 1/2 Sec. 11	Greenhorn	2 unpat. claims	About 6000	about 16 mi. Austin	Roy Allen, Bates, Ore. Wm. Lennon, Baker, Ore.

CLASS II NAME	LOCATION	DISTRICT	AREA	PLAT.	DISTANCE FROM SHIPPING POINT	OWNER
Randall and Regal	T13S, R42E, about sec. 15	Mormon Basin	Randall-4 unpat. claims Regal- 5 " "	5200	12 mi. Dixie	Mr. Stevenson, Baker, Ore.
Reagan Mine	18 mi. SW of Durkee	"	12 claims			Zenith Gold Mining Co. Roy Chadwell, Durkee, Ore.
ed Boy & Mountain Chief	Near Cornucopia	Cornucopia	2 pat. claims	6000		Almon Motley, & associates Halfway, Ore.
Regal Group (see Randall)						
Schist Mine	T12S, R45E, Sec. 33	Conner Creek	4 unpat. claims	1900	2 mi. to U.P. RR	J.W. Baker, 1840 Record St. Baker, Ore.
Simmons Mine	Simmons Mountain between N.W. forks Pine Creek	Cornucopia		70000	About 28 mi. Robinette 2 1/2 mi. Cornucopia mill	Leverett Davis, Salt Lake City, Utah
Stalter Mine	T10S, R34E, 3E, Sec. 8	New El Dorado		About 7000	About 16 mi. Austin	Corp. of Dan Stalter Heirs, Pendleton, Ore.

CLASS II NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Standard Mine	T8S, R35E, Sec. 11	Granite	2 unpat. claims	about 5500	about 25 mi. Sumpter	John Lench, Granite, Ore.
Sterling Mine	2 mi. E. of Ben Harrison T9S, R35E, about Sec. 31	Greenhorn	4 claims	7000	about 23 mi. Whitney	G.T. Lewis, H.N. Stevens, Portland, Ore.
Sutton Creek	T11S, R40E, Sec. 12	Baker	5 unpat. claims 80 acres deeded land	moderate	15 mi. Baker	Sutton Creek Mining Corp. C.G. Kinney, Sec.
Tillicum Mine	T9S, R35E, N $\frac{1}{2}$ Sec. 23	Granite	6 unpat. claims		granite to Sumpter 1 $\frac{1}{2}$ mi. 3 $\frac{1}{2}$ mi. Granite	Vernon Pratt Tacoma, Wn.
Timber Canyon Mine	T9S, R44E, Sec. 28-29	Sparta	7 unpat. claims	About 4500		M. Freeman? Suplee, Ore.
Vindicator Gold Mine (Twin Baby)	T6S, R42E, Sec. 20	Medical Springs	9 claims of 20 acres each	moderate	3 $\frac{1}{2}$ mi. to Medical Springs	Vindicator Mines Co. W.M. Mayers, Sec. Portland, Ore.
Western Union	15 mi. from Haines	Rock Creek	6 pat. claims	high	15 mi. Haines	John Long, Ed & Walter Coles Haines, Ore.
Yankee Boy	T11S, R35E, Sec. 36	Quartzburg	4 unpat. claims	4400		Mrs. Ester Berri John Day, Ore.

CLASS III

NAME OF PROPERTY

REFERENCE

Baker & Harriman Prospect	Bulletin	14A	Page 14
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Banzette	14A		53
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Beldon	14B		137
Belle of the Hills Group	14A		35
Big Pine Group	14B		74
Black Jack	14B		98
Blue Bucket Mining Co.	14A		76
Blue Mud Prospect	14A		76
Borden Claims	14A		98
Buckhorn Claim	14A		86
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Cap Martin Mine	14A		15
Carpenter Hill Mine	14A		104
Carroll B. Prospect	14B		139
Chattanooga Claim	14A		104
Chicago-Virtue Prospect	14B		140
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Conundrum Group	14A		86
Copperdown Mine	14A		36
Cracker-Oregon Mine	14A		18
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Dale Claims	14A		18
Dean Mine	14A		53
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Dolcoatte Group			

Unpublished report J.E.A.6/25/39

<u>NAME OF PROPERTY</u>		<u>REFERENCE</u>	
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		14B	76
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Dream Group			
Durkee Development Co.		14A	66
Elk Creek Gold Mining Co.		14A	28
Eureka & Fargo Gold & Copper Mining Co.		14A	116
Evance Group		14B	23
Fairview Claims		14A	77
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Forest Queen Mine		14A	29
Forrester Group		14B	118
Foster Claim		14A	106
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Fuller & Ingerson		14A	66
Galloway Mine		14A	18
Gibbs Property		14A	67
Gold Bug		14B	141
Gold Coin		14A	54
Golden Rod Mine		14A	69
Grande Ronde Mine		14A	111
Granite Group		14A	19
Great Northern Mine		14A	116
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Hemler Claims		14A	36
Howell & Haight Property		14B	119
Herring Brothers Claims			
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Intermountain Mine		14A	79
IXL		14B	79
Jackley Claims		14A	29
Jay Gould Claims			
			Unpublished report H.K.L.
			Unpublished report H.K.L.8/29/41
			Unpublished report H.K.L.1/10/40
			Unpublished report J.E.A.2/3/39
			Unpublished report H.K.L.5/18/40
			" " H.K.L.10/12/40
			Unpublished report H.K.L.

NAME OF PROPERTYREFERENCE

Juniper Hill			
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Lady Bug Group		14B	81
Last Chance Claim		14A	107
Last Chance Group		14B	120
Last Chance Mine		14A	20
Le Gore Prospect		14A	117
Liddy Group		14A	23
Lillie Jane Claim		14B	120
Little Giant Mine		14B	81
Little Joe Group			
Log Cabin Mine		14A	100
Loy's Mine		14A	96
Lucky Strike		14A	79
Magpie Mine		14A	89
Maiden's Dream Group		14B	56
Mammoth Group		14B	82
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CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Baker & Herriman Pros- pect	T9S, R39E, Sec. 8	Baker			About 10 mi. Baker	
Banner	T10S, R35E, Sec. 15	Greenhorn				Mrs. K. W. Earhart Whitney, Ore.
Banzette	T10S, R35E, NE corner Sec. 16	"		6000 to 6400	about 8½ mi. Tipton	Van Holberg Baker, Ore.
Bates Claims	9½ mi. Baker	Virtue	2 unpat. claims	moderate	9½ mi. Baker	Alma Williams, Baker, Ore.
Beaver Dam Group	T12S, R38E, Sec. 7	Upper Burnt River	4 unpat. claims	4800 to 5000		Mr. H. E. Kehres, Hereford, Ore.
Beldon Prospect		Cornucopia	2 unpat. claims	high		Harold DeWit
Belle of the Hills Group	T10S, R33E, S side of Elk Creek & W of Badger Mine	Susanville	3 unpat. claims			Arthur J. Johnson Estate-Gertie O'Rourke, Susanville, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Big Pine Group	T8S, R36E, W $\frac{1}{2}$ Sec. 31	Cracker Creek	2 claims & 2 fractions	5000		Frank Davenport Baker, Ore.
Black Jack	T10S, R34E, Sec. 24	Greenhorn	3 unpat. claims			Floyd Sherwood John Day, Ore.
Blue Bucket Mining Co.	T8S, R34E, Sec. 7-8	Desolation Creek	17 unpat. claims			Leon Starmount 326 Hutton Bldg. Spokane, Wn. (Pres.)
Blue Mud Prospect	T13S, R42E, 1500 feet SE of Humboldt	Monnon Basin		About 5000	About 13 mi. Durkee	Ralph Gorman, Jas. Kidwell, John Kernan, Estate
Borden Claims	25 mi. SW Durkee	"				Jess W. Baker, Baker, Ore.
Buckhorn Claim	13 mi. S Baker	Upper Burnt River		high		Edw. Bates, Baker, Ore.
Bull of the Woods Mine	15 mi. SW Haines	Rock Creek				Walter Coles, John Long, Haines, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Bunker Hill Mine	SW extension of North Pole-Columbia Lode	Cracker Creek	3 claims	About 6000	59 mi. Baker	J. J. Davis & others Bumpton, Ore.
Cap Martin Mine	T8S, R35E, NW 1/4 Sec. 25	Granite	5 unpat. claims	5500 to 6000	About 20 mi. Bumpton	Mrs. E. B. Casteel Leacham, Ore. Carl Hemphill, Pilot Rock, Ore.
Carpenter Hill Mine	T9S, R39E, Sec. 8	Baker		About 4000	About 10 mi. Baker	Geo. Tilley
Carroll B. Prospect (Barry)	T10S, R41E, SE 1/4 Sec. 3	Virtue	10 claims	3600	3 mi. Pleasant Valley	S. J. Niblack
Chattanooga Claim	T10S, R35E, near Gem Mine	Susanville	1 pat. claim			B. F. Hurt, Susanville, Ore.
Chicago-Virtue Prospect	T9S, R41E, Sec. 35	Virtue		3300	8 mi. Baker	
Compton Mine	T10S, R35E, Sec. 5	Susanville				Curley Buys, Payette, Idaho

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Cornudrun Group	T6S, R45E, Sec. 30	Cornucopia		high	About 4 mi. Cornucopia mill or 30 mi. Robinette	
Copperdown Mine	16 mi. NW Baker	Rock Creek	3 unpat. claims	high	16 mi. Baker	John Deamen, Est. Hanley Strayer. Administrator
Cracker Oregon	1800 ft. SE North Pole-Columbia Lode	Cornucopia		3500	36 mi. Baker	Cracker Creek Gold Mining Co. Sumpter, Ore.
Crown Point Mine	11 mi. Sumpter or Sumpter Valley RR	Cable Cove	3 lode claims	high	on Sumpter Valley RR	Otto Simons, Baker, Ore.
Cub Mine (Black Bear)	3/4 mi. above Delay Cabin in Phillips Gulch-NW Baker on Elkhorn Ridge	Rock Creek	1 claim	4500		Irvin Bros. Baker, Ore.
Curl Claims	300 yds. E from mouth of Maiden Creek on N. side of Powder River.	Sparta	3 unpat. claims			C.W. Curl, Baker, Ore.
Daisy Claim	T10S, R33E, S. of Rescue Group	Susanville				Mr. B.F. Hurt Susanville, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Dale Claims	T9S, R39E, Sec. 22	Baker				Mr. Dale
Dean Mine	12 mi. Sumpter on Sumpter Valley RR	Cable Cove	6 unpat. claims	high	on Sumpter Valley RR	Molly N. Harpham Jess Baker, Baker, Ore.
Diadem	T10S, R35E, NE $\frac{1}{4}$ Sec. 17	Greenhorn		high	About 9 mi. Tipton	Lee Mantle, Los Angeles, Cal.
Dixie Queen Property	on nose of Cougar Ridge between E&W forks of Dixie Creek	Quartzburg	5 claims			Dr. Hugh B. Fate, John Day, Ore.
Dolcoatte Group	T8S, R38E, joins Baisley Mine	Rock Creek	1 pat. claim	high	14 mi. Baker	Mose Fuchs, Baker, Ore.
Dolly Varden	T7S, R44E, Sec. 18	Eagle Creek				Chas. Carnhan Homestead, Ore.
Don Juan	1 mi. S of Greenhorn T10S, R35E, Sec. 15	Greenhorn		About 6500	About 9 mi. Tipton	Mrs. T. J. Sheehy, Clarence Merritt Willis Walk, Baker, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Donnelly Group	T4S, R44E, Sec. 31	Wallowa Range		8500		
Double Eagle	T10S, R35E, S $\frac{1}{2}$ Sec. 3	Greenhorn	7 claims		9 mi. Tipton	
Dream Group	T9S, R34E, Head of Wilson Creek	Baker	2 unpat. claims			B. F. Kulis, Baker, Ore.
Durkee Development Co.	$\frac{1}{2}$ mi. S. of Rye Valley road-5 mi. Durkee	Lower Burnt River		4000	5 mi. Durkee	Deerdork & Gaves, Durkee, Ore.
Elk Creek Gold Mining Co. (Robert Emmett)	1 mi. NW Cornucopia Mine	Cornucopia	1 claim	high	About 26 mi. Robinette	
Eureka & Fargo Gold & Copper Mining Co.	T4N, R48E, 49E	Imnaha	49 pat. claims			Opportunity Land Co. Lester E. Brown, Clarkston, Wn. (Seey)
Evence Group	T15S, R31E, Sec. 3	Canyon	6 unpat. claims	3500		Chas. Mack, Canyon City, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Fairview Claims	18 mi. Durkee	Mormon Basin			18 mi. Durkee	Roy & Rollin Chadwell
Fitzsimmons Group	NW of E. fork of Dixie Creek	Quartzburg	5 pat. claims			Bank of John Day & Jim Cleaver, Prairie City, Ore.
Flying Cloud Mine	T8S, R37E, Sec. 5(?)	Sumpter				
Forest Queen Mine	near Cornucopia Mine	Cornucopia		high	About 27 mi. Robinette	Ernest R. Gray, Missoula, Mont.
Forrester Group		Quartzburg	2 claims			Walter Ross, Wm. Clark, Prairie City, Ore.
Foster Claim (Black Iode Claim)	T10S, R41E, Sec. 3	Virtue	1 claim	moderate	3 mi. RR at Encina	R. S. Foster, Baker, Ore.
Fris Property	T6S, R40E, S4E Sec. 7	"			5 mi. Baker	Fris, Baker, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Fuller & Ingerson	T10S, R44E, Sec. 17-20-21	Lower Burnt River	Unpatented property 2000 acres	6000		Al Fuller, Geo. Ingerson, Durkee, Ore.
Galloway Mine	9 mi. Sumpster on the Sumpster Valley RR	Cable Cove		high	on Sumpster Valley RR	Bert Piper, Baker, Ore.
Gibbs Property	T12S, R44E, Sec. 9	Lower Burnt River			4 mi. NE Weatherby	Mrs. Gibbs, Sumpster, Ore.
Cold Bug	1 mi. NE Susanville	Susanville				J. H. Dunstan, Jr., Susanville, Ore.
Gold Coin		Greenhorn	4 unpat. claims	high		Mrs. T. J. Sheedy, Clarence Merritt Willis Walk, Baker, Ore.
Golden Rod Mine	12 mi. NE Durkee	Lower Burnt River	10 unpat. claims		12 mi. Durkee	Stevens Goss, 1116 Valley Ave. Baker, Ore.
Grande Ronde Mines	T6S, R36E, Sec. 26	Camp Carson				Grande Ronde Mines, Inc. C. H. D. Douglas, Yakima, Wn.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Granite Group	T8S, R36E, Sec. 13	Cable Cove	12 claims	7000 to 8000	1 mi. Argonaut Mine about 10 miles to Sumpter	Geo. Ingerson Baker, Ore.
Great Northern Mine	T4S, R43E, Sec. 23	Wallowa Range		8800		
Haley Claim	T12S, R33E, SW $\frac{1}{4}$ Sec 11	Quartzburg				J. E. Haley, Bradford, Prairie City, Ore.
Hemler Claims	2 mi. N of Columbia Mine in Fruit Creek	Cracker Creek	5 claims	7500	About 8 mi. Sumpter	Geo. E. Hemler (?)
Howell & Haight Property	Top of ridge E. of Dixie Creek & at head of a tributary to Corral Creek	Quartzburg				Howell & Haight, Prairie City, Ore.
Herring Bros.	T9S, R42E, Sec. 3	Virtue	5 unpat. claims	3500		F. S. & L. Herring, Baker, Ore.
Hice Mine (Buckhorn, Golden Star Gold Star)	2000 ft. S. of Humboldt Mine T13S, R42E,	Mormon Basin	8 unpat. claims	5000	About 14 mi. Dixie Gold Stair Mining Co. Robert Hice, Huntington, Ore Rt 1	

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHELPING POINT	OWNER
Higgins & Eveland	near Sanger Mine T7S, R43E	Eagle Creek	3 claims	4800 5000		Wm. Higgins, Chas. Eveland
Independent No. 1	12 mi. E Baker	Virtue	6 unpat. claims	moderate	12 mi. Baker	Mabel A. Griffith Baker, Ore.
Independent No. 2	12 mi. E Baker	"	2 unpat. claims	"	12 mi. Baker	Mrs. Sadie Cullen Baker, Ore.
Intermountain Mine (silver)	18 mi. Durkee	Mormon Basin		About 5000	18 mi. Durkee	Wess Bowden
IXL	T10S, R35E, Sec. 10	Greenhorn	11 claims	About 6300	About 9 mi. Tipton	Fred T. Kelley, Boise, Idaho
Jackely Claims	near Cornucopia Mine (about T6S, R45E, Sec. 21)	Cornucopia		high	About 25 mi. Robinette	
Jay Gould Group	T10S, R36E, Sec. 9	Greenhorn	5 unpat. claims	4500	4 1/2 mi. Whitney	Ross D. Traylor, 1657 Oak St. Eugene, Ore. Chas. R. Greer, Whitney, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Juniper Hill	T12S, R40E, Sec. 14	Upper Burnt River	4 unpat. claims		18 mi. Durkee	J. F. Keyton, Baker, Ore.
King Tut Group	T9S, R35E, E $\frac{1}{2}$ Sec. 36	Greenhorn	6 unpat. claims			W. M. Bakestraw, John Bradburn, F. T. Hughes, Pendleton, Ore. Van E. Halberg Baker, Ore.
Kit Carson	T10S, R35E, N $\frac{1}{2}$ Sec. 17	"	3 unpat. claims			
Lady Bug Group	T10S, R34E, Sec. 15	New Colorado	4 unpat. claims	5930		H. H. Silvertooth, Austin, Ore.
Last Chance Claim	T10S, R41E, Sec. 2	Virtue		moderate	3 $\frac{1}{2}$ mi. RR at Encina	Robert Palmer, Hugh Denham, Baker, Ore.
Last Chance Group	T11S, R33E, head of Ruby Creek S. of Dixie Meadows	Quartzburg	5 claims			H. H. Knight, Prairie City, Ore.
Last Chance Mine	T8S, R36E, Sec. 14	Cable Cove		7000 5000	10 mi. Sumpter	Hallock, Donald & Banta
La Gore Prospect	T3S, R44E, Sec. 7	Wallowa Range		7600		Joe & Stanley LeGore, Joseph, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Liddy Group	T11S, R41E, Sec. 34	Comer Creek		3500	4 to 5 mi. U.P. RR	J.J. Liddy
Lillie Jane Claim	T11S, R33E, Sec. 26	Quartzburg				J.H. Edmundson, Prairie City, Ore.
Little Giant Mine	T10S, R35E, NW 4 Sec. 4	Greenhorn		5910	1.3 mi. Greenhorn About 8 1/2 mi. Tipton	Judge Norbournes Berkely, Pendleton, Ore.
Little Joe Group	T12S, R44E,	Lower Burnt River		4800	7 mi. Hwy. 30 & RR	Geo. E. Morin, % Adam Kolb, Baker, Ore.
Log Cabin Mine	1 mi. Orion 6 mi. Unity postoffice	Upper Burnt River		high		R.J. Cartill
Loy's Mine	T8S, R37E, Sec. 7 (?)	Sumpter				
Lucky Strike	adjacent to Rainbow Mine T13S, R42E	Mormon Basin		About 5000	12 mi. Dixie	Bent Landreth Baker, Ore.

CLASS III	NAME	LOCATION	DISTRICT	AREA	LEV.	DISTANCE FROM SHIPPING POINT	OWNER
	Nagpie Mine	3 mi. from Haines	Rock Creek	5 unpat. claims		3 mi. Haines	Chas. Dunn, Baker, Ore.
	Maiden's Dream Group	T9S, R36E, Sec. 16	Granite	2 1/2 pat. claims		1 1/2 mi. S. of Ibex Mine or about 8 mi. to Sumpter	J. M. Barnett, Baker, Ore. Fred Smith, Granite, Ore.
	Mammoth Group	T9S, R34E, NW 1/4 Sec. 35	Greenhorn	8 unpat. claims	6700		Ed. Baugh, Matt Thompson, Halfway, Ore.
	Marble Creek Mining Co.	12 mi. W. Baker	Baker	9 acres pat. 2 fractions & 1 unpat. claim	high	12 mi. Baker	James Cavin, Baker, Ore. Mrs. F. C. Robinson, Mella Walla, Wn.
	McColloch Group	17 mi. W. of Haines adjoining Baisley Mine T8S, R38E, about sec. 20	Rock Creek	6 unpat. claims	high	17 mi. Haines	O. O. Baisley, Frank McColloch, Baker, Ore.
	McCord's Gulch Claims	T12S, R44E, NE Sec. 20	Lower Burnt River	2 unpat. claims quartz claim, 1 placer			C. E. Worthington, Huntington, Ore.
	Minnie McDowell	4 mi. NW Sumpter	Sumpter	5 unpat. claims	high	4 mi. Sumpter	

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Morton Prospect	T13S, R42E, en divide between Clangarry & French Gulch	Normon		About 5400	15 mi. Dixie	Morton Bros, Vale, Ore.
Mountain View Prospect	T8S, R36E, Sec. 15	Cable Cove	3 claims	6500 7000		B. J. Turnbow, Geo. Bailey, Jim Jefferson Baker, Ore.
Mountain View	1 1/4 mi. Canyon City	Canyon		4500		Clyde V. Kunes, Canyon City, Ore.
Mullins Prospect	Near Soda Creek	Conner Creek				J. Mullins, Gus Darland Grangeville, Ida
Muscatine	Sec. 10S, R35 1/2 E, 3/4 mi. N. Greenhorn	Greenhorn		About 6400	About 8 mi. Tipton	L. Helmer, Whitney, Ore.
Nancy Joe Mine	on Cow Creek	Upper Burnt River	2 claims	high		Mike Hoff, S. B. Larsen, Baker, Ore.
Nobody's Dream	on Cow Creek	"	4 claims	high		" "
Olive Butte (Big Elk)	T9S, R35E, S4 1/2 Sec. 35	Greenhorn		6000		Judge Berkeley, Pendleton, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	HEAV.	DISTANCE FROM SHEDDING POINT	OWNER
Ophir Mine	T12S, R35E, S1 Sec. 10	Quartzburg	11 unpat. claims			Ed Clark, Standard Oil Sta. Prairie City, Ore.
Ophir Mine	T10S, R35E, S. of the Badger shaft	Susanville	1 claim	About 3500		Certie O'Rourke, Susanville, Ore.
Oregon Chief	11 mi. Sumpter on Sumpter Valley RR	Cable Cove	4 unpat. claims	high	on Sumpter Valley RR	A.M. Donely (?)
Oregon Trail Mine	7 mi. E. Baker	Virtue	6 unpat. claims	moderate	7 mi. Baker	J.E. Caldwell Baker, Ore.
Overshot Group	T15S, R42E, NW1/4 Sec. 14	Moannon Basin	6 unpat. claims	5250	13 mi. Dixie	Albert Hinderman Estate, Ed. Graves, Chas. McNamara, Durkee, Ore.
Pat Mine	T9S, R41E, SE1/4 Sec. 8	Virtue		moderate	7 mi. Baker	Calder, Baker, Ore.
Pearl Mine	14 mi. Baker	Rock Creek	1 pat. claim	high	14 mi. Baker	Isadore Fuchs, Baker, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Phoenix	close to Don Juan	Greenhorn		6500	About 8 mi. Tipton	Frank Stewart, Baker, Ore.
Pioneer Mine	T10S, R34E, Sec. 7	New Eldorado		6000		New Eldorado Mining & Reduction Co. E. B. Reed, Pres.
Price Anderson Group	10 $\frac{1}{2}$ mi. Sumpter on Sumpter Valley RR	Cracker Creek	3 unpat. claims	high	10 $\frac{1}{2}$ mi. Sumpter	R. P. Anderson Baker, Ore.
Pride of Oregon	T9S, R35E, Sec. 10	Granite	5 claims			Fred Smith, Granite, Ore.
Prindle Property	on ridge 1 $\frac{1}{2}$ mi. W. of Dixie Butte	Quartzburg				Frank B. Prindle, Prairie City, Ore.
Pyx mine	T10S, R36E, Sec. 2	Greenhorn	6 unpat. claims	5500 6000		Frank Stewart, Baker, Ore.
Quebec	T9S, R35E, NW $\frac{1}{4}$ Sec. 27	Granite	2 pat. claims 12 acres pat. mill site			Roy M. Evans, Granite, Ore.

CLASS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Red Chief	10 mi. Sumpter on Sumpter Valley RR	Cable Cove	6 pat. claims	high	on Sumpter Valley RR	Otto Simons, Baker, Ore.
Red Mountain Prospect	T6S, R45E, Sec. 21	Cornucopia		7200		
Rescue	T10S, R35E, adjoining Gen Mine	Susanville	3 claims			Curley Buys, Payette, Idaho
Richardson Claims	T10S, R35E, NE $\frac{1}{4}$ Sec. 13	Greenhorn		high		C.S. Richardson, Baker, Ore.
Roba Brothers	T16S, R28E, E $\frac{1}{2}$ Sec. 13	South Fork				
Sheep Rock Mine (Apex)	T6S, R44E, Sec. 30	Eagle Creek	1 claim		About 42 mi. Baker	H.G. & D.A. Miles, Baker, Ore.
Showdown Mine	T14S, R37E, Sec. 7-8	Upper Burnt River	2 claims	5770		W.T. Thompson, Bill Schroeder,
Simmons Pros- pect	Simmons Mt. between E&W forks of Pine Creek	Cornucopia				R.J. Simmons W.L. Meyers
Silver King	2 mi. Herschel - Sumpter	Sumpter				O. Gordon, Baker, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Skyscraper Claim	on ridge between Elk & Deep Creek above town of Galena	Susanville	1 claim			Elk Creek Mining Co. Yakima, Wn.
Smith Claims	T6S, R45E, Sec. 19	Cornucopia		9000 9500		Geo. W. Smith
Soda Creek Mine	T11S, R45E, Sec. 18	Conner Creek				J. Mullins, Gus D. Darland, Grangeville, Ida
Stockton Group	T10S, R35E, SE of Badger Group	Susanville	5 pat. claims			Mrs. A. A. Patten, 500 Howard Ave. Seattle, Wn.
Sunset Mine (Suncrack)	13 mi. E. Baker on Richland Hwy.	Virtue	3 unpat. claims	About 5300	13 mi. Baker	Joe Haskins, Langdon Rand, Baker, Ore.
Thompson Mine	T10S, R33E, N. side of Elk Creek below Badger Group	Susanville	8 claims			Elk Creek Mining Co. Yakima, Wn.
Tiger Mine	T10S, R34E, Sec. 4	Greenhorn	6 unpat. claims	high		S. C. Richardson, Austin, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Twin Sister Claim	T11S, R44E, Sec. 34	Lower Burnt River	1 claim			Terney & Bunch (?) Dunke, Ore.
Uncle Sam Mine	T8S, R36E, Sec. 29	Bald Mt.		7100	Between Iber & Monumental or about 7 mi. Sumpter	C. E. Wikstrom, Raymond, Wn.
Wall Street Group	on Pine Creek	Upper Burnt River		high		S. G. Larsen, Baker, Ore.
White Elephant Prospect	About T6S, R45E, Sec. 26	Cornucopia		high		
Wild Irishman Prospect (Valley View)	About T6S, R45E, Sec. 26	"		9000		
Wright & Van Mead Claims	T8S, R37E, S $\frac{1}{2}$ Sec. 13	Hog Creek	3 unpat. lode claims	6500	12 mi. Haines	Van Mead, H. E. Wright, Baker, Ore.
Yellow Boy Mining Co.	T9S, R39E, Sec. 8	Baker	3 pat. claims 6 unpat. claims		12 mi. Baker	N. A. Muesge, Pres. Baker, Ore.

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Rabbit	14B	89	
Rainbow	14A	80	(Mormon Basin Mines, Inc.)
Rachel	14A	108	Unpublished report H.K.L. 8/7/40
Record	14A	101	
Red Boy	14B	60	
Roberts	14B	90	

NAME OF PROPERTY

REFERENCE

Roy & Sturgill	Bulletin 14A	Page 49
Royal White	14B	91
Ruby	14B	91
Ruby Creek	14B	63
Sanger	14A	50
Snow Creek	14A	56
Summit	14A	51
Summit	14A	83
Sunday Hill	14A	83
Tempest	14B	93
Tom Paine - Old Soldier (Group)	14A	16
Virtue	14A	108
West Side	14B	96
White Swan	14A	110

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Ajax	T8S, R35 $\frac{1}{2}$ E, Sec. 27 ?	Granite	4 unpat. claims, (lode) and millsite	About 4800	About 20 miles Sumpter	J.J.O'Dair, Granite, Ore.
Argonaut	T8S, R37E, NW $\frac{1}{4}$ Sec. 19	Cracker Creek	Several unpat. claims	4700	10 mi. Sumpter	Bascom Parker, Baker, Ore.
Badger	T10S, R35E, Sec. 8	Susanville	7 pat. claims	About 3500	About 27 mi. to Austin	Bradley Mining Co. San Francisco
Baisley-Elk horn	T8S, R38E, Sec. 20	Rock Creek	9 pat. 5 unpat. Quartz claims	high	15 mi. from Baker	John Schmidt Pollman Estate Baker, Ore.
Balm Creek	T7S, R43E, Sec. 32-35	Eagle Creek	Inc. Poorman, Mother Lode, Oregon Copper, Goose Creek Property	Moderate	About 30 mi. Baker	J. Arthur, Baker, Ore.
Basin	T7S, R43E, Sec. 1 ?	Eagle Creek	7 unpat. claims 40 acres deeded land			S.S. Sturgill C.L. Palmer, Baker, Ore.
Ben Harrison	T9S, R34E, Sec. 36	Greenhorn		6500	23 mi. Sumpter Valley RR at Whitney 28 to Sumpter	W.T. Agerton Lima, Ohio
Bluebird	T9S, R35E, sec. 11	Granite		about 4600	about 19 mi. to Sumpter	Henry Cavin Granite, Ore.

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Bonanza	4 mi. E. of Greenhorn T10S, R35E, Sec 8	Greenhorn		About 6000	3 mi. from Whitney	R. B. McGinnis Merlin, Ore.
Buffalo Monitor	T8S, R35E, SW 1/4 Sec 14	Granite	3 unpat. claims and pat. millsite	5800	about 23 mi. to Sumpter	Bruce Dennis 403 Pacific Bldg. Portland
California	T8S, R36E, Sec. 15	W17E Cable Cove		About 6500	About 11 mi. Baker	California Consolidated Mines Co. ?
Carbonate	T10S, R34E, Sec 3	Green horn	3 claims	7250	ab. 9 mi. Sumpter Valley RR Spur at mouth of Granite Boulder Creek	Mr. & Mrs. Sam Nigh Whitney, Ore.
Cliff	1 mi. N. of Flagstaff Mine T8S, R41E, Sec. 32	Virtue	1 claim	Ab 4000	5 1/2 mi. Baker	Milo & Henry Newton, Baker, Ore.
Columbian	T9S, R41E, Sec. 9-10	Virtue	1 pat. 3 unpat. claims	3500	11 mi. to Baker	Donald W. Green Baker, Ore.
Connor Creek	No. fork Connor Creek	Connor Creek		Ab 4500	3 mi. from Huntington Robinette Rd. & U.P. branch	J. O. Jefferson Portland, Ore.
Continental	T8S, R35E, W 1/2 Sec. 12	Granite	10 unpat. claims	Ab. 6000	26 mi. Sumpter	J. A. Gyllenburg Baker, Ore.

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Cornucopia	T6S, R45E, Sec. 27-28-29	Cornucopia	about 2000 acres - 1/2 pat. 1/2 unpat.	4800 to 8000	26 mi. to Robinsonette	J.M. Baker, Sec. Treas. 824 Old Nat. Bank Bldg Spokane, Wn.
Cougar Independence	T8S, R35E, SW 1/4 Sec. 22	Granite	2 pat. 15 unpat. and 2 unpat. fractions	Ab 5000	Ab. 19 mi. Sumpter	Independence Mining Co. Appleton, Wis.
Dixie Meadows	T11S, R33E, Sec 23	quartzburg	10 pat. claims		Ab. 15 mi. Austin	Mrs. G.H. Kight
Emma		Virtue	4 unpat. claims (lode)	Moderate	8 mi. Baker	Carl W. Hupke Walter G. Brown Baker, Ore.
Flagstaff	T9S, R41E, Sec. 5	Virtue		3900	7 mi. Baker	Ken Grabner Baker, Ore.
Gen	T10S, R35E, Sec. 5	Susanville	2 pat. claims & a 160 acre homestead	Ab 3500	Ab. 27 mi. Austin	Mrs. J.H. Dunstan Susanville, Ore.
Giraffe	T12S, R42E, Sec. 31	Mormon Basin	7 claims		About 16 mi. Dixie, Ore.	Giraffe MAM 80. A.C. Weatherman Bridgeport, Ore.
Gleason	T12S, R44E, SW 1/4 Sec. 15	Lower Burnt River	7 unpat. lode claims	4500	5 1/2 mi. Weatherby	A.V. Lovejoy & Mrs. Dora Rizer Lime, Ore.

CLASS I	NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Gold Cluster Group	T12S, R44E, Sec. 21-22		Lower Burnt River	10 unpat. lode claims in 1 group-2 in another	4500	4 1/2 mi. Weatherby	M.P. Gifford J.E. Johnson Rt 1 Huntington, Ore
Golden Eagle	T10S, R35E, E 1/2 Sec. 15		Greenhorn	100 acres pat. ground	5500	Ab. 8 mi. Tipton	F.R. Klein Baker, Ore.
Golden Gate Group	T10S, R35E, Sec. 5-6		Susanville	2 pat. claims		Ab. 30 mi. Austin	Bradley Mining Co 425 Crocker Bldg San Francisco
Gold Hill	T12S, R45E, SW 1/4 Sec 1		Lower Burnt River	20 lode claims, 1 mill claim, 80 acres deeded land	4000	33/4 mi. Durkee	Jas. T. Hall, Durkee, Ore.
Gold Point	T12S, R44E, E 1/2 Sec. 20		"	1 unpat. lode claim	Ab 3500	Ab 2 mi. Weatherby	K.T. Engstrom J.W. Forsterling Durkee, Ore
Gold Ridge	1/2 mi. NE of Sparta		Sparta	ab 200 acres inc. pat. & deeded land	4100	Ab 32 mi. Baker	New Deal Min. Co. L.E. Boyer, Pr. Halfway, Ore.
Great Northern	2 mi. S.E. Canyon City T14S, R32E		Canyon		4700	Ab 26 mi. Seneca	Isaac Guker Canyon City, Ore.
Haight	T14S, R32E, Sec. 7		"		4600	"	Clint Haight, Sr Canyon City, Ore

CLASS I	NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
	Hallock	T12S, R42E, NW $\frac{1}{4}$ Sec. 2	Lower Burnt River	2 unpat. claims	5200	7 mi. Hwy. 30 & UPRR	N.M. Hallock Box 124, Durkee, Ore.
	Harrison Group (Windsor, Physche, Big Johnny)	T10S, R35E, Sec. 8-17	Greenhorn	16 unpat. claims	6500 7000	3 mi. S.W. Greenhorn About 10 mi.	C.L. Harrison H.S. Riechert, Seattle, Wn.
	Hidden Treasure		Virtue	4 claims - 1 millsite	3500	10 mi. Baker	Mike Koff- Baker, Ore.
	Highland-Maxwell	T8S, R38E, Sec. 19	Rock Creek	20 pat. claims	6100	14 mi. UPRR near Haines	W.F. Johnston J.S. Newcomer
	Humboldt	T13S, R42 About Sec. 15	Monmon Basin		5600	12-14 mi. Dixie, Ore.	Mr. Gorman Baker, Ore.
	Ibex (and Bald Mountain)	T9S, R36E, Sec. 3-4	Cracker Creek		6300	7 mi. Sumpter	Ibex Gold Min. Co. P.D. McTavish 310 Rogers Bldg. Vancouver, Wn.
	Imperial Eagle	T8S, R36E, Sec. 15	Cable Cove	Several Claims	6500 7700	about 12 mi. Sumpter	Arman H. Newberry H. Banta, Atty.? Baker, Ore.
	Indiana	T12S, R42E, S $\frac{1}{2}$ Sec 11	Monmon Basin	6 unpat. lode claims	5000	8-10 mi. Dixie, Ore.	Otto Zimmerman Geo. Bertrand Frank Klein, Thos. Thompson, Baker, Ore

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Intermountain	T10S, R33E, Sec. 6	Greenhorn	5 claims	high	10 mi. Tipton	C.W. & W.C. Hardner, Baker, Ore
Johnson	T6S, R40E, Sec. 55?	Baker	200 acres	3300	6 mi. North Powder	Mr. Elvie Haines, North Powder, Ore.
Keystone	T13S, R33E, Sec. 2	Quartz- Ville	5 unpat. claims		7 mi. Prairie City & John Day Hwy.	Ed Powell, John Ward, Nyssa, Ore.
Koehler	T9S, R41E, Sec. 7	Virtue			5 mi. Baker	Pat O'Brien Baker, Ore.
La Belleview	T2S, R36E, Sec. 8	Granite	6 pat. claims, 1 unpat. claim, 8 mill claims	7000	26 mi. Sumpter	Mrs. J. H. Parker Berkeley, Cal
Little Bonanza	T12S, R44E, NE 1/4 Sec. 15	Lower Burnt River	6 unpat. lode claims	4500	5 1/2 mi. Weatherby	Mrs. G. W. Gibbs Sumpter, Ore
Little Hill	T12S, R44E, Center Sec. 15	"	3 unpat. lode claims	4800	5 mi. Weatherby	Ida M. Bowen Frank L. " 2335 4th St. Baker, Ore.
Macy	T9S, R44E, Sec. 5	Sparta	7 claimsequals 120 acres	2500 up Powder Riv. from Maiden Creek	35 mi. Baker	G.B. Whittle 1919 Smith Tower Bldg, Seattle, Wn.

CLASS I

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Monumental	T8S, R36E, Sec. 19	Granite	6 unpat. claims	6000	About 20 mi. Sumpter	J. B. Kissell Sumpter, Ore.
Mountain View	4 mi. N. of Bourne T8S, R38E	Cracker Creek	15 $\frac{1}{2}$ acres Pat.	7500	4 mi. N. Bourne	W. F. Johnson J. F. Newcomer
Morning	T10S, R34E, Sec. 13 SE $\frac{1}{4}$	Greenhorn	8 unpat. claims	6400	About 12 mi. Austin	Wm. W. Gardner Whitney
Morris	T10S, R34E, Sec. 1	"	1 pat. 7 $\frac{1}{2}$ unpat. claims		About 26 miles N. to Sumpter	Mary Thornburg & Estate, Alvin Thornburg, La Grande
New York	T8S, R35 $\frac{1}{2}$ E, Sec. 27	Granite	6 claims	About 5000	About 19 mi. Sumpter	F. J. Barker Unity, Ore. Chas. Lanich & Nels Stevens, Granite,
North Pole- Columbia Lode	Bourne T9S, R37E, Sec. 4-5	Cracker Creek	Consolidation of many properties	about 5500	7 mi. Sumpter 36 mi. Baker	Ellis Mining Co. Sumpter
Owl (Red Bird, Virginia)	T10S, R35E, N $\frac{1}{2}$ Sec. 10	Greenhorn			9 mi. Tipton	A. E. Petty Whitney, Ore.
Porterville	7 mi. Whitney T10S, R35 $\frac{1}{2}$ E, 21?	"	9 unpat. claims	5000	7 mi. Whitney	A. D. Penrod Baker, Ore.

NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING-POINT	OWNER
Prairie Diggings	3 mi. E. of Canyon	Canyon	6 pat. claims		23 mi. Seneca	
Quartzburg Mining Co. (Colo. or Equity Group)	T13S, R36E, Sec. 2	Quartzburg	6 pat. claims		7 mi. Prairie City	R. C. Reese, Prairie City Ore.
Rabbit	T10S, R36E, N $\frac{1}{2}$ Sec. 10	Greenhorn	6 unpat. claims		About 9 mi. Tipton	L. A. Woodward Baker, Ore. Wm. Hay, B. James Whitney, Ore.
Rainbow	N. of divide between Cal. Gulch & Rainbow Gulch T13S, R42E	Mormon Basin	6 pat. & many unpat. claims	5600	12 mi. Dixie, Ore.	Dr. E. B. Young & Associates, Baker, Ore.
Rachel	T9S, R41E, Sec. 7-8	Virtue	5 pat. claims	3500	5 mi. Baker	H. A. Waggoner, Baker, Ore.
Record	T14S, R36E, Sec. 11	Upper Burnt River	15 full size unpat. claims, 80 acres deeded land			Mrs. Maud Ralph & Whitmore, Baker, Ore.
Red Boy	Head of Congo Gulch T9S, R35E	Granite		About 4600	About 19 mi. Sumpter	Hallock, Donald & Banta, Baker, Ore.

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Roberts	T10S, R35E, Sec. 21	Greenhorn	4 unpat. claims	6000 6500	about 7 mi. Tipton	Frank Roberts Tahhill, Ore.
Roy & Sturgill	T7S, R43E, S ¹ / ₄ Sec. 3	Eagle Creek	2 unpat. claims	4400	14 mi. Medical Springs	Claude McIntyre, Baker, Ore.
Royal White	1 mi. N. Greenhorn or T10S, R34E,	Greenhorn		6500	About 8 mi. Tipton	Alice Weigand, Baker, Ore.
Ruby	T10S, R34E, Sec. 2	"		7250		
Ruby Creek	T9S, R35E, Sec. 22	Granite	8 pat. claims & a fraction			Roy M. Evans Granite, Ore. J. C. Ladner, Seattle, Wn.
Sanger	T7S, R43E, Sec. 2	Eagle Creek		4900	About 15 mi. Medical Springs & Lumber co. railroad	Wm. Wendt, Baker, Ore.
Snow Creek	T10S, R35E, N ¹ / ₄ Sec. 16	Greenhorn	15 fractions unpat. lode claims	6150	Central Ore. Hwy. nearest main Hwy. 27 mi. distant	Hubert S. Smith, Bay City, Mich.
Summit	East Eagle creek 5 mi. above junction with Eagle	Eagle Cr.	several claims inc. Woodward & Dunham Miles group			Summit Mining Co W. H. Strayer Baker, Ore.

CLASS I NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Summit	T13S, R42E, NW $\frac{1}{4}$ Sec. 22	Mormon Basin	4 claims & 2 fractions about all unpat.	about 4600	10-12 mi. Dixie, Ore.	Carl Mathes, Andy Porter, A.H. Fidley, W.E. Buell
Sunday Hill	T13S, R42E, NW $\frac{1}{4}$ Sec. 15	"	17 lode claims	5050	12 mi. Dixie, Ore.	Wm. Phalen, Frank Barris, Rainbow Co., Bonekamp Estate
Tempest	T10S, R34E, Sec. 2	Greenhorn	4 unpat. claims	7200	7 mi. Sumpter Valley RR spur at mouth of Granite Boulder Creek	Otto Simons Baker, Ore. Roy Bowman, Richalán, Ore.
Tom Paine- Old Soldier Group	McCord Gulch T9S, R39E, Sec. 7	Baker	7 claims		About 12 mi. Baker	Mrs. F.C. Robinson, Walla Walla, Wn.
Virtue	T9S, R41E, Sec. 21	Virtue		3800	14 mi. Baker	Virtue Mine Develop. Co. Wm. Wendt, Pres. Baker, Ore.
West Side	T10S, R35E, SE $\frac{1}{4}$ Sec. 9	Greenhorn	4 pat. claims			Mr. Baird, Vanhill, Ore.
White Swan	T9S, R41E, Sec. 25	Virtue		3300	14 mi. Baker	Harold Banta (Trustee) Baker, Ore.

CLAS III NAME	LOCATION	DISTRICT	AREA	ELEV.	DISTANCE FROM SHIPPING POINT	OWNER
Young America	T9S, R39E, Sec. 8	Baker		high	12 mi. Baker	Mose Fuchs, Baker, Ore.
Zimmerman Prospect	T9S, R39E, NW $\frac{1}{4}$ Sec. 17	Baker		3950	$\frac{1}{2}$ mi. above forks on Hubbard Gulch about 8 mi. Haines	Otto W. Zimmerman Baker, Ore.

OREGON RECREATIONAL GOLD MINING

Answers to questions most frequently asked by "weekend miners"

-- DOES GOLD OCCUR IN OREGON?

Lode and placer gold has been mined from many parts of the State. The southwestern and northeastern corners of the State have the highest production of both lode and placer gold. Minor output has come from the other parts of the State.

-- WHERE CAN I OBTAIN INFORMATION ABOUT PAST GOLD MINES AND MINING, INCLUDING MAPS?

The following can be purchased from the Portland, Grants Pass, and Baker offices of the Department of Geology and Mineral Industries:

(1) Gold and Silver in Oregon (Bulletin 61), 1968	\$17.50
(2) Oregon's Gold Placers (Misc. Paper 5), 14 p.	1.00
(3) Skin Diving for Gold in Oregon (The Ore Bin, April 1961), 8 p.	1.00
(4) Golden Years of Eastern Oregon (The Ore Bin, April 1978), 14 p. ...	1.00
(5) Special Gold Issue (The Ore Bin, April 1973), 16 p.	1.00
(6) Geology, Mineralization and Mining Field Guides for the Cascade Range (The Ore Bin - June 1977, December 1977, May 1978, and June 1978). Price per issue	1.00
(7) Recreational Gold Packet (includes items 2, 3, and 4 above, plus an 8½x11 mineral localities map and a list of Department publications)	5.00 2.00

-- WHAT LANDS ARE OPEN FOR PROSPECTING AND MINING?

Land ownership for the surface and for the mineral rights can be determined from the local County Assessor's maps. Patented mining claims are treated the same as any other privately owned land. Most U.S. Forest Service and U.S. Bureau of Land Management lands, shown on their published maps, are open for prospecting; however, much of the better lode and placer ground will have been staked.

-- WHERE CAN I OBTAIN INFORMATION ABOUT PROSPECTING FOR GOLD?

The U.S. Geological Survey has available three leaflets on the subject. They are entitled "Gold," "Prospecting for Gold", and "Suggestions for Prospecting". Copies may be obtained without charge from the Information Office, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia 22304.

-- HOW CAN I TELL IF AN AREA HAS BEEN STAKED?

All unpatented mining claims are recorded in the local County Courthouse and with the U.S. Bureau of Land Management, 825 N.E. Multnomah Street (P.O. Box 2965) Portland, Oregon 97208 (telephone: (503) 231-6281). The BLM records may be easier to work with than the county's.

-- SUPPOSE I FIND SOME GOLD, WHAT THEN?

The gold is yours to keep, give away, or sell. There is no limit to the amount. The U.S. Government no longer buys gold. Gold may be sold to individuals, jewelry manufacturers, or gold buyers. Best prices are received for good-sized nuggets or visible gold mineral specimens which have a collectors' value rather than a metal value. There is no fixed price for gold, with sales consummated between a willing buyer and a seller, at an agreed-upon price. The current price should serve as a guide.

-- DO I NEED PERMISSION TO PROSPECT AND STATE A MINING CLAIM ON PUBLIC LANDS?

On public lands that have not been withdrawn from mineral entry, Federal permission is not needed to prospect or state a mining claim.

-- WHAT ARE THE RULES AND REGULATIONS FOR GOLD MINING?

The U.S. Bureau of Land Management has printed "Staking a Mining Claim on Federal Lands" for free distribution. For sale at most stationers are two forms which show how to stake either a lode or a placer claim. Each has a brief synopsis of the mining law. The forms are Form No. 830 (Notice of Vein or Lode Locations in Oregon), and Form No. 897 (Notice of Placer Location - Oregon). The forms are 30¢ each. If prospecting or mining is to go beyond the handtools stage then the U.S. Forest Service and the U.S. Bureau of Land Management may require a notice of intent or a plan of operation, and the Department of Geology and Mineral Industries may require a surface mining permit, depending on the size of the proposed mining development.

Most gold panners and those with small dredges, however, are not interested in locating a mining claim and desire only to do some recreational placer mining. No permits are required and unless they unduly muddy the waters in a stream, there will be no problems. A report, which gives the best time to work in a stream, entitled "Recreational Mining Can Be Compatible with Other Resources", may be obtained from the Environmental Management Section of the State of Oregon Department of Fish and Wildlife (506 S.W. Mill Street, P.O. Box 3503, Portland, Oregon 97208 - telephone: 229-5408).

Care must be taken not to trespass on valid mining claims or privately owned land. Good outdoor manners and a concern for the environment are essential.

-- WHERE CAN I HAVE MY SAMPLES ASSAYED FOR GOLD?

The Department does not provide in-house assaying services. The public is encouraged to send samples directly to private labs; a list is available from the Department upon request. The lab(s) to be utilized were selected for the ability to provide high quality results at reasonable costs.

Rocks and minerals also may be identified at the U.S. Bureau of Mines, 1450 Queen Street S.W. (P.O. Box 70, Albany, Oregon 97321, telephone - (503) 967-5809).

* * *

The State of Oregon Department of Geology and Mineral Industries maintains offices at 1005 State Office Building, 1400 S.W. 5th Avenue, Portland, Oregon 97201 (telephone: 229-5580); and field office at 312 S.E. "H" Street, Grants Pass 97526 (telephone: 476-2496); and 2033 First Street, Baker 97814 (telephone: 523-3133). You are invited to visit the field offices to obtain detailed information on local gold diggings. Geologic maps and a wide variety of bulletins are available at all three of the Department's offices.

PUBLICATION MAIL ORDERS: Allow 1 month for delivery. Payment must accompany orders less than \$50. All sales are final. FOREIGN ORDERS: PLEASE REMIT IN U.S. DOLLARS

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

MEMORANDUM REPORT

SUBJECT: Dredged Areas

LOCATION: Josephine County--Greenback Mining District. Sections 4, 5, 8, & 9; T 34s; R 6w.

Along Grave Creek from 1500' above the mouth of Mackin Gulch and extending down stream to approximately 1000' above Leland. A strip 300-1000 feet wide, $1\frac{1}{2}$ miles in length and totalling an estimated 115 acres was dredged.

HISTORY: The Rogue River Gold Company began dredging just up stream from Leland, September 25, 1935. An old channel of Grave Creek south of the present stream was dredged with a bucket type dredge being used. The operation was discontinued in 1939 when work up stream reached a point at which the gravels extended so deep that it was impossible to clean bedrock.

GENERAL: This dredged area is possibly the most extensive in Josephine County and is one of the few which has involved any appreciable acreage of agricultural land.

The area dredged (see attached sketch map) included the following soil types, the descriptions of which were taken from the "Soil Survey of Josephine County, Oregon" published by the U. S. Department of Agriculture (1923). Percentage figures shown represent an estimate by the writer of the percentage of the total acreage dredged covered by a particular soil type prior to dredging. The estimate is based on the soils map accompanying the U. S. Department of Agriculture publication mentioned above:

15%---"Hugo Silt Loam---The surface soil of the Hugo silt loam consists typically of about 10 inches of brown, friable silt loam containing a small quantity of small iron--cemented pellets and usually a larger proportion of flat, angular fragments of slate and hard shale. The subsoil, to a depth of 36 inches, is a brown or slightly reddish-brown, compact silt loam grading into the parent rock through a mass of rock fragments containing very little fine material. The bedrock consists of shale, slate, or sandstone and occurs at various depths within the 6 foot section, the average depth probably being less than 4 feet."

GENERAL:(con't)---

45%---"Corning Gravelly Clay Loam---The surface soil of the Corning gravelly clay loam, is its typical development, consists of 12 inches of a dull-red clay loam containing 20 to 40 per cent of mixed water-worn gravel. The subsoil, to a depth of many feet, is a red, compact gravelly clay loam or clay. The surface soil generally contains a large quantity of rusty brown iron-cemented pellets about one-half the size of a pea, and in places accumulation of ferruginous material has caused a slight cementation in the subsoil. Locally some of the material included with this type has a light loamy texture, and is somewhat more friable than typical."

"Certain areas have a large content of boulders ranging from 6 inches to 1 foot or more in diameter.-----
Usually the stones occur only on the surface, but in places they are irregularly distributed throughout both soil and subsoil. For the most part they consist of hard, resistant rocks, in which quartzite, granite, and slate predominate. In places, as along Rough and Ready Creek in the southwestern part of the area surveyed, the boulders are so numerous as to make the land non-agricultural; in other places they interfere more or less with cultivation."

15%---"Columbia Fine Sandy Loam, Gravelly Phase---The surface soil of the Columbia fine sandy loam, gravelly phase, consist typically of 10 to 18 inches of light-brown or grayish-brown to brown friable sandy loam, containing a quantity of water worn gravel representing a variety of rocks. The soil is low in content of organic matter, and the structure is rather loose and porous. In the lower lying areas representing the more recent alluvial deposits the subsoil consists of lighter colored deposits of loose gravel and cobblestones, containing very little interstitial material, which extend to a depth of several feet. The gravel is of mixed origin, and although granitic and quartzitic rock predominate, every formation in the region is represented in the material."

"In the more elevated areas representing older and somewhat modified alluvial deposits the subsoil, to many feet in depth, consists of stratified deposits of water worn gravel and cobblestones firmly embedded in light brown loam. In places the structure of the subsoil and substratum is loose and porous, but more commonly the under lying material consists of very compact or partly cemented layers in which gravel and cobblestones constitute 60 to 75 per cent of the total mass.-----

25%---"Columbia Fine Sandy Loam, Stony Phase---in places the material of the Columbia series contains a large quantity

GENERAL: (con't) ---

of loose, water worn boulders 6 inches to 1 foot or more in diameter.----- The fine material consists mainly of grayish-brown loam or fine sandy loam, but in places the phase consists of deep windrows of loose, round gravel and rocks with very little fine material."

"The phase is confined mainly to low terraces a few feet above overflow. Drainage is excessive and the high content of stones renders the greater part of it nonagricultural."

Cleared land of the Corning gravelly clay loam soil type located adjacent of the dredged area apparently is being utilized mainly as grazing land.

Adjacent land of the Hugo silt loam soil type is covered by timber or brush and is not being utilized as farmland.

Land of the Columbia fine sandy loam soil, both gravelly and stony soil types adjacent to the dredged area apparently is being utilized as grazing land or for general farm crops. Much of the stony soil type is suitable only as grazing land.

Only a small portion of the settling pond area is being farmed. The remainder is the site of a sawmill operation with the settling ponds being utilized as log ponds for the mill.

Insofar as can be determined no resoiling has been attempted. There is no growth on the tailings other than occasional small trees and brush.

Report by; H. D. Wolfe
Date: May 5, 1950

Clair Engle

2D DISTRICT CALIFORNIA

HOME ADDRESS
RED BLUFF, CALIFORNIA

OFFICE ADDRESS
1018 HOUSE OFFICE BUILDING

Congress of the United States

House of Representatives

Washington, D. C.

November 27, 1945

COMMITTEES:

WAR CLAIMS, CHAIRMAN
WORLD WAR VETERANS'
LEGISLATION
MINES AND MINING
COINAGE, WEIGHTS, AND
MEASURES
PUBLIC LANDS
ROADS

VIA AIR MAIL

Mr. F. W. Libbety, Director
Oregon State Dept. of Geology
702 Woodlark Building
Portland, Oregon

Dear Sir:

Pursuant to your telegraphic request of November 26th I am enclosing herewith two copies of my bill H.R.4393, providing for the relief of the owners of certain gold mines which were closed or the operations of which were curtailed by W.P.B. Limitation Order L-208.

No action has been taken on this measure yet but Committee hearings are being scheduled for the near future.

Very sincerely yours,

Clair Engle

CLAIR ENGLE, M.C.

Encl:1
mwm

RECEIVED
NOV 30 1945

STATE DEPT OF GEOLOGY
& MINERAL IND.

P.S. As I am going out of the city on a business trip before this letter will be typed I am asking my secretary to sign it for me.

From Your
Congressman
Clair Engle

2nd District California

79TH CONGRESS
1ST SESSION

H. R. 4393

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 16, 1945

Mr. ENGLE of California introduced the following bill; which was referred
to the Committee on War Claims

A BILL

For the relief of the owners of certain gold mines which were
closed or the operations of which were curtailed by War
Production Board Limitation Order L-208.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

That any owner of a gold mine who incurred a financial
loss due to the closing or curtailment of operations of such
mine as a result of the restrictions imposed by War Pro-
duction Board Limitation Order L-208 during the effective
life thereof may, within six months after the effective date
of this Act, file a claim or claims for the amount of such
loss, including the costs of placing such mine in a condition
equivalent to that which it was in at the time such mine

1 was closed or its operations curtailed as a result of such
2 order, but not including payment for lost production.

3 SEC. 2. (a) The Secretary of the Treasury is author-
4 ized and directed to appoint an examiner, who shall be paid
5 a compensation at the rate of \$7,500 per annum, and shall
6 be furnished with an adequate staff to consider such claims.
7 It shall be the duty of such examiner to consider all claims
8 filed under this Act and to certify for payment by the
9 Secretary of the Treasury such claims as he shall find quali-
10 fied for payment under the terms of this Act, in such amounts
11 as he shall find are due. It shall further be the duty of the
12 examiner to settle all claims within one year after the date
13 of filing thereof, except where prevented by unusual circum-
14 stances.

15 (b) The pertinent records of other agencies of the Fed-
16 eral Government shall be made available to the examiner
17 upon request.

18 SEC. 3. The Secretary of the Treasury is authorized
19 and directed to pay, out of such sums as may be appropriated
20 under the terms of this Act, such claims as are certified to
21 him under the terms of this Act.

22 SEC. 4. Appeal may be taken from any decision of the
23 examiner by a suit brought in the United States district
24 court for the district wherein the petitioner is domiciled or
25 wherein his mining operations were conducted.

1 SEC. 5. There are hereby authorized to be appropriated
2 such sums as are necessary to carry out the provisions of
3 this Act.

4 SEC. 6. This Act shall take effect on the first day of the
5 first calendar month following the date of its enactment.

Gold Mining

State Dept. of Geology
1069 State Office Bldg.
1400 S. W. 5th Ave
Portland, Oregon 97201.



AMERICAN



GOLD



MINE

AND

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GOLD IN CALIFORNIA

By California Senator H.L. Richardson

A lot of people today

Empire led an almost mirac-

mines know whereof they
speak, and the geologists
back their stories.

Untold billions in gold
still lie buried in our
hills, awaiting the time
when a realistic price of
gold is established so that
it won't cost more to mine
it than it does to sell it;
when the integrity of the
dollar is reestablished;
when the dollar is no long-
er inflated by the issuance

There are untold amounts of
gold nuggets and dust now
in the hands of individ-
uals in California, hold-
ing it for the day it is
worth selling. This key
industry of ours will come
back one day and the fab-
ulous mines of the past
will again disgorge their
golden riches.

I have no doubt that the
gold mining industry and
all of the numerous indus-

try to tell you that gold is a barbarian kind of metal, a metal that has no relevance or meaning to a contemporary society, but if you take a good look at history, you will find that the opposite is true. You also find out that throughout history those who make the loudest noise and protest are inevitably trying to tell you something the opposite of fact.

Gold is synonymous with an advanced society. History has shown that to be true. The longest lasting civilization known to man, the Eastern Roman Empire, known as the Byzantine Empire, lasted from 300 A.D. to 1400 A.D., 1,100 years, at times almost solely because of its protection of the value of its coinage, which was gold. During the Dark Ages, when nothing else could be trusted, Byzantine gold coins could buy anything in the civilized world, if you had enough of them to meet the price.

Donald J. Hoppe, expert and author on the subject of gold, said, "A loss of gold and a chronic debasement of its currency were cited by the historians Gibbon and Mommsen as being among the chief causes of the collapse of the Roman Empire. And after the downfall of Rome, the Byzantine

ulus existence, primarily because of its determination to maintain the purity and value of its gold coinage."

History has had its fill of civilizations that debased coinage, from the Romans to Germany in the 1920's. Bankruptcy brought an end to organized society and government in Germany when it took a wheelbarrow load of paper money to buy a loaf of bread. Inflation has been used before as a vehicle to end national debt. The German debt of 1914 through 1923 was cancelled in this manner, with the exchange rate of 42 trillion marks for one dollar, the entire debt was retired with an equivalent of $1\frac{3}{4}$ American pennies.

In 1942, the Federal government, closed down all gold mining in the country by calling that industry "nonessential to the war effort." Most of our mines have never been re-opened; they are flooded to ground level, sealed against accidents, their machinery dismantled, moved out or sold to Russia, and the miners have sought other jobs. You need not hunt far in any Mother Lode town to find tales of mines where there is more gold left in the ground than was ever taken out. The old-timers who were employed in the

of more paper money without gold as a hedge against the fluctuations of monetary policy by the Federal government.

In the interim, panning for gold has become one of California's favorite pastimes, particularly since underwater diving equipment has made rooting up the bottoms of rivers easier.

ries related to it, will again be brought to life within the next ten years by an enlightened Congress, or we will have runaway inflation as it was so sadly demonstrated in Germany and China. Government will either fold under the accumulated weight of paper money or intelligently rectify the problems now.



36 foreign diplomats representing 32 countries came to California's Mother Lode and tried their luck at gold panning. Some color was found, but no nuggets.

The diplomats, from embassies in Washington D.C. and missions to the United States, had with them George Reynolds, alternate executive director of the International Monetary Fund. AGN

SILVER-LINED GARBAGE

Fine Jewelry 'Mined' From V

BERT WEBBER
Free-Lance Writer

For years it's been treated as "garbage" — get rid of it! Today this variety of refuse yields glitter.

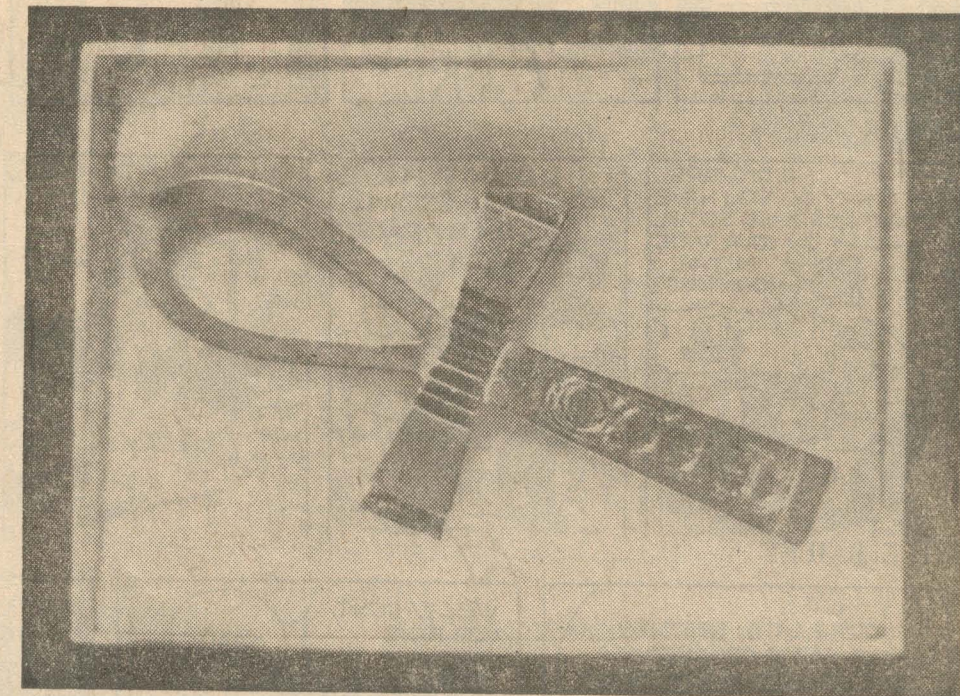
Silver, more pure than sterling, is being pulled electrolytically from waste photographic darkroom chemicals.

As a step in the film developing process, unused silver on film is removed in a chemical rinse, the fixing bath. Eventually these chemicals become exhausted, and most amateur and professional photographers dump worn out mix down the drain. And down the drain go measurable amounts of silver.

It's said that Eastman Kodak Company uses more silver in the manufacturing of photographic emulsions than the United States mint uses for coins — and that's before the silver cutback in recent U.S. coinage.

TWO YEARS AGO a Medford man thumbed through a magazine and came to an ad suggesting people who develop film should rent or buy a silver salvage unit. As the ad suggested, one can "make money reclaiming silver."

W.L. Florea decided to collect the "sludge" and old



EGYPTIAN ANKH, called "key of life" is popular charm now being made from

999 fine silver recycled from photographic chemicals.

chemicals from film users in the area, including hospitals. Hospitals consume mountains of X-ray films and chemicals, then throw out mountains of used film and exhausted chemicals. All contain silver in varying amounts.

Florea reasoned that he could get enough waste material in Southern Oregon to set up silver salvage units. He guessed right and found he's not alone. There are numerous collectors in Oregon. In some areas the competition is great.

SOME HOSPITALS and industrial photo operators, glad to have somebody else dump and clean their tanks, are grateful for the service. Some give the old chemical in an exchange for the service. Florea came along saying, "Why give it away? It's worth money to me. I'll buy it."

He presently picks up used chemical and old sheet film from hospital X-ray departments, mass-production photo plants, individual portrait studios, industrial plants and from some home darkroom hobbyists.

The rate paid is based on the silver yield from the solutions. X-ray offices have a higher silver content in their waste than does the home picture hobbyist. Using the silver litmus test, Florea will tell a client the approximate percentage of silver in the solution.

THE SALVAGE of silver is becoming an ecology matter. "We can no longer afford to throw out silver. Even the

OREGON
JOURNAL

FEATURES

...the Northwest's greatest!

3M

MONDAY, DECEMBER 13, 1971

• • 3

These We Like...

Concert

It would take considerable time and space just to research and list the recordings made of Tchaikovsky's "1812 Overture." It is a traditional musical showpiece that appears early in every man's record library, proba-

unfamiliar with "Butterfly", it should be explained that it actually is three rock groups, not one, built around the talents of Doug Ingle, a vocalist whose organ playing gives Butterfly a lightness unusual to rock groups. On side one, "Iron Butterfly Theme," "Possession" and "Unconscious Power," are played by the "Heavy" Iron

Children" — all reshaped by Havens to fit the now famous Richie Havens mold. Any person who has enjoyed Havens' past recording efforts should enjoy this one too. Stormy Forest, SFS 6010 (DMc)

HUMBLE PIE fans will rejoice over the group's live performance. "Rockin' the



Worn-Out Photolab Chemicals

Federal government has reclaiming units in many installations, and people on the payroll to attend them," Florea declares.

Exactly what becomes of the silver once collected?

Florea explains: "We first have to acknowledge that silver collected by any electrolytic process and in any quantity cannot be used without refining. Most people, especially those with small rental units, sell to a smelter. Silver and gold prices vary on almost a daily basis. From the current price on the day of the transaction, the smelter-operator deducts laboratory and refining fees, postage and other charges. The net proceeds for un-smelted silver is pretty low.

"One of my clients," Florea says, used a reclaimer in his lab for about two years then mailed the unit to his contact in the East. He realized about \$3 clear profit after all that time. Now I buy his old solutions every month and pay cash by the liquid gallon when I pick it up.

"MANY mass-production smelters aren't too careful and pour unreclaimed silver down the drain themselves. For me, efficiency is the only way I can make it. There's a big demand for silver. In my process I pull 100 per cent of the silver out of the solution."

When asked if he peddled this reclaimed silver to the Eastern smelters, Florea almost exploded: "Absolutely not! In my judgement that's the way not to do it! If I accepted the low price the smelters pay, I couldn't make it."

Florea set up a small furnace, bought crucibles, and started his own smelter. Soon he had so much chemical awaiting processing and so many coffee cans sitting around full of reclaimed silver, he brought in two partners. Dave Vallandigham from Williams, Ore., deep in the Josephine County mining area, is a mine and mill oper-



SILVER BULLION reclaimed during past 24 months by Medford man from worn-out X-ray and photolab chemicals and valued at \$36,000 goes on display this week at Crater National Bank in Medford. Silver assays at 999.5 fine—purer than sterling silver. (Bert Webber photos)

ator and assayer. Harry Garner, Grants Pass, has spent a lifetime, following study at Colorado School of Mines, as chemist, metallurgist, silver smith and engraver. Garner also inlays gold.

The trio works silver from castoff photolab and X-ray chemicals into, as a visitor to the plant commented, "The most gorgeous hand-crafted silver jewelry I've yet laid eyes on."

"SILVER," points out Dave, "is measured in degrees of 'fine.' Fine is as close to 1000 as silver can be refined. Electric companies use fine silver in switch and other connections. It's used

Company, with headquarters in Grants Pass.

Vallandigham, says Allen Smithson, a Grants Pass crafts specialist, is casting silver objects d'art using the the Lost Wax Process. "This is a difficult and little known technique" said Smithson, "but in my opinion it gives the most exact reproductions.

TWO DESIGNS plus belt buckles are now in production, with other objects to follow. These include the ancient ANKH, an Egyptian cross sometimes called the "key of life," and a 1712 "piece-of-eight" from the Mexico City mint. "Everything we make depends on handwork — no two pieces will be precisely alike," exclaimed Dave. He said national advertising presently lists ANKH items "about \$25 for 'tarnishing' Sterling." Florea pointed out the firm is using non-tarnish 999 fine. He wears a 999 fine belt buckle he made over a year ago.

Rogue Pure Silver Company plans its first public display of salvaged silver "999.5 fine" for five days this week in lobby of Crater National Bank in Medford. "We're showing silver bullion in bars about the size of a postage stamp and bars the size of a building brick. The big bars weigh about 18 lbs. and are worth up to about \$1,000 each. We also are showing some pure silver crystals along with the jewelry," Florea said. The display includes pure gold plate work done by Garner on an ANKH.

"We will soon be doing silver plating. The equipment can handle anything from an earring to a bumper off a car," quipped Florea.

Harry Garner sums it all up this way: "It's nice to be able to make something beautiful out of what people once discarded down the drain. We're working hard and take pride in what we're creating."

doesn't tarnish like sterling.

Old silver coins tarnish easily as most governments mint with 900 fine or less. "German silver and nickel silver," Dave announced, "doesn't have any silver in it!"

The three partners have registered their work under the name Rogue Pure Silver



pretation. So what's the news in a new recording? Best answer is simply to listen to London's sparkling Phase 4 Stereo Concert Series album with Leopold Stokowski conducting the Royal Philharmonic Orchestra, with an assist from the John Alldis Chorus, Welsh National Opera Chorus and the Band of the Grenadier Guards. The "1812 Overture" cries out for the finest recording techniques to capture cleanly, without distortion, not only the roar of cannon, exultation of cathedral bells and the Russian people but also the quiet contrasting passages reflecting war's tragedies and the pastorel scene. The overture runs the gamut of excited human emotions, and every time one hears it, he reaches out for sounds which aren't even there but which his senses tell him might or should be there. Well, London's Phase 4 Stereo release probably comes closer to satisfying all those tingling senses than any previous recording of the overture. It's a hair-raising performance. On Side 2 are those two other Russian favorites, Borodin's Polovtsian Dances from "Prince Igor" and Stravinsky's "Pastorale." London Phase 4 Stereo Concert Series, SPC 21041. (EG)

ANOTHER WORK which early found its way into the library of a serious record collector, even back in the 78 rpm days, was some interpretation of Richard Strauss' compelling "Death and Transfiguration." Like every "lush" tone poem, it not only requires a perceptive conductor and orchestra but also fine recording techniques to bring it fully alive for a listener. Both these qualities are neatly combined in London's Phase 4 Stereo Concert Series' new album with Lorin Maazel conducting the New Philharmonia Orchestra. On Side 2 is Tchaikovsky's explorations in the subject of death, his "Francesca da Rimini," a rich piece composed during his middle thirties when he was reaching out for a meaning to life (and death) and moving into his maturity as a composer. London Phase 4 Stereo Concert Series, SPC 21067. (EG)

Pops

ON ANY LIST of top rock groups, there would have to be a spot for Iron Butterfly. The group's new album, "Evolution: The Best of Iron Butterfly," offers a good sampling of the group's varied musical talents. To those

of Ingle, Danny Weiss, guitar; Jerry Penrod, bass, Ron Bushy, drums and Darryl DeLoach, tambourine, percussion and vocals. Then the next four numbers, "Flowers and Beads," "Termination," "In - A - Gadda - Da - Vida," "Soul Experience," and "Belda Beast" are played by the "I - A - Gadda - Da - Vida," group consisting of Ingle, Erik Brann on guitar and vocals, Lee Dorman on bass and Bushy on drums. Finally, the "Metamorphosis" Iron Butterfly plays "Stone Believer," "Easy Rider" and "Slower Than Guns." In this group are Ingle, Dorman, Bushy, and Mike Pinera on guitar and vocals and El Rhino on guitar. Much of the very good music on this album was composed by Ingle. ATCO, SD 33-369. (KN)

LED ZEPPELIN needs no introduction to young rock fans. Nor does the hard rock this high-flying English group cranks out. With the exception of "Whole Lotta Love" and "The Immigrant Song," you won't find many, if any, of the Zeppelin's songs on the bubble-gum "Boss 40." Yet all of the group's albums have been top sellers. It's latest effort on Atlantic, the title of which has been written in hieroglyphics or some such indistinguishable sign language, should do little to soil the Zeppelin mystique. "Black Dog" and "Misty Mountain Hop" are strictly Led Zeppelin, but "Stairway to Heaven," seems to veer away somewhat from Zeppelin's hard stuff as the group picks up on the same haunting melody which prevailed throughout the Beatles' "Abbey Road" album. Some Zeppelin fans may consider that a cop-out, but the group redeems itself on "Four Sticks" and "When the Levee Breaks," a good blues-rock piece. Best cut from this album, in this reviewer's opinion, is "Rock and Roll," a good trip for those who grooved to the best rock instrumentals of the early '60s. Atlantic, SD 7208. (DMC)

EVEN BEFORE he turned George Harrison's "Here Comes the Sun" into a giant seller, Richie Havens was winning plaudits for his honest, gutsy interpretations of popular music. His new album on Stormy Forest Records, a division of MGM, contains more of the same — James Taylor's "Fire and Rain," Peter Townshend's "Tommy," Cat Stevens' "Fathers & Sons" and Graham Nash's "Teach Your

Fillmore," a two-record package which was recorded live at Bill Graham's Fillmore East just before Graham shut down the joint. The two-nights this album was recorded, Humble Pie was sharing the stage with a then-unheralded young musician named Lee Michaels. Name sound familiar? Included on this latest Humble Pie release are several good tunes authored by members of the English rock group as well as Ray Charles' now classic gospel rock tune "Hallelujah, I Love Her So." "Four Day Creep" and "I Don't Need No Doctor," a couple of super hard movers, are the highlights of this album. Humble Pie fans will undoubtedly find many more. A&M, SP 3506. (DMC)

LIVINGSTONE TAYLOR, "Sweet Baby James" brother and considered by some to be the best musical talent in the talented Taylor family, seems to have all the ingredients of super stardom at his reach. Taylor wrote 10 of the 11 songs on his new Capricorn release, and if you guessed brother James Taylor, wrote No. 11, you're wrong. This album is strictly a Livingstone Taylor product, and he comes across exceptionally well, whether its on country rock tunes such as "Get Out of Bed" or on a soft, soothing ballad like "Gentleman." Move over, Jimmy T. Capricorn. Atlantic, SD 863. (DMC)

RITA COLIDGE'S new album, "Nice Feelin'," includes the backing of Marc Benno on guitars and vocals and of the Dixie Flyers, who play guitars, keyboards, bass and drums on this record. Some of the artists are Al Kooper, who played organ on "I'll Be Here," and Rusty Young, who played steel guitar on "You Touched Me In the Morning." This album contains Dave Mason's "Only You Know and I Know," Bob Dylan's "Most Likely You Go Your Way," and Neil Young's "Journey Thru the Past." A & M, SP 4325. (CO)

SANDY DENNY has been popular in England for quite some time now. And with her new album, "The North Star Grassman and the Ravens," she should begin to come into her own in the United States. Her new album has 11 songs on it, and a total of 10 different musicians playing on it at different times. Sandy Denny does the singing and plays occasional acoustic guitar or piano on this album. Most of the songs include about six musicians. A & M, SP 4317 (CO)



ORIGINAL pieces-of-eight, 1712 vintage, from Mexico. Mint was used to make mold for pieces-of-eight so this one now being turned out by Rogue Pure Silver Company of Grants Pass.

Top 20 S

HOLLYWOOD (UPI) — The top 20 singles this week based on Billboard's survey of sales and broadcast play:

1. "Family Affair," Sly and Family Stone.
2. "Brand New Key," Melanie.
3. "Have You Seen Her," Chi-Lites.
4. "Old Fashioned Love Song," Three Dog Night.
5. "Got To Be There," Michael Jackson.

6. "Theme From Isaac Hayes.
7. "Baby I'm a You," Bread.
8. "All I Ever Need You," Sonny and Cher.
9. "American Pie," McLean.
10. "Cherish," Davsidy.
11. "Scorpio," Denfee.
12. "Hey Girl-I Know When," Donny Osmond.
13. "Respect Yo

Your Hor

TUESDAY, DECEMBER 14
By CARROLL RIGHTER
Of Carroll Righter Institute
ARIES (March 21 to April 19) Get busy and clear up work ahead of you so you can then devote yourself to your mate and have a delightful time together. Plan for greater things in the future. Study that brochure well.
TAURUS (April 20 to May 20) Sit down and talk with associates so you can make better arrangements for the future together. A good day to come to an excellent agreement with those who oppose you. Use right words.
GEMINI (May 21 to June 21) If you enthusiastically start all those duties ahead of you, you find they are easy to fake care of and you get right profits from them. Plan time to add to present wardrobe. Find best items.
MOON CHILDREN (June 22 to July 21) You want to have a good time and can do so if you get in touch with those congenial people you like and have them accompany you. First get important work done. Show your finest skills.
LEO (July 22 to Aug. 21) Entertaining at home in p.m. can prove to be most delightful as well as bring right people together there. Show you are a grand

host, hostess. First get that working early.
VIRGO (Aug. 22 to Sept. 21) Get together with congenials whether business or personal life and you'll get excellent results. Remember reports, statements out early, for buying and selling. Study that night.
LIBRA (Sept. 22 to Oct. 22) are of a practical turn of mind after those aims that increase. Hit on the right plan for success. A business expert gives fine you can follow.
SCORPIO (Oct. 23 to Nov. 21) are of assistance to good friends find they help you gain your future, so get busy early at work as well. Take particular pains on others. This can be a wonderful evening.
SAGITTARIUS (Nov. 22 to Dec. 21) The aspects are excellent for new and worthwhile plans in future, so get busy early at work to what advisers have to say some philanthropic work that's tant.
CAPRICORN (Dec. 22 to Jan. 19)

afford silver jewelry I've yet laid eyes on."

"SILVER," points out Dave, "is measured in degrees of 'fine.' Fine is as close to 1000 as silver can be refined. Electric companies use fine silver in switch and other connections. It's used in jet airplanes and by NASA. The highest grade silver doesn't tarnish like sterling."

Harry Garner reminded that most people believe sterling is the pure and most expensive silver. "One doesn't add silver to get sterling. One takes the impurities (copper) out of sterling to get fine silver. Sterling is only 925 fine."

In a jesting mood came a remark that in the early days of sterling, during the Norman dynasty (13th century), somebody wanted to create some "repeat" business. "OK," the tale goes, "you make the coins of sterling and I'll sell the polish." All sterling tarnishes.

"IN ALL seriousness," Florea interjected, "sterling is a good mix for flatware. If flatware were 999.5 fine, the grade we're producing for jewelry from photolab solutions, a fork would bend when you spear a piece of steak!" He said that 999.5 fine was excellent for jewelry items. It is more attractive because fine silver



POURING SILVER is dangerous, about 1,700 degrees hot, says W. L. Florea of Medford, founder of company which now collects silver from photolab wastes to make fine jewelry.

gles

Staple Singers.

14. "Stones," Neil Diamond.

15. "You Are Everything," Stylistics.

16. "Where Did Our Love Go," Donnie Elbert.

17. "Gypsies, Tramps and Thieves," Cher.

18. "Superstar," Temptations.

19. "Rock Steady," Aretha Franklin.

20. "Sunshine," Jonathan Edwards.

ope

al day to be with allies and begin that new plan you have in mind, whether of a business or social nature. State your objectives clearly. Save some time for that study you have been wanting to do.

IF YOUR child is born today . . . he or she will be one of those lucky young people who while very determined still knows how to use such a quality in a modern manner for big success early in life. The judgment here is excellent. There is much ability at revitalizing outmoded businesses, ideas, and making them work efficiently, so slant the education along such lines, stressing both

Becker On Bridge

By B. JAY BECKER
Journal Bridge Expert

South dealer.
Both sides vulnerable.

NORTH		WEST		EAST		SOUTH	
♠	AK 5	♠	2	♠	8 6 3	♠	Q J 10 9 7 4
♥	8 7 6 5	♥	K 10 9	♥	3	♥	A Q J 4 2
♦	K J	♦	8 6 5 4 3	♦	A Q 9 7 2	♦	10
♣	Q 8 7 6	♣	A K 10 2	♣	J 9 5 4	♣	3

The bidding:

South	West	North	East
1 ♠	Pass	2 ♣	Pass
2 ♠	Pass	4 ♠	

Opening lead —king of clubs.

This deal occurred in the match between France and Italy in 1969. It provides a fine illustration of the play known as the scissors coup.

At the first table — where Garozzo and Forquet were North-South for Italy — the bidding went as shown and West led the king of clubs. With East following low, West shifted to his singleton spade.

Declarer recognized the

theless finished down one. After winning the spade in dummy, he played a trump to the ace and the jack back, deliberately avoiding the finesse.

West won with the king and returned a diamond through the K-J. The king lost to the ace and East promptly returned a spade, which West ruffed to score the setting trick.

The play started the same way at the second table, where the contract was also four hearts. Again West led the king of clubs and switched to a spade.

But the French declarer, Henri Svarc, after winning the spade with the ace, led the queen of clubs from dummy and on it discarded the ten of diamonds.

West won with the ace and shifted to a diamond, but — due to the scissors coup which had effectively cut communication between the East-West hands — declarer made the contract.

He ruffed the diamond return and led the A-J of hearts. West won with the king — it was the third trick for the defense — but was now out of ammunition. Svarc easily won the rest of the tricks and France gained 720 points on the deal as a direct outcome of the

Ask Andy: Shiny pyrite

Andy sends a 20-volume set of the Merit Students Encyclopedia to Shelly Clements, 12, Lansing, Mich., for his question: **What exactly is fool's gold?**

When you are gold prospecting in likely places, any shiny yellow metal tends to look like the real thing. But sometimes the promising sample turns out to be pyrite, which is a chemical compound of iron and sulfur. Because pyrite is less costly than gold, people called it fool's gold. But let's not be fooled by this notion — for

sometimes a chunk of pyrite may be more useful than all the gold in Ft. Knox.

Some people think of pure gold as money-money. They may get carried away with this notion and come down with the strange disease of the mind called gold fever. In gold rush days, many feverish prospectors felt that gold was so very valuable that nothing else had any value at all. Certainly they were determined never to be fooled by something they called fool's gold.

Often this shiny yellow

mineral is found in deposits of real gold. Usually it is iron pyrite, a compound of iron and sulfur. But no matter how much it looked like the real thing, those gold-hungry prospectors refused to be fooled.

The golden sample was heated and whacked with a hammer. If it tarnished or melted with a repulsive smell, if it shattered under the hammer, then it was discarded as fool's gold — alias pyrite.

Suppose you were camping and lost all your gear, in-

cluding the matches. A nugget of gold would be downright useless. But a piece of pyrite could at least give you a nice warm meal. For the hard, brittle mineral can be used to strike the spark to light a campfire — which could save your life.

Pyrite also can be more useful than real gold in the busy world of industry. There, its high sulfur content is extracted to manufacture sulfuric acid. This hot-tempered chemical works behind the scenes in refining petroleum and in manufacturing

certain steels. It also is used in certain printing processes, in making soaps, glues and dozens of other everyday items.

Some pyrites also contain useable traces of nickel, cobalt, lead or zinc. Others contain enough copper to be rated as copper ores. Obviously there is nothing foolish in a deposit of so-called fool's gold. True, the gold is more costly, but the pyrite may be more useful.

Pyrites are quite plentiful minerals. Flaky and chunky deposits often occur in

slates, shales and various lava rocks. Some deposits also occur in gold-bearing quartz rocks. In this case, a flake of fool's gold might tell a prospector that real gold is quite close.

Concert scheduled

Two Portland bands, Carl Smith's Natural Gas Company and the Sunnyland Band, will perform in concert at 7:30 p.m. Thursday, Nov. 14, at the Paramount Northwest theater.

January 25, 1967

Mr. Herman A. Fay
Route #3, Box 395
McMinnville, Oregon 97128

Dear Mr. Fay:

Thank you for your letter of January 12, inquiring about gold placer mines.

Over the years dozens of schemes have been tried and many machines have been built to recover the fine gold occurring in western Oregon streams. Many of these devices have been able to recover the fine gold, but only a few of them have proven to be economically feasible.

The main difficulty with all of the attempts to recover values from the black sands has been one of economics rather than metallurgy. Most of the sands contain only a few cents worth of gold per yard, and unfortunately the equipment that has been designed, even though it is capable of recovering nearly all of the values present, just can't handle enough yards per day to make it worthwhile. For instance, assuming that you can locate a piece of ground which has 50 cents of gold and platinum per yard and that you can make a 90 percent recovery, this will net 45 cents per yard and it will take 100 yards a day to gross \$45. Subtract from this the overhead, operating costs, and labor and you can readily see that such an operation is not practical. If you go to a plant that can handle 400-500 yards a day, then the initial costs are so high that an individual or a small group cannot afford to construct and operate it.

The successful operations have been conducted where there have been relatively small but very high grade "pockets", or rich pay streaks where the yardage is relatively small and the values extremely high. Unfortunately most of these have been worked out and the chances of discovering additional ones are very slender indeed.

In another envelope we are sending you a copy of a leaflet, "Skin Diving for Gold in Oregon," which contains some information which we hope will be helpful to you. On the enclosed list of publications your attention is invited to the items marked in red.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

RECEIVED
JAN 16 1967

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

Herman A. Fay,
Rt.#3, Box 395,
McMinnville, Oregon.

1/12/1967

Dear Sir;

Does the state have a state mining inspector or a mining department where I might get information on such things as mining equipment that has been or is being used in placer mining that picks up floating, or so called, flour gold?

Are there any areas known where there is enough fine gold if the equipment is cheap enough to operate where it would be possible to make wages by hand.

I've heard through the years from different prospectors that it is possible to make wages if a person could come up with a contraption to trap this fine gold. So I have been working on a machine that operates more or less by hand, that I think will pick up most of this floating gold. But I haven't been financially able to take a chance on going out prospecting to prove it. So therefore I'm very much interested in whether it has been tried before in known areas and if it was successful. Was the operation too costly to make it pay, or wasn't there enough gold in these areas to make it pay.

Thank you.

Sincerely yours,

Herman A. Fay

GEOCHEM

January 18, 1967

Mr. Charles R. Knapp
803 "C" Avenue
La Grande, Oregon 97850

Dear Mr. Knapp:

In answer to your inquiry about the availability of kits for field analysis, the only one that I know of currently being manufactured is by Apex Development Company, N. 6828 Fox Point Drive, Spokane, Washington 99208.

Most people doing this kind of work prepare their own kits and reagents. The best source of this information is U.S. Geological Survey Bulletin 1152, Analytical Methods Used in Geochemical Exploration by the U.S. Geological Survey. This is available from the U.S. Government Printing Office, Washington, D.C., for 45¢. This bulletin describes the chemicals necessary and the analytical procedures for many different elements.

Sincerely yours,

R. G. Bowen
Geologist

RGB:lk

October 23, 1974

Mr. Ernest R. Wells
P.O. Box 267
Elgin, Oregon 97827

Dear Mr. Wells:

Thank you for your letter inquiring about the processing of gold.

As you no doubt are fully aware, the number of methods available for the concentration and recovery of gold is almost endless. If you are dealing with free gold - that is, gold in a metallic state rather than combined in a sulfide, telluride or some other form, the concentration and recovery is usually straightforward and relatively inexpensive. Needless to say, unit costs vary with the volume of ore to be processed, both per hour and in total. Assuming that: (1) fairly large volumes are to be processed, (2) the gold is free, and (3) funding is available to acquire proper equipment, then several treatments are available. If the gold is fine, a fine grind either in a ball mill or rod mill will probably be required to separate the gold particles from the gangue. Once this has been accomplished the fines can be rough-concentrated on tables or possibly jigs. The table or jig concentrates can then either be passed over amalgam plates or batched into an impact amalgamator. If assays of the tails from the amalgam circuit show any appreciable amount of gold remaining, then either a cyanide or flotation circuit might be considered. In extremely difficult cases all four methods might have to be employed to strip the values; tabling or jigging; amalgamation, cyaniding; flotation.

If the gold is not too fine you might want to use some Humphrey spirals to catch the coarser particles and partly concentrate the rod mill slurry. A coarser grind would probably suffice to free the gold, provided a fairly high circulating load through the spirals and back through the rod mill was maintained. The trick is to separate the gold from the gangue as quickly as possible and avoid overgrinding (and the generation of slimes which are difficult to handle) and added expense and higher losses.

Mr. Ernest R. Wells

Page 2

October 23, 1974

Only rarely is it practicable to ship concentrates containing free gold to a custom mill or smelter for final treatment. If at all possible a mill should be designed to concentrate the ore to the final stage. The determination of whether to melt the concentrate into slugs or bars or leave it as dust would depend on the volume produced and the relative price obtainable for the two forms.

The Denver Equipment Company, 600 Broadway, Denver, Colorado 80217 manufactures a complete line of mineral dressing equipment and you might wish to write them concerning your problem. As you no doubt know, we can run gold and silver assays on any type of ore or concentrate. We require at least one pound of raw ore or about a half a cup of concentrate to run an assay. Our schedule of service charges is attached.

Sincerely yours,

Ralph S. Mason
Deputy State Geologist

RSM:lk

Encl,

Ralph - can
you answer this

September 24, 1974

R.E. Conconan - State geologist
State Department of Geology and Mineral Industries
1069 State Office Building
Portland, Oregon 97201

Dear Mr. Conconan,

I am writing this letter both for my own information in behalf of others who have asked the question of me and I am unable to answer.

When gold is visible with a microscope and shows on assays and you have devised a method to grind the ore and screen size it, is there any method that you know of that the individual can use without great costs involved to;

1.. obtain a reduced bulk concentrate retaining the fine gold from much greater heads. (would like to obtain bulk concentrates for assay purpose from each section of ground but cant recover the gold by conventional gravity method as it is too fine)

2.. Actually save the gold from the ground material.

If you can tell me the answer to this or can steer me to bullitens on the proper place for the information I would appreciate it.

Since I saw you last I have written to Russel Chadwick as per your suggestion (obtained his street address from the telephone operator) but he has not had time to answer.

Should you get any information which you believe might be of importance to me concerning the Forest Service regulations I would surely appreciate it.

Sincerely yours,

Ernest R. Wells

Ernest R. Wells

P.O. Box 267

Elgin, Oregon 97827

RECEIVED
SEP 26 1974

STATE DEPT. OF GEOLOGY
& MINERAL IND.

Environmental Management Section

U.S. Fish and Wildlife Division

P.O. Box 3503

Portland, Oregon 97208

(229-5408)

- (1) Recreational Mining Can Be Compatible with Other Resources
- (2) Oregon's Guidelines for Timing of in-water Work to Protect Fish and Wildlife Resources.

If 50 cubic yards are removed a permit must be obtained from the Division of State Lands (378-3805); and also from the U.S. Army Corps of Engineers (221-6021 - info.). Also DEQ would shut down the operation if the stream is muddied too much.

B.C. firm hopes to take \$20 million

By CARRIE PETERSON

Correspondent, The Oregonian

SUMPTER — A Vancouver, B.C., firm is reopening the Bonanza Mine south of here near Baker and expects to take up to \$20 million worth of gold from tailings, dumps and ore left behind by older, less efficient milling operations.

R. Ross Dion, consultant geologist for Tapin Copper Mines, Ltd., says there is enough potential in the tailings and dumps alone to pay Tapin for rehabilitating the mine.

Geophysicists and engineers are taking electromagnetic readings of the Bonanza property, which is a mile by a half-mile and has 14 patented claims.

Bruce Woodsworth, engineer for Tapin, is studying old mine records and correlating that information with data acquired by geophysicists.

Besides the gold-rich tailings and dumps, miners left behind five miles of underground workings. The main shaft goes into the earth 1,250 feet, where it meets a fault. Woodsworth said engineers hope to locate the vein

on the other side of the fault by drilling.

Woodsworth expects to operate the main haulage at the 500-foot level. Old records show the shaft is filled with water to that point.

In further exploration, consultants and engineers will look for probable targets for diamond drilling.

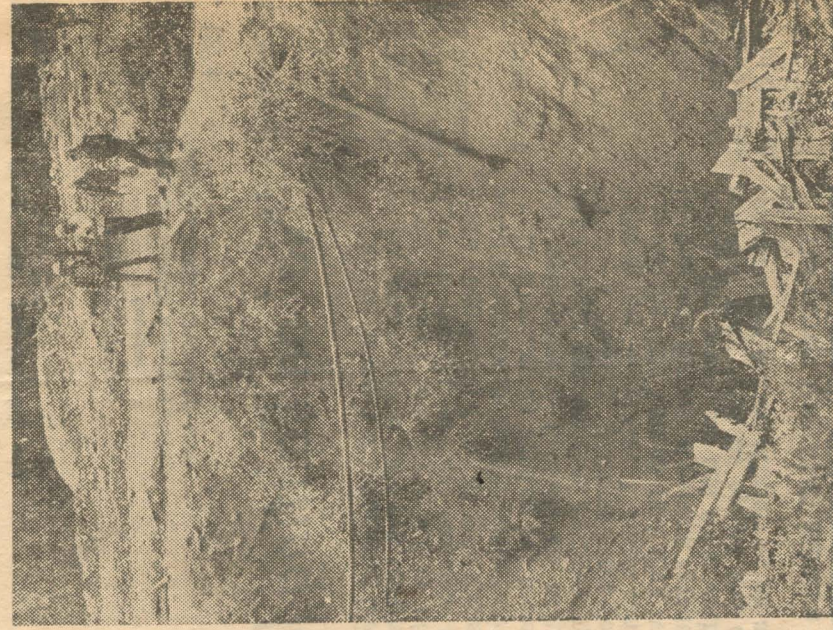
After the second phase of exploration, the mine will go into full operation, employing between 20 and 50 men. To justify the building of a comprehensive mill, Jerry Bradley, company consultant, said the mine would have to be worked for at least five years.

Tapin became aware of the property seven months ago through a third party in Seattle. The property was formerly owned by two Baker women. A Seattle company will retain a 30 per cent interest in the mine, with Tapin holding the other 70 per cent, Bradley said.

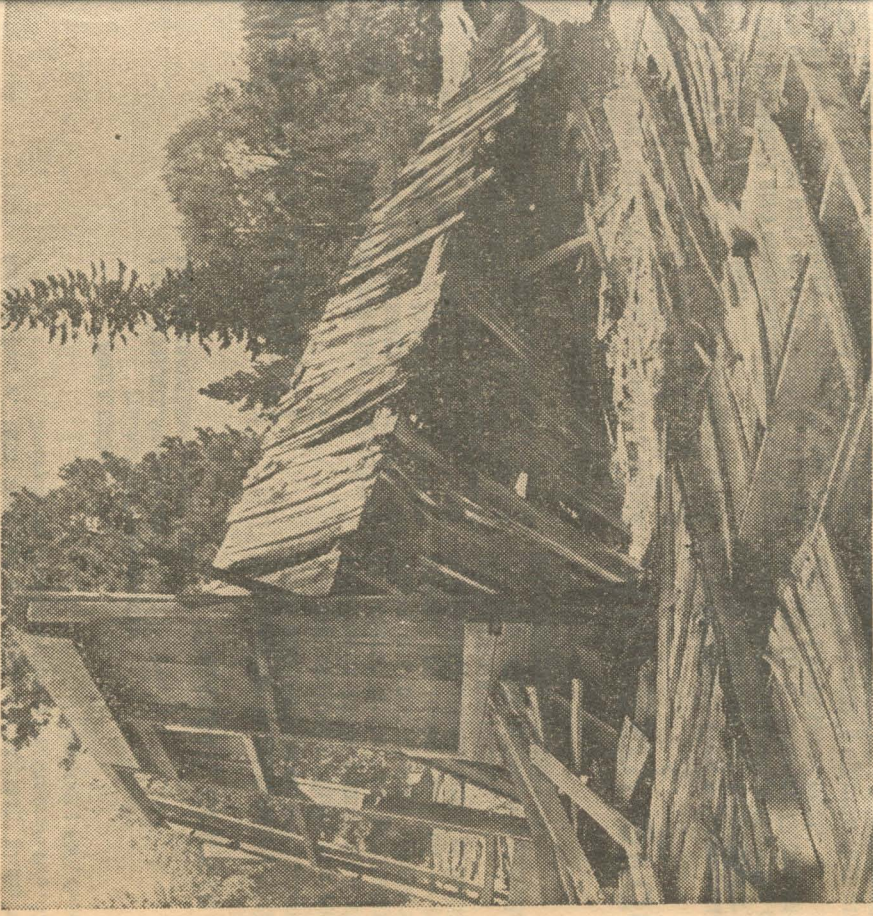
The Bonanza Mine was discovered in 1877 by a prospector named Jack Haggard. He sold his claim for \$300. The next time the mine sold, it went to for \$30,000, and later for \$50,000. Because of the profits each owner (except Haggard) made on the property, the mine was named "Bonanza."

The mine was in full production from 1897 until the early 1900s, with the last use in 1910. Between 1898 and 1904, \$4 million in gold ore was taken from the mine at \$20 an ounce, Woodsworth said.

Investors from New York



REOPENING A BONANZA — Workers (above) inspect caved-in shaft of Bonanza Mine at Sumpter, near Baker. A Vancouver, B. C., company plans to reopen the abandoned gold mine after readings of ore there are made. Old cookhouse and bunkhouse (right), used until the mine shut down in 1910, show the ravages of time and weather.



had large interests in the Bonanza Mine at the turn of the century. One group of owners, the Geiser Brothers (for whom Geiser Creek, which runs through the claim, is named), used their money from the mine to buy and develop the Geiser Grand Hotel in Baker.

Canadian mining firm plan

By GARY MIDDLETON
Of The Democrat-Herald

It was once known as the "King of the Greenhorn District," one of the wealthiest mines in Northeast Oregon.

Two men—Al Geiser and F.P. Hayes—made fortunes on the Bonanza in the late 1800's and its output amply rewarded many other owners. By 1904, however, the economics of mining gold has changed, and like the dozens of other mines in the area, the Bonanza was shut down.

Now the "king" may live again.

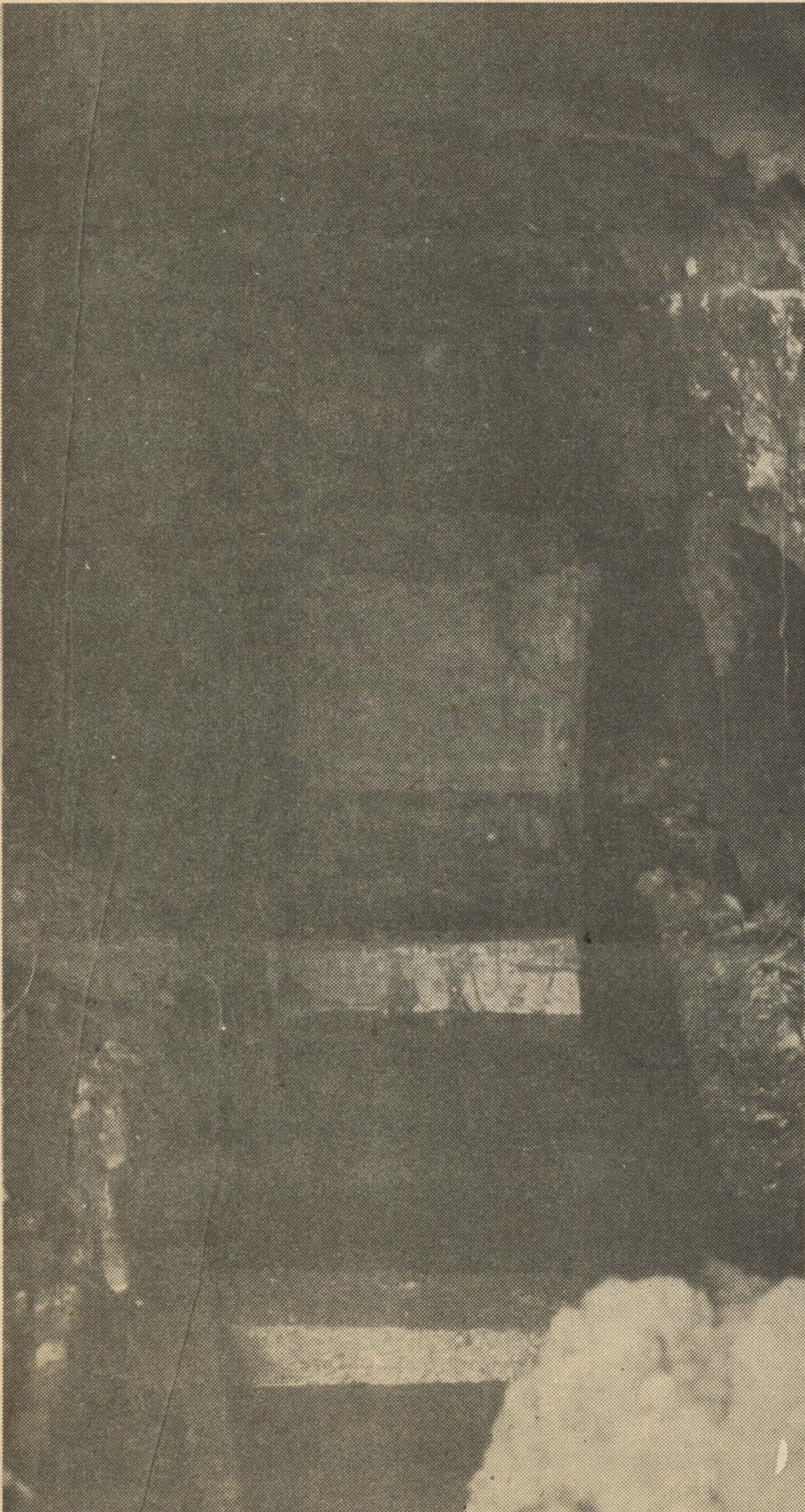
Tapin Copper Mines Limited of Vancouver, Canada, recently acquired an interest in the mine and plans to resume gold production.

Last weekend the company flew about 40 stockholders to Baker to tour the property. In talks with the Democrat-Herald, representatives of the company explained what Tapin plans to do with the Bonanza.

The history of the mine dates to 1877, when a prospector named Jack Haggard, poking around in the mountains southwest of Baker between the present day ghost towns of Whitney and Greenhorn, came across a promising outcropping of rock. Haggard dug into the mountainside and recovered some valuable ore. But he soon realized the job of mining the site was too big for one man. Haggard sold his claim for \$350 in 1879 to the Bonanza Mining Company. Al Geiser bought the mine in 1892 for \$3,000. Six years later Geiser reaped his reward, selling out for \$500,000 to a group of Pittsburg stockholders in the Standard Oil Company.

According to Tapin officials, the company acquired an interest in the property this spring after seven months of negotiations with the present owners, a group of Seattle businessmen. The agreement with the group stipulates that Tapin will reopen the mine and retain 70 per cent of revenues generated, the other 30 per cent going to the owners.

Why does the company think the Bonanza can still be profitable? According to geologist M. Ross Dion, the early mining methods were crude and much ore which is now minable was left underground. In addition, he feels that there is a strong likelihood that there are gold veins in the nearby vicinity which the "old timers" never discovered. And lastly, Dion mentions the surging world gold prices, which



A long-closed portel was reopened recently and an ore cart found standing just as it had been left 70 years ago.

s to reopen Bonanza Mine



The old Bonanza mill, as it looked at the turn of the century. According to the 1903 Evening Herald, "During 1899 and 1900, its 40-stamp mill steadily maintained a

production of \$40,000 per month, one month the output reaching a startling figure of \$102,000."





Where it all started: the original hole sunk by Jack Haggard in 1877. From this beginning sprung a network of more than five miles of tunnel work.

last week placed gold at about \$150 per ounce on the free market. (In the early 1900's gold was selling for about \$20 per ounce).

Jerry Bradley, who is serving as marketing consultant for the company, said that Tapin knows of about 150,000 to 200,000 tons of ore "in place," and suspects that a like amount may yet be found.

Each ton of the ore is estimated to contain from between .2 to .6 ounces of gold. Bradley said he anticipates that the company could process from 150 to 200 tons of ore per day, with a mine life of perhaps six to 10 years.

Roy Saadion, secretary-treasurer of Tapin told the Canadian stockholders that, at today's prices, there may be \$15,000,000 in gold still in the Bonanza.

What is the company's "battle plan" to extract these riches from the mountain through which Bonanza was bored?

The company is presently conducting a \$90,000 program of testing, including geophysical and geochemical tests and diamond-bit drilling. The company calls this a "verification" program, designed to prove the reports and old maps which have come down through the years. According to Dion, the old miners could only process oxidized ore—that is, ore chemically broken down by air and moisture. The old-timers simply passed up vast quantities of sulfide ore. In addition, the company is presently opening up the mine's portals, or lower-level entrances, to drain water which has accumulated in the shafts. (The main shaft is 1,250 feet deep, making it one of the deepest in Oregon at its time.)

The geophysical surveys involve sending electrical impulses through the earth to determine electrical resistance, giving a clue to ore deposits below.

In the next stage of the plan, which may overlap the first operations, Tapin will do more diamond drilling and start bulk ore sampling. Bulk sampling involves processing several hundred pounds of typical Bonanza ore in various types of miniature gold mills, to determine the optimum mill type. The lower level of the mine will be dewatered with pumps.

The last stage of the project calls for actual construction of the new mill, one which can be amortised over a 5- to 7-year period.

"Right now we know we can justify a mill," Dion says. "At present there is not enough gold production to meet the industrial demand in the world."

Dion estimates that the company will spend \$3 million on the mine before full production begins. About \$500,000 will be expended before the



The depression in the center of the picture is the main shaft of the Bonanza, extending down into the mountain 1250 feet, "the deepest shaft in Eastern Oregon," the 1903

Evening Herald said. Remains of the old hoisting plant surround the shaft. At one time the company operating the mine intended to sink the shaft to 2,500 feet.

milling rate is announced.

Dion figures that the Bonanza's main shaft alone is worth from \$125,000 to \$250,000 to the company, based on today's costs.

Roy Saadion, addressing the stockholders, said, "Some persons may wonder; if the mine shut in 1904, it must not have been making money. But gold was \$20 per ounce then; and they were recovering only about .50 per cent of the gold. Even at that, for the last four years of operations, production of gold averaged from .8 to 1 ounce of gold per ton of ore."

Saadion told the stockholders that "a lot of money is going to be required" to retimber much of the five miles of tunneling in the mine, and to purchase new rails for ore carts.

Northeast Oregonians may be curious about the number of Canadian mining companies which are now

actively exploring in this area. The Canadians have an explanation: They are here because of socialism at home.

A conservative, business-oriented government was recently tossed out of office in British Columbia, they explain, being replaced by the left-wing New Democrats. The new party has imposed exorbitant taxes on mining, bringing mineral exploration north of the border to a halt. Canadian capital, then, is looking for opportunity elsewhere, namely in the Yukon, Arizona and Oregon.

As one company official put it, "You can't pay 105 per cent tax on 100 per cent profit."

So, indirectly, a shift in government in Canada is responsible for the reawakened interest in the long-dormant gold mines of this part of Oregon.



R. Ross Dion, geologist with Tapin Copper Mines, the company which plans to reopen the Bonanza.

Inadequate country roads cause inflated food prices

SPRINGFIELD, Ore. (AP) — A study released by The Road Information Program (TRIP) shows that one of the reasons for inflated food prices is inadequate country roads that slow truck traffic.

"Every time city shoppers pass a supermarket checkout stand, they pay in part for slow, costly, farm-to-market trucking," said William Peckham of Springfield, spokesman for TRIP.

The group is a nonprofit educational organization based in Washington, D.C. Sponsored by road builders,

construction equipment manufacturers and other businesses involved in engineering building and financing roads, TRIP researches and distributes information about road transportation issues.

About one-third of Oregon's country roads, or 31,034 miles, are considered intolerable by federal standards and should be improved, Peckham said.

The study included arterial, collector and local roads but not interstates, park, private or primitive roads.

'Scrap Iron' May Return Millions To Umatilla Man

UMATILLA (Special) — What motorists often mistake for a pile of scrap iron along Highway 730 west of here represents the chance to fulfill a dream for a Umatilla man.

Perry Hobson, master mechanic and sometimes gold dredge operator, has plans to construct a dredge which, he hopes, will start this year taking up to \$1 million worth of aggregate out of the Columbia River.

"Actually what I hope to develop is nothing more than a glorified sand and gravel plant with the side business of mining for precious metals," Hobson said.

He claims his operation would be unique to the Columbia River although there is a gravel dredging operation at Reedsport and one on the Ohio River.

He said cement companies in Portland and in foreign

countries would be his best potential customers. One advantage his operation would have over inland gravel suppliers would be the low cost and ease of barge shipment.

He's also counting on sand yielding gold, silver, iron and zirconium and titanium, both Space Age metals.

Hobson has the mining lease rights to about 2,400 acres of land in the Columbia River between Irrigon and Boardman.

"I've been working for five years to get these leases and to satisfy all the various state and federal government agencies," he said.

Before he could get the Corps of Engineers' approval to mine on the river the corps sent the application to 300 agencies on its mailing list to see if any had objections, he said.

"They even sent it to NASA," he added.

Gold? He helps you find it

By GUS AUGUST

Democrat-Herald Writer

8/18/78

There's gold in them thar hills — and Tom Bohmker is willing to teach you how to find it.

Bohmker, who owns and operates No Sweat's Assay Office and Mining Outfitters, 1413 N.W. Ninth St., Corvallis, plans a daylong demonstration and sale Saturday commemorating a "huge \$125,000 gold strike in southern Oregon."

"That big strike was by a part-time prospector this summer, who for obvious reasons, prefers to remain anonymous," Bohmker said.

Some of the nuggets found weighed up to 21.5 troy ounces. A troy ounce weighs just over 31.1 grams; it takes 12 of them to equal one pound.

Prospectors don't have to go that far to find gold. There is some in almost any stream in the Cascade Range, Bohmker said.

"In your area, the Quartzville is a good gold stream, not spectacular, but good. And it's worked by recreational gold seekers from as far away as Vancouver, B.C., and Portland," he added.

In the 1860s, rich veins of gold-bearing quartz were found in the Quartzville area but little is left to indicate it, Bohmker said.

"The ghost town may be gone but the mines remain and some produce gold even today," he added. The Quartzville area is about 30 miles east of Sweet Home.

According to Bohmker, the best area seems to be a few miles downstream from Yellowbottom Campground to Canal Creek.

"Every weekend usually finds gold dredgers busy in the area. One in July found a half-pound of nuggets up to the size of a nickle

at the campground itself in four hours," Bohmker said.

Bohmker, 29, has prospected for gold everywhere from Alaska to South America, usually managing to make a living at it.

"It may be hard work, but I enjoy it," he said.

He recently published a book, "Gold Panner's Guide to the Black Hills," after spending four months in South Dakota looking for gold.

Bohmker caught the gold fever when he was five years old while visiting a gold mine in Nevada with his father.

He learned aircraft technology and took geology courses in college but began working in gold mines when he couldn't find a job in the aircraft industry.

Today, he works at seeking gold about six months of the year. In the winter, when gold fever is cooled by winter snows and rains, he does carpet cleaning and janitorial work, in addition to operating his mining outfitters shop in Corvallis.

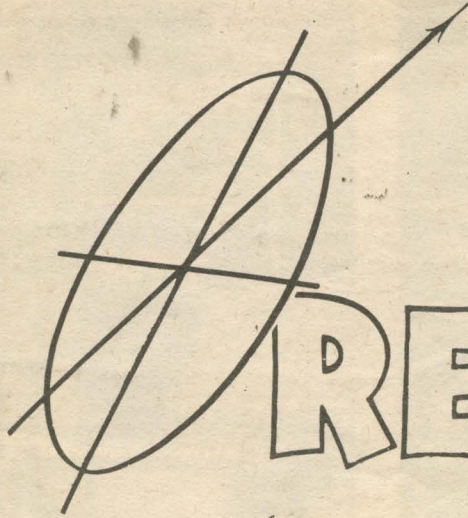
Saturday's "Gold Strike Sale-a-Bration" will include free gold panning lessons, free maps to gold mines at Quartzville and the awarding of gold pans, sluice boxes and prospecting books, Bohmker said.

"We couldn't get some of the bigger nuggets to display but we will have pictures and nugget jewelry sales," he said.

Bohmker, who buys and sells gold, said nuggets found in local area streams often sell for three to 10 times their face value. A one-ounce nugget could go for as much as \$700.

"Most people hoard their gold," Bohmker said.

"Gold panning is done mostly by weekenders, many of whom don't know how to do it. It takes only about 10 minutes to learn the correct way," he said.



OREGON

Train

Supplement to the Baker Democrat H

Jewelry gold mined near Halfway

By DAVID CONN
D-H Staff Writer

While the largest placer mining operation in Baker County, Ore., appears to be producing satisfactory quantities of gold, the mining technique itself is expected to actually improve over time.

Cornucopia Minerals Inc., a Colorado corporation, received state and local approval Aug. 28 to mine 460 acres of land near Halfway Creek, about six miles north of Halfway below the old Cornucopia mine.

Cornucopia Minerals must conduct its operation according to a plan set by the Department of Environmental Quality (DEQ) and the Department of Geology and Minerals. Their basic requirements are to put back in condition suitable for growing plants and trees.

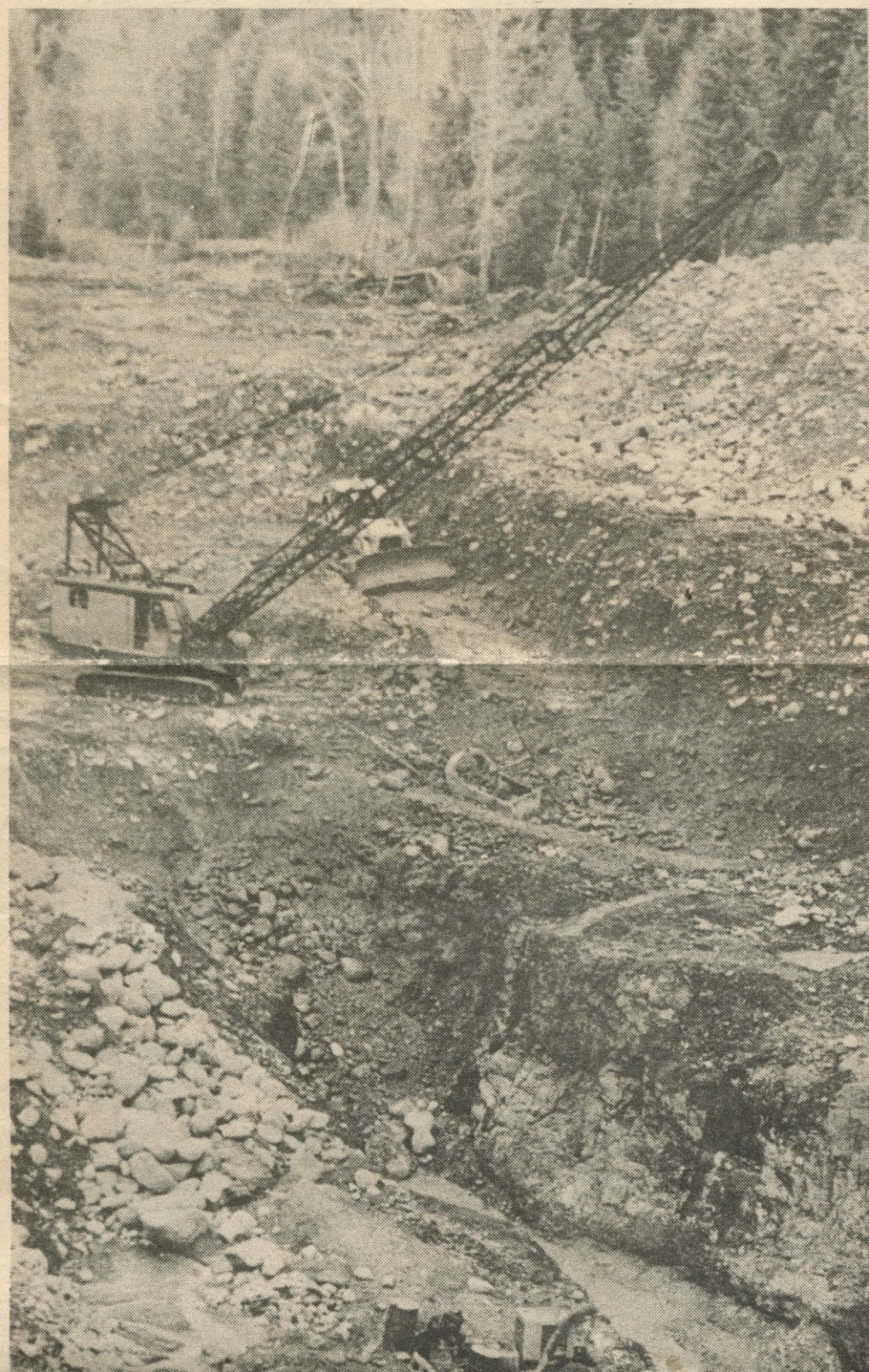
Howard T. Yates, president of Cornucopia Minerals, said the operation will develop an important resource without adding any pollutants to the land, water or air, and will convert the area to an eyeshore to an attractive recreational area.

Yates said his mining operation is reworking an area that has been abandoned. When he entered the area, large rocks and boulders were scattered all over the ground with no trees or vegetation. He said the Oregon Department of Geology has required a reclamation project designed to restore the area.

The reclamation project, scheduled to begin in July, will consist of a series of fish ponds five to 10 acres surface size after the area has been reseeded and planted.

According to an engineer's report, "ditching of all or part of Pine Creek into, through, and out of these ponds should be a major step to the recreational utility of this valley. The valley at present is of no use from the standpoint of recreational fishing."

Cornucopia Minerals is leasing the mineral rights to the area owned by Loleta, Donald and David Steinmetz of Baker County. The owners told the Baker County planning commission they were "hoping for a full time operating mine for the last 40 years."



ails

he Baker Democrat Herald

r Halfway

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David Steinmetz of Beaverton, Ore. The
planning commission that they had been
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ALTHOUGH the Cornucopia Minerals Inc., mining operation requires digging deep into the earth adjacent to Pine Creek, state regulations will require the miners to fill in the hole and cover the area with topsoil so it will again grow trees and grass. A previous mining operation left boulders and gravel atop the ground which prevented anything from growing.



CRUDE GRAVEL is scooped up by the drag line up to three cubic yards at a time. The miners are working in a narrow valley below the old Cornucopia mine about six miles north of Halfway. This area had been previously worked, but gold for jewelry manufacturing is expected to make the operation profitable.

Excavators find gold under Haines streets

HAINES — Residents of this small Northeast Oregon town who have a hankering to pan gold need only to step outside their doorways.

According to Mayor Richard Camp, there could be a bonanza of the yellow metal right under the city's streets and sidewalks.

Workmen installing a new sewer system in Haines, population 360, have been panning their excavations during lunch breaks and have come up with several gold nuggets, according to Camp.

"We knew it was down there," Camp said. "This is dredgebbble ground. The old timers knew there was gold here."

Last month, Camp won his town a measure of statewide notoriety during a dispute with the Environmental Protection Agency over federal requirements to chlorinate the city's water supply.

The mayor sent EPA officials a tongue-in-cheek letter notifying them that he had hooked up an old whiskey still from nearby Rock Creek — an area once overrun by moonshiners — to the town's water system, and said water now has a .4 percent alcohol level.

"Our water has a slight bourbon taste," said Camp after the gold nuggets were uncovered. "We have a new slogan: 'Whiskey in our water and gold in

our streets.' It's a nice place to live.

"If you spade in your garden here, you don't know what you're going to get — carrots or nuggets."

Camp explained that the sewer line excavation, a \$1 million project by Steve Smith Contracting of Vancouver, Wash., is 20 feet deep in some places.

"That's down to the hardpan and that's where the gold is, they tell me. I'm no miner," said Camp.

The first of the nuggets reportedly was the size of a small fingernail, according to Camp. Later two more nuggets of undisclosed size and value were discovered, he said.

"They told me they panned three pans and found two nuggets," he said.

According to Camp, Haines rests on a geologic formation that connects Rock Creek Basin, where dozens of mines were once worked. Because of the rising price of gold, many of the old mines are being reopened, he said.

This area even has a legendary Lost Bucket Mine, a missing bonanza iscent of the Lost Dutchman Mine Southwest, he said.

"If we should turn up an old blue bucket, then we're really going to start looking seriously," Camp quipped.

"It makes sense there's gold here. I don't know how much. We're not going to tear up the whole town to find out — I don't think."

Dr 3/15/80

There's gold in Haines' sewers

HAINES, Ore. (AP) — There is gold in the hills and gulleys of Eastern Oregon, and in the sewers of Haines.

Haines is a town of 370 persons near Baker, which is gold mining country.

The U.S. Environmental Protection Agency said Haines had to replace its 80-year-old wooden water lines and put in a sewer system.

The town got a \$1 million grant to build the sewer system and digging began two days ago, near a state highway (Oregon 7) and under railroad tracks.

"When we pulled out the machine,

there was a little gold nugget in the dirt (on the blades)," said the town's mayor, Dick Camp.

"We weren't surprised, but we'll start panning around there this weekend."

He said the gold was in a hole about 20 feet deep.

Camp said the nugget has not been assayed so he didn't know the value. In any event, it belongs to the town.

Camp, owner of a firm that makes snowmobile accessories and fence-building tools, has been embroiled in a

dispute with the EPA over putting in new water chlorinating equipment.

The town couldn't afford the \$2,000 cost, he said, "so we invented one that costs less than \$20 bucks.

"The EPA wanted us to send all kind of test results on the water. An editor (for the Baker) paper joked that we built it out of an old moonshine still. Of course, we didn't.

"But I sent a letter to the EPA saying the water had a .5 percent bourbon content.

"Now we can say we have whiskey in our water and gold in our sewers."

Anticipated gold rush brings gleam to eyes in

By DICK COCKLE

Correspondent, The Oregonian

BAKER — Despite the economic climate here — which nearly everyone agrees is worse than the January weather — a general air of buoyancy seems to infect the residents of this Northeast Oregon town.

The reason is that many expect a gold rush here next spring.

"I'm not saying Baker is the bonanza, but it's common knowledge that there's a lot of ore in this area," said Bob Mason, one of those who anticipates an epidemic of gold fever.

The price of gold, now yo-yoing between \$585 and more than \$800 an ounce, will bring miners and prospectors here from all over the Pacific Northwest, predicted Mason, a regional labor economist for the Oregon Employment Division in Baker.

"I cannot think of one item that

makes people goggle-eyed more than gold," Mason said. "If you want to see something, wait until you see these ten-derfeet coming out here with their pans. It's going to happen."

Bob Ciesiel, a mining engineer for the federal Bureau of Land Management in Baker, agrees.

Ciesiel's office, which normally averages two or three inquiries a week about mining possibilities, is getting "a half-dozen a day now. There's a tremendous interest," he said.

Most of those inquiries are from "neophytes," he admitted, but a number of major corporations are scouting out the region, too.

"They keep kind of a low profile," he said.

Several mines already are in operation. The Iron Dike Mine near Homestead, owned by Silver King Mines, a subsidiary of Texas Gulf Corp., is lode mining copper, silver and gold. Ciesiel

said he understands it is gearing up to employ 60-75 persons.

Gold and silver are being mined in the Cougar Independence Mine near Granite, and 10-12 persons are working a large "placer" operation near Unity in Mormon Basin, washing gold from the tailings of an old mine.

And three separate operations are getting under way in the Virtue Flat area to extract gold from tailings left over from the turn-of-the-century mining operation, he said.

In December 1977, 40 persons were employed as miners in Baker County. There are now 160, according to Ciesiel. Even he isn't immune to the lure of the yellow metal, he admitted.

"When I see gold in a sluice box, the hair on the back of my head kind of raises. It's gold fever," he said.

A gold rush couldn't come at a better time for Baker County, according to

Mason.

He expects the unemployment rate here to touch 16 percent to 17 percent this month. Some 750 persons in the county collect unemployment checks, almost 200 more than ever before, he said.

Agriculture and wood products form the backbone of Baker County's economy, and the region has been affected "as badly as probably anywhere in Eastern Oregon by the housing market," he explained.

One of the county's biggest employers, Ellingson Timber Co. veneer plant, laid off 30-40 workers last November. The Ellingson Lumber Co., which normally has a roster of more than 400 workers, employs 310-320, according to company officials.

If large-scale mining has a rebirth here, Mason believes many out-of-work loggers and mill hands will get off the

unemployment rolls by taking jobs as miners. There should be a lot of opportunity for heavy equipment operators, he said.

According to Ciesiel, anyone wanting to file a claim on public domain land administered by the Forest Service or Bureau of Land Management will be able to do so — providing someone else hasn't gotten there first.

"There's no conflict as far as the government goes. I'm sure there are going to be conflicts among (miners), people locating on top of people," he said.

"There are quite a few people in the known areas now, that are living in the gulches and have these claims," he said.

"An awful lot of the placer ground has been mined by the early timers," Ciesiel warned. "The good ground has been taken up for years before the price of gold started going up."

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Gold was discovered in Baker Coun-

ty in 1862 and mining reached its zenith here in the late 1800s, according to Ciesiel. Most of the miners were gone by World War II.

It is still possible to come across gold, he said. Two weeks ago, a 1½-ounce nugget was found on Conner Creek.

"It was somebody who was operating there quite a while. It came through a sluice box," he said. "That ground has been gone over I don't know how many times and out pops a 1½-ounce nugget, which is pretty good pickings."

"We're just hoping (a gold rush) will be beneficial to us all," said Donna Brown, manager of the Baker County Chamber of Commerce.

"Times are a little tough now, and we're looking for solutions, and this could be a very easy one. . . . I've got my fingers crossed. I've never lived in a gold rush before."

IN THE PACIFIC NORTHWEST

Dam gold totals \$2.5 million

JACKSONVILLE — The amount of gold recovered during the construction of the Applegate Dam has risen to \$2.5 million, according to an U.S. Army Corps of Engineers official.

Albert Zbytovsky, contract administration chief for the Applegate Dam project, said Peter Kiewit & Sons Co., Omaha, Neb., the principle contractor for the dam, has extracted more than \$2.5 million in gold at the site 20 miles southwest of here since beginning construction on the dam in mid-1978.

"The U.S. Bureau of Reclamation has on occasion made arrangements with contractors to recover gold, but to my knowledge, this is the first time the corps ever has done this," Zbytovsky said.

He said most corps dam projects in recent years, like Lost Creek on the Rogue River and Cougar and Blue River on the McKenzie River system, have been in gold mining country, so extrac-

tion wasn't a corps concern. "The Applegate seems to be a first in that regard," Zbytovsky said.

The corps has received about \$770,000 out of Kiewit's \$2.5 million total based on a contract the corps arranged with the company. The contract called for the corps to receive 15 percent of the first \$800,000 worth of gold extracted, 20 percent of the next \$400,000 and 25 percent of the total beyond that, Zbytovsky said.

A second company, M.C. Lininger and Sons, Medford, has extracted an estimated \$50,000, said company spokesman Rod Miller. He said a final report stating the precise amount of gold extracted is forthcoming from Sam Toni Co., Fresno, Calif., a mineral refinery firm. Zbytovsky said the refinery report is expected "at any time."

The corps completed construction of the \$95 million project in mid-September, a full year ahead of schedule. The dam will regulate the flow of the Ap-

plegate River the principal southern tributary to the Rogue River. The corp completed Lost Creek Dam in 1978 and a proposed third dam on the Rogue, Elk Creek, hasn't received final authorization.

Zbytovsky said construction crews still have wrap-up work to do, and he predicted, "We'll be out of here by March." Work remains to be done on the intake tower, spillway, and the corps will finish construction of eight picnic areas and parks along the five-mile-long reservoir that stretches to within a few hundred yards of the California border.

The project's main recreational facility, Grouse Creek Park, already is complete, and construction will begin soon on the Watkins and Cougar picnic areas. Construction dates for the other picnic areas and parks, along with the 22-mile trail network, haven't been set yet, he said.

THE SUNDAY OREGONIAN

11 / 9 / 80

HOMESTAKE MINING COMPANY

100 BUSH STREET

SAN FRANCISCO 4, CALIFORNIA

January 29, 1965

Mr. John R. Ross
Editor
American Gold News
P.O. Box 427
San Andreas, California

Dear Mr. Ross:

I have recently been advised that the Senate Committee on Banking and Currency starts hearings February 2nd on the administration's proposal to relax the requirement of 25% gold backing for Federal Reserve Bank Notes and Deposits. The Administration bill was, I believe, introduced on January 28th. Opponents to the measure may testify beginning February 9th.

I am sure you agree that all of us interested in gold mining should oppose this effort to weaken the position of gold in our monetary system and anything you could do to bring the matter to the attention of your readers would be very helpful. As many as can be reached should be asked to write to the Chairman of the Senate Committee on Currency and Banking (Senate office Building, Washington) and either request time to testify or to submit a written statement.

With best wishes,

Sincerely,

Donald H. McLaughlin
Donald H. McLaughlin
Chairman of the Board

DHM/slh

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FEB 5 1965

STATE DEPT. OF GEOLOGY
& MINERAL INDS.



AMERICAN GOLD ASSOCIATION, INC.

P. O. Box 427, San Andreas, California
PHONE SK 4-3613

February 3, 1965

Dear Fellow Citizen:

The copy of the enclosed letter from Donald H. McLaughlin, Chairman of the Board of the Homestake Mining Company, is self-explanatory.

We urgently request that you write to Senator A. W. Robertson, Chairman of the Senate Committee on Currency and Banking, Senate Office Building, Washington, D. C., vigorously protesting the proposed removal of the 25% gold backing for the Federal Reserve Bank Notes and Deposits.

As you will note from the enclosed letter the time is very short and we urgently request that you write TODAY and also request your friends to do likewise.

With kindest personal regards

I remain Sincerely,

Chairman, American Gold Association

The Bookshelf

Gold—Faithful Bulwark of Money

Gold as a monetary standard seems to be really getting tarnished.

For one thing, the Administration's bill now before Congress proposes to drop the 25% gold cover for the U.S. dollar. For another, the insistence by Professor Robert Triffin of Yale that gold is inadequate in terms of quantity and elasticity and that therefore a new international central banking arrangement is necessary has led to discussion of "the Triffin plan" in world financial circles.

Against this background comes "The Triumph of Gold" by Charles Rist, the late distinguished French economist, translated from the French and with a 43-page introduction by Philip Cortney, a director of the International Chamber of Commerce and head of the Coty cosmetic house. The thesis of the book is evident in its title: Gold can be downed, but not for long. In the millenia-long history of gold, inflationary-minded rulers have, on occasion indeed, snubbed, shunted aside, downgraded, and even outlawed gold; yet the metal has always, sooner or later, returned triumphantly as a stable monetary standard and final arbiter of value. Professor Rist and Mr. Cortney present the case for a return to a fully convertible gold standard now. The case has rarely been presented more persuasively.

Critics of gold claim it is too limited in supply to do much good. Many economists and bankers on both sides of the Atlantic hold the view, expressed again recently by Professor Triffin, that the sharp fall in commodity prices after 1929 and particularly after 1931 was due to a "shortage of gold." According to the late Dr. Rist, and Mr. Cortney shares the opinion, the fault was not in gold but in the mismanagement of the gold standard after World War I. The governments of the United States and Great Britain failed to recognize that the huge paper money inflation during the war had made impossible the maintenance of the pre-war price relationship between gold and paper currencies. So when gold convertibility was reinstated it was at the old 1914 price and not at a readjusted price. The result was that production of gold was hampered, international liquidity in gold became inadequate and forced deflation followed.

Dr. Rist and Mr. Cortney see the post-World War I error repeated in the post-World War II period. The old pre-war price of \$35 per ounce of gold is perpetuated, despite the huge paper inflation and soaring prices since 1939. And again the "shortage of gold" is widely alluded to. To this line, gold's critics have added a new and highly effective argument, especially insofar as public opinion is concerned. For when pressed on a higher price for gold, they say that this would benefit the Russians, who are big gold producers. Mr. Cortney concedes this, but says the Russians are high-cost gold producers and, more importantly, a modernized, fully convertible gold standard can save us from possibly ruinous inflation, a fate the Russians would enjoy much more.

For the big talking point of gold is its dampening effect on inflation. Bank credit can be stretched and stretched in a one-way elasticity; government debts can be permanently monetized in paper inflation; printing presses can be rolled ad infinitum; currency can be worth less than the paper it is printed on. But not so easily with convertible gold.

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Gold stymies inflationists. To reproduce it, it must be extracted from a begrudging earth. And while paper currency satisfies two of the requirements for money—medium of exchange and standard of value—paper can never match the record of gold on the third requirement: Store of value.

This is why the people of France hoard gold, though less so since the sound monetary policies under DeGaulle. The Frenchman remembers the story of the rout of French paper currency under John Law during the Mississippi Bubble, the debacle of the assignats during the French Revolution, and he has seen and endured the shrinkage of more than 99% of the purchasing power of the franc from World War I to DeGaulle. So some gold hidden in a pot buried by the tree stump in the back yard has become a form of French inflation insurance.

* * *

Rather surprisingly, the book ends with the appended full remarks—29 pages of them—by Allan Sproul, then president of the Federal Reserve Bank of New York, at the 75th annual convention of the American Bankers Association in 1949 at San Francisco. It being the centennial of the discovery of gold in California, Mr. Sproul gave the case against gold convertibility.

So here you have it, the case for and against gold. Meanwhile, the patsy of inflation—the universal person described as Everyman in the medieval morality plays—can only ask: With gold or without, how long this inflation, how long?

—WILLIAM H. PETERSON

The Triumph of Gold. By Charles Rist. Translated from the French and with an introduction by Philip Cortney. Philosophical Library. 258 pages. \$

International "Money"

Gold Standard Provided a Solid Basis for Vigorous World Trade

By Henry Hazlitt

Mr. Hazlitt has been writing on economic subjects for many years. His books include, "Economics in One Lesson" and "The Failure of the 'New Economics'," the latter a study of Keynesian principles.

Since England and the United States went off the gold standard in 1931 and 1933 respectively, and especially since the outbreak of World War II in 1939, nearly every country in the world has been suffering from inflation and chronic instability. World monetary reconstruction has become not only essential but urgent.

But the word "world" here is equivocal. It could imply that we are talking about a completely unified monetary system for the whole world. To talk about such a unified system, however, is utopian. Such a system would be neither possible nor desirable unless the whole world were under a single government.

What we need is something quite different. We need a sound monetary system within each nation. What is desired is national systems of such a nature that they coordinate with each other. In this sense we can have, in effect, a "world" monetary system—and certainly an "international" monetary system. But it would be "international" because national systems were voluntarily coordinated, not because there was a central international authority prescribing or dictating monetary policy to each national government.

Voluntary System

Such a voluntary coordinated system was the gold standard, as it operated in the main in the United States and Canada, in Great Britain, and in the leading nations of Europe at the end of the Nineteenth Century and prior to 1914. Within each nation the gold standard was a national standard. But it was also the "international" standard. It was not "international" because some formal international high authority, commission, treaty or agreement controlled or enforced it.

Yet it was international because private banks, central banks or national governments met their obligations and kept their pledges. The American dollar was legally convertible, on demand, to any amount, by anybody, official or unofficial, citizen or foreigner, white or colored, into 23.22 grains of pure gold. The British pound was legally and just as fully convertible into 4.866 times as much gold. Therefore the American dollar was convertible into pounds sterling at \$4.866.

And so around the circle. The world's leading currencies were convertible into each other at all times at known ratios. They were traded on the world's markets at those ratios—or rather, the quotations could vary from these ratios by no more than the amount that it actually cost to ship gold between one country and another.

True, this system had some defects. But before we consider them let us recognize some of its tremendous merits. The gold standard gave to the world what was in effect, though not in form, an international money. Gold, and not the British pound or the American dollar, was the ultimate money in which the trade of the world was conducted, and in which the international balance of payments was settled. It was the money of account, the standard of value, the common medium of exchange.

While the gold standard in its full form lasted, it provided the world with a stability of prices that it has certainly not enjoyed since. Even Lord Keynes, who is still the chief inspiration of today's denigrators of gold, and who applied to it the term—a

that adhered to it into what was in effect, though not in name, a single currency. It maintained relative stability of prices over long periods because the value of gold, like the value of other commodities, was determined by its quantity, and its quantity was determined in turn by nature and by its cost of production.

The old gold standard was not a perfect system. It had two main defects, one inherent, the other imposed upon it. The inherent defect was that the value of a given quantity of gold, and therefore the value of the dollar or the pound or the franc, was affected by the accidents of gold mining—that is to say by the accidents of gold discovery and new technological processes for mining and refining gold. The other defect was imposed by the changing amount of paper claims created against the gold supply.

The inherent defect was, in fact, a minor one. If new gold discoveries kept approximate pace with the growth of production of other goods, prices in terms of gold tended to remain relatively stable. In periods when gold discoveries outpaced average gains in output of other goods, there might be a mild "gold inflation." Nobody seemed to mind this very much. Many economists thought it provided a stimulus to production. It never led to a violent or a panic inflation. It was not followed by a deflation. There was simply a slow and moderate rise of prices.

In periods when other production outpaced new gold discoveries, there would tend to be, if things were allowed to follow their natural course, a mild decline of prices over a longish period. This was never severe enough in itself to do any harm to business. If prices and wages were flexible, money costs of production would tend to decline at the same pace as prices (usually because of productivity gains) leaving percentage profit margins unchanged. The bugaboo of a "world gold shortage" has no real basis.

Credit Policies

It was the second, non-inherent defect of the old gold standard that was of major importance. This was the result of the credit policies based on gold. The fractional gold reserve system allowed a far larger volume of credit to be issued than the amount of new gold supply. Six or 10 dollars or more of credit might be ultimately issued against each dollar of gold.

In the United States today, there are \$8 of note and bank deposit currency for every dollar of gold, if only demand deposits are counted, and \$15 if all time deposits are also counted. When there was a crisis of confidence, even under the old gold standard, a large percentage of the deposit currency supply might be wiped out over a few months. So the fractional reserve system, as commonly administered, led to violent oscillations in the money supply, intensifying both booms and slumps.

But it would not take too much ingenuity to eliminate this "fluctuation-multiplier" result brought about by the fractional percentage reserve system and other practices of central banks. The limits of this article do

Gold has other merits as a standard of value and medium of exchange, as compared with other commodities, but a thousand textbooks have made these familiar. Its great merit as compared with paper money, is precisely the limitation of supply that nature has put upon it.

And there is no substitute for this merit. It is an illusion, resting on political naivete, that as good or a better result can be achieved by passing a law, or even a Constitutional amendment, that the paper money supply must remain forever fixed, or can increase by only 2%, or 3%, or 4%, a year. In the first difficulty or minor depression there would be a chorus of demands for "temporary suspension" of the law, or for upward revision of the permitted currency increase to 5%, or 7%, or 10%. Paper money everywhere, soon or late, leads to major and sometimes catastrophic inflation.

Fluctuating Paper

This is only one of the disadvantages of paper money. The value of a paper monetary unit will fluctuate, even without any change in total supply, with every rumor of foreign difficulties, or of instability of the government, or even of instability of governmental policy.

As for international controls or formal agreements, none is either necessary or desirable, except perhaps when initial parities are adopted. It would be desirable for the United States to fix the gold value of the dollar at some round figure in grams of gold—that is to say, in terms of the metric system.

It would be desirable for other countries to fix the gold value of their own currency units in some round figure in grams of gold—preferably in some round multiple or fraction of the gold value of the dollar. This would not require a treaty, a convention or an international conference at Geneva or Rome. Countries would not have to act simultaneously; they could simply act successively, when ready. They could fix currency values as simple multiples of each other, not merely for the convenience of other nations, but for the greatest convenience of their own business firms and citizens. Such round multiples would immensely facilitate international trade, investment, tourism and calculation.

As for the rest, each country would be responsible for the maintenance, the soundness and convertibility of its own currency unit. There would not be, and there should not be, any international institution to run to give them "credit rights" or "drawing rights" or any other automatic form of help.

If the "disequilibrium" of any country's economy or currency were only "minor" or "temporary," as that country's politicians would of course contend, it could easily get short private loans or credits from other countries by raising its interest rates. But if the disequilibrium were major or long-term or structural, then it should not get official loans or credits from other countries or from any international institution, until it abandons the policies that led to the "disequilibrium"—or, to use a blunter term, to the distrust.

Ideology Needed

There is no need for any intergovernmental International Bank—though such an institution would have a legitimate and useful function if sold to private investors. There

Use the need a sound monetary system within each nation. What is desired is national systems of such a nature that they coordinate with each other. In this sense we can have, in effect, a "world" monetary system—and certainly an "international" monetary system. But it would be "international" because national systems were voluntarily coordinated, not because there was a central international authority prescribing or dictating monetary policy to each national government.

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While the gold standard in its full form lasted, it provided the world with a stability of prices that it has certainly not enjoyed since. Even Lord Keynes, who is still the chief inspiration of today's denigrators of gold, and who applied to it the term—a "barbarous relic"—that they are now so fond of repeating, paid tribute to the stability of prices that existed under it. On page 14 of his book on "Monetary Reform," in 1924, he wrote:

Stable Prices

"The remarkable feature of this long period (about 1826 to 1915) was the relative stability of the price level. Approximately the same level of price ruled in or about the years 1826, 1841, 1855, 1862, 1867, 1871 and 1915. Prices were also level in the years 1844, 1881 and 1914. If we call the index number of these latter years 100, we find that, for the period of close on a century from 1826 to the outbreak of the war, the maximum fluctuation in either direction was 30 points, the index number never rising above 130 and never falling below 70. No wonder that we came to believe in the stability of money contracts over a long period. The metal *gold* might not possess all the theoretical advantages of an artificially regulated standard, but it could not be tampered with and had proved reliable in practice." (His italics.)

Thus the gold standard tied the countries

system. It had two main defects, one inherent, the other imposed upon it. The inherent defect was that the value of a given quantity of gold, and therefore the value of the dollar or the pound or the franc, was affected by the accidents of gold mining—that is to say by the accidents of gold discovery and new technological processes for mining and refining gold. The other defect was imposed by the changing amount of paper claims created against the gold supply.

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But it would not take too much ingenuity to eliminate this "fluctuation-multiplier" result brought about by the fractional percentage reserve system and other practices of central banks. The limits of this article do not permit detailed discussion of the specific measures that this might involve. It is enough to point out that one of them could be merely to allow no further expansion in the money supply of any country unless to reflect a dollar-for-dollar increase in new gold reserves.

But less stringent restrictions (designed to permit a seasonal but not cyclical or secular "elasticity" in the money supply) might be possible—say by confining increases in net loans and investments, beyond an initial amount, to commercial paper of not more than nine months' maturity. The problem has been that our "elastic" currency has turned out to have the "elasticity" of taffy, not the elasticity of a rubber band or a steel spring which tends to return to its original size when the tension is removed.

The outstanding merit of the old gold standard was a negative one. The supply of gold, like the supply of other commodities, is determined by nature, labor and costs of production. It cannot, like the supply of paper money, be increased indefinitely, to any amount, by the mere whim or political exigencies of politicians and bureaucrats.

upward revision of the permitted currency increase to 5%, or 7%, or 10%. Paper money everywhere, soon or late, leads to major and sometimes catastrophic inflation.

Fluctuating Paper

This is only one of the disadvantages of paper money. The value of a paper monetary unit will fluctuate, even without any change in total supply, with every rumor of foreign difficulties, or of instability of the government, or even of instability of governmental policy.

As for international controls or formal agreements, none is either necessary or desirable, except perhaps when initial parities are adopted. It would be desirable for the United States to fix the gold value of the dollar at some round figure in grams of gold—that is to say, in terms of the metric system.

It would be desirable for other countries to fix the gold value of their own currency units in some round figure in grams of gold—preferably in some round multiple or fraction of the gold value of the dollar. This would not require a treaty, a convention or an international conference at Geneva or Rome. Countries would not have to act simultaneously; they could simply act successively, when ready. They could fix currency values as simple multiples of each other, not merely for the convenience of other nations, but for the greatest convenience of their own business firms and citizens. Such round multiples would immensely facilitate international trade, investment, tourism and calculation.

As for the rest, each country would be responsible for the maintenance, the soundness and convertibility of its own currency unit. There would not be, and there should not be, any international institution to run to give them "credit rights" or "drawing rights" or any other automatic form of help.

If the "disequilibrium" of any country's economy or currency were only "minor" or "temporary," as that country's politicians would of course contend, it could easily get short private loans or credits from other countries by raising its interest rates. But if the disequilibrium were major or long-term or structural, then it should not get official loans or credits from other countries or from any international institution, until it abandons the policies that led to the "disequilibrium"—or, to use a blunter term, to the distrust.

Ideology Needed

There is no need for any intergovernmental International Bank—though such an institution would have a legitimate and useful function if sold to private investors. There is no need for an International Monetary Fund, even in private hands—though if private investors could be found who wanted to invest in such an institution, they should be free to do so. International (or, to speak more precisely, intergovernmental) institutions are no more necessary in the monetary field than in the field of foreign trade.

What is necessary for freedom of trade is not a set of international bureaucrats meeting in some lovely spa and passing resolutions, but an ideology which leads each nation to recognize that low tariffs and freedom of trade are in the best interests of its own consumers and its own producers. What is necessary for sound money and free international convertibility is merely a recognition in each nation that sound money, free markets, and full convertibility at fixed rates are in the best interests of its own trade and its own long-term prosperity and "economic growth."

If such recognition exists, no elaborate international machinery is necessary. If it does not exist, international machinery designed to enforce it is futile where it is not pernicious.



STATE DEPARTMENT OF GEOLOGY
AND MINERAL INDUSTRIES

BAKER FIELD OFFICE
2033 FIRST STREET
BAKER, OREGON

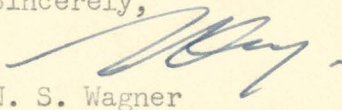
January 9, 1956

Mr. Hollis M. Dole
1069 State Office Building
Portland 1, Oregon

Dear Hollis:

Attached is a tabulation of the gold and silver, etc., production for Baker County which Ralph prepared for me several years ago from U. S. B. M. yearbook records. Will you please have someone bring this from 1943 to date as nearly as the records permit following the same pattern of tabulation as employed on the enclosed. Reasonably soon too, if possible, as I have need of the figures for the Sumpter Valley dredge history on which I am now working.

Sincerely,



N. S. Wagner

NSW:gl
enc.

P. S. Please be sure to have the attached returned to me.

Rock

RECEIVED
JAN 10 1956

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

COPY

RECEIVED
JAN 13 1956
STATE DEPT. OF GEOLOGY
& MINERAL INDS.

January 12, 1956

Mr. Hollis M. Dole
1069 State Office Building
Portland 1, Oregon

Dear Hollis:

Now that the department has, for the first time in its history, the precise dates of the various periods of large scale Sumpter Valley dredging, it is possible to sit down with the placer production records of Baker County and make some rather significant calculations.

The detailed production records by counties began in 1902. Thus we can get an average for a ten year period of placer production prior to the time there was any dredging at all in the Sumpter Valley. Likewise, there is an eleven year break in the bucketline operations from 1923 to 1934, which again serves to provide a yardstick by means of which the increases due to dredging can be measured.

All told, I have made some very interesting comparisons. In fact, my free time for the last couple of days has been devoted to playing around with these figures. I even had my figures for all operation up to 1943 all tabulated and organized in final form for incorporation in my notes when some inner voice spoke up and compelled me to question the accuracy of my basic production data.

Check it I did, and unfortunately enough, my findings are that whoever prepared these production tables made no corrections for the various different prices which prevailed for gold and silver between 1902 and 1943. As a result, the dollar values given are low for all years prior to the time that gold and silver were pegged at their present prices, and the final dollar totals are likewise low throughout.

The situation could be very amusing indeed when one considers how many times the local Chamber of Commerce has quoted from these tables, but the situation isn't at all funny for the reason that we too have done just exactly the same thing. For my part, I have always regarded these tables as the last word in reliability for the reason that the compilation is credited to Charles White Merrill, Metal Economics Division, Bureau of Mines and is set up in a table form entirely comparable to that used by the Bureau in the Minerals Yearbooks. I am also very confident, Hollis, that Fay regarded them in the same manner and that he too has quoted from them as I know he was very pleased to get copies of the tables. You had best therefore make sure that any copies in your

Mr. Hollis M. Dole
January 12, 1956
Page two

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To get the records straight, these tables, one for Baker County and one for Grant County, were given to us by the local Chamber of Commerce in the summer of 1945, at which time we were doing some special work for the Chamber on Baker County resources. What Ralph prepared at that time, and in conjunction with that same project, was the production for the state as a whole. He had no part whatsoever in the preparation of the subject of County tables and please get this straight as I erroneously credited him with having compiled the tables in my letter to you of the 9th in which I otherwise requested having the record brought up to date for all post war production. That was just hasty writing on my part. In fact, I had forgotten at the time that the tables had originated from the Chamber and it was only after discovery of the errors that I looked into the situation and ascertained the true facts.

I have checked with the Chamber and they at first seemed inclined to feel that they had secured these lists direct from the U. S. B. M. which is probably what they told us back in 1945. Anyway, with due course of time they also concluded that maybe they had copied them from some mining magazine which they got then, so all in all, the originality of the tables is now obscure, although it is obvious that Minerals Yearbook records were used in their compilation as the fine ounce figures agree with the Yearbook data for such Yearbooks as I have available for comparison. Reconstructing the picture, it would seem that what happened is that some flunkey on some Mining Journal prepared the tables from Minerals Yearbook records, and it was his idea for adding the totals, which he did without thinking to readjust the dollar values for the years when the gold and silver prices were lower than they were in 1943.

To effect a correction to these records it would seem best to check the fine ounces shown on the tables against the Minerals Yearbook records. If these are correct, we can then merely multiply the fine ounces of gold and silver for each year by the present prices and end up with accurate and usable tables.

This should be done as we have quite a few calls for the data covered by these tables, and it is the sort of data which the public expects we should have available as a matter of course. Besides, I need the dope on the placer portion of Baker County for the present placer history report.

As the job of correcting these records will entail reference to Yearbooks which I don't have, and also use of calculating machines, I am therefore enclosing additional copies of the tables for both Baker and Grant Counties. There is no particular hurry for the corrected tables in their final form for both counties, but if I am to get the Sumpter Dredging report out before the Spring field

Mr. Hollis M. Dole
January 12, 1956
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c. c. to Mr. Ralph Mason

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STATE DEPARTMENT OF GEOLOGY
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

Albany Office
of Mineral Resources

P. O. BOX 492
ALBANY, OREGON

File No: AOMR 2010 D

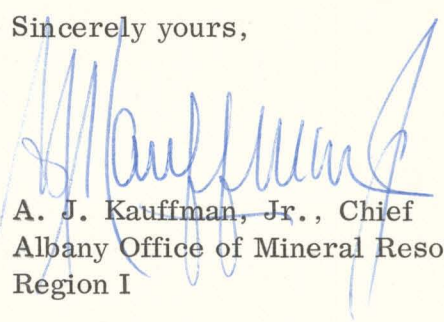
April 26, 1963

Mr. Ralph S. Mason
Mining Engineer
Oregon State Department of
Geology and Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Mr. Mason:

With reference to our letter of March 7, we have enclosed gold and silver production tables for Josephine, Douglas, Coos, and Curry Counties. If the figures marked conceal are to be published separately, the confidentiality will have to be cleared with each company requesting concealment.

Sincerely yours,


A. J. Kauffman, Jr., Chief
Albany Office of Mineral Resources
Region I

Attachments

90,300
20
1810,000



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

Albany Office
of Mineral Resources

P. O. BOX 492
ALBANY, OREGON

File No: AOMR 2010 D

March 7, 1963

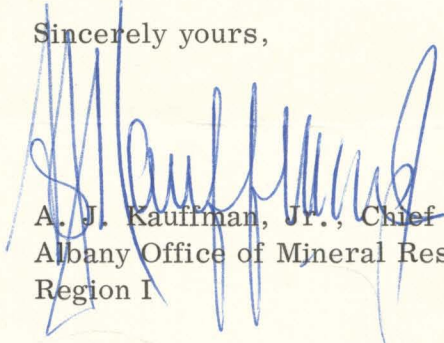
Mr. Ralph S. Mason
Mining Engineer
Oregon State Department of Geology
and Mineral Industries
1069 State Office Building
Portland 1, Oregon

Dear Mr. Mason:

This is to acknowledge receipt of your letter dated February 28, concerning past gold and silver production from Jackson, Josephine, Douglas, Coos, and Curry Counties.

Due to the work involved in tabulating this data there will be a delay before the production record for all counties, except Jackson, can be completed for you. The Jackson County production record is attached. We will forward the additional information as soon as possible.

Sincerely yours,


A. J. Kauffman, Jr., Chief
Albany Office of Mineral Resources
Region I

Attachment

Jackson
P2P-51

*

	6, 5	6	5.0	0	
	4, 9	6	1.0	0	
	4, 1	2	1.0	0	
	2, 1	4	8.0	0	
	6, 3	4	1.0	0	
	5, 1	8	0.0	0	
	2, 5	1	7.0	0	
	3, 4	1	5.0	0	
	1, 8	3	5.0	0	
	1, 2	4	5.0	0	
	2, 0	9	3.0	0	
	1, 0	6	5.0	0	
	1, 6	3	3.0	0	
	1, 2	1	6.0	0	
	1, 7	9	1.0	0	
		8	4	5.0	0
	1, 2	7	3.0	0	
	1, 7	5	5.0	0	
		4	2	4.0	0
	1, 5	5	3.0	0	
	1, 0	4	9.0	0	
		8	3	9.0	0
		5	2	6.0	0
		4	0	1.0	0
		5	8	2.0	0
		5	4	3.0	0
	2, 8	3	1.0	0	
	8, 0	0	9.0	0	
	4, 2	8	2.0	0	
	3, 7	1	5.0	0	
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	4, 5	6	3.0	0	
8	6, 3	3	8.0	0	S
	6, 7	2	8.0	0	
	5, 7	6	6.0	0	
	2, 7	0	7.0	0	
	4, 7	9	9.0	0	
	7, 2	3	6.0	0	
	8, 6	1	6.0	0	
1	7, 0	4	0.0	0	
1	9, 9	0	1.0	0	
1	3, 0	2	0.0	0	
		5	5.0	0	
		4	8.0	0	
		1	4	6.0	0
		5	1	8.0	0
	1, 7	8	1.0	0	
		3	0	4.0	0
		1	5	7.0	0
		2	8	8.0	0
			7	8.0	0
			4	0.0	0
		1	2	2.0	0
		1	0	4.0	0
			5	6.0	0
		1	0	4.0	0
			6	0.0	0
			6	9.0	0
			5	1.0	0
1959	1	7	6, 1	3	2.0 0 S

1959

S

Production of gold and silver in Jackson County,
Oregon, lode and placer mines, 1902 - 1961

Year	<u>Placer Mines</u>		Tons	<u>Lode Mines</u>	
	Gold	Silver		Gold	Silver
1902	6,565 ✓	56	2,200	1,670 ✓	- ✓ 8,235
1903	4,961 ✓	-	1,719	988 ✓	- ✓ 5,950
1904	4,121 ✓	36	1,310	1,129 ✓	120 ✓ 5,250
1905	2,148 ✓	356	5,919	2,210 ✓	541 ✓ 4,350
1906	6,341 ✓	1,118	9,644	2,296 ✓	2,051 ✓ 8,640
1907	5,180 ✓	944	14,923	3,501 ✓	2,324 ✓ 8,680
1908	2,517 ✓	769	3,293	720 ✓	585 ✓ 3,240
1909	3,415 ✓	927	5,329	1,432 ✓	1,011 ✓ 4,850
1910	1,835 ✓	298	63	220 ✓	780 ✓ 2,050
1911	1,245 ✓	293	8,980	1,006 ✓	464 ✓ 2,250
1912	2,093 ✓	361	3,375	953 ✓	1,088 ✓ 3,050
1913	1,065 ✓	182	922	721 ✓	975 ✓ 1,790
1914	1,633 ✓	231	265	278 ✓	40 ✓ 1,910
1915	1,216 ✓	221	315	244 ✓	546 ✓ 1,460
1916	1,791 ✓	220	2,306	313 ✓	21 ✓ 2,100
1917	845 ✓	87	20	17 ✓	2 ✓ 860
1918	1,273 ✓	179	1,824	1,321 ✓	438 ✓ 2,590
1919	1,755 ✓	239	86	41 ✓	164 ✓ 1,800
1920	424 ✓	72	13	508 ✓	1 ✓ 930
1921	1,553 ✓	157	451	411 ✓	43 ✓ 1,960
1922	1,049 ✓	133	44	187 ✓	44 ✓ 1,240
1923	839 ✓	125	734	387 ✓	803 ✓ 1,220
1924	526 ✓	100	98	163 ✓	32 ✓ 690
1925	401 ✓	58	809	815 ✓	350 ✓ 1,220
1926	582 ✓	99	161	105 ✓	24 ✓ 690
1927	543 ✓	71	160	124 ✓	21 ✓ 670
1928	2,831 ✓	412	88	67 ✓	206 ✓ 2,900
1929	8,009 ✓	1,282	173	69 ✓	12 ✓ 8,080
1930	4,282 ✓	662	91	248 ✓	60 ✓ 4,530
1931	3,715 ✓	520	466	932 ✓	386 ✓ 4,650
1932	7,022 ✓	982	1,361	721 ✓	411 ✓ 7,740
1933	4,563 ✓	618	2,581	702 ✓	1,306 ✓ 5,260 110,8
1934	6,728 ✓	1,124	12,789	1,527 ✓	2,172 ✓ 8,250
1935	5,766 ✓	586	25,358	3,782 ✓	5,745 ✓ 9,550
1936	2,707 ✓	399	17,222	2,601 ✓	3,317 ✓ 5,810
1937	4,799 ✓	957	2,301	881 ✓	533 ✓ 5,680
1938	7,236 ✓	1,130	2,610	970 ✓	698 ✓ 8,210
1939	8,616 ✓	1,098	2,743	1,188 ✓	915 ✓ 9,800
1940	17,040 ✓	2,525	3,159	1,682 ✓	1,216 ✓ 18,720
1941	19,901 ✓	2,262	2,227	921 ✓	901 ✓ 20,820
1942	13,020 ✓	1,566	524	361 ✓	232 ✓ 13,380 99,70
1943	55 ✓	8	95	414 ✓	111 ✓ 470
1944	48 ✓	9	31	117 ✓	31 ✓ 160
1945	146 ✓	25	1	59 ✓	10 ✓ 210

Production of gold and silver in Jackson County, Oregon, lode and placer mines,
1902 - 1961(cont.)

Year	<u>Placer Mines</u>			<u>Lode Mines</u>		
	Gold	Silver	Tons	Gold	Silver	
1946	518 ✓	74	85	82 ✓	969	600 -
1947	1,781 ✓	227	1,047	184 ✓	21,243	1,970
1948	304 ✓	34	107	61 ✓	23	370
1949	157 ✓	73	55	76 ✓	14	230
1950	288 ✓	46	33	31 ✓	6	320
1951	78 ✓	12	332	39 ✓	4	157
1952	40 ✓	4	11	12 ✓	3	50
1953	122 ✓	23		Confidential		127
1954	104 ✓	18	31	90 ✓	26	190
1955	56 ✓	9	43	110 ✓	20	170
1956	104 ✓	15	3	17 ✓	3	20
1957	60 ✓	8	200	473 ✓	108	530
1958	69 ✓	8	120	239 ✓	54	310
1959	51 ✓	9	255	150 ✓	35	200
1960	1/	1/	320	28 1/	Confidential	
1961	1/	1/	113	272 1/	66 1/	212

1943-61 6,440

1/ Lode and placer combined to avoid disclosing individual company confidential data.

Total 1902-61 216,980

1960	668	101	167	183
1961	705	104	349	1,918
1962	411	58	411	5,989
1963	528	62	1281	58,172
1964	322	45	339	14,327
1965				

038-

GRANT COUNTY

GOLD

Placer	Lode
\$ 69,639.50	\$ 94,184.65
28,683.20	144,547.20
37,849.70	101,460.45
40,731.60	108,679.90
54,684.70	38,593.10
25,967.55	110,574.45
38,740.45	111,331.50
18,600.75	51,372.65
30,511.95	30,781.10
20,061.65	43,161.30
19,660.55	17,034.50
13,971.65	93,799.30
34,952.75	66,461.85
2,318.05	8,258.95
101,614.45	6,056.40
198,982.70	34,194.30
164,058.65	8,607.90
102,538.80	6,659.10
98,590.80	19,001.85
167,003.20	16,208.15
165,828.25	37,801.05
219,937.20	47,187.70
198,824.50	91,006.65
131,369.35	57,595.30
106,570.80	87,346.70
132,223.00	126,738.85
Total -	138,777.45
64,941.10	59,083.15
154,908.60	22,602.30
90,017.90	20,583.85
116,723.95	21,267.40
50,644.30	15,742.45
190,750.70	25,928.00
325,801.00	51,330.00
623,105.00	35,190.00
356,545.00	58,205.00
787,535.00	40,110.00
932,680.00	210,280.00
858,935.00	283,920.00
608,405.00	403,270.00
403,935.00	52,570.00
1,120.00	-

SILVER

Placer	Lode
\$ -	69,537.49
-	57,716.38
-	45,899.79
237.11	22,166.17
375.58	2,990.12
148.42	9,595.72
563.82	15,714.42
118.56	1,414.52
133.94	1,967.47
85.07	2,014.53
124.89	403.63
61.54	82,887.14
106.79	61,936.39
12.67	1,292.34
285.08	1,162.02
4,687.90	20,393.27
369.24	11,419.29
276.93	17,517.18
647.98	4,769.35
475.13	984.64
458.84	5,578.42
594.59	9,211.09
528.52	9,297.97
362.91	10,079.89
293.22	13,950.58
362.00	32,380.90
202.72	22,901.93
221.73	18,618.57
619.93	4,375.68
300.46	3,569.32
393.68	1,918.60
194.58	123.99
811.79	1,091.43
1,026.27	5,428.19
1,884.21	16,047.46
1,135.78	10,303.43
2,573.82	6,416.45
3,579.28	8,226.45
4,001.01	48,143.29
3,267.05	84,472.70
1,819.96	2,647.13
3.62	-

Year	Number of Mines	PLACER			
		Gold		Silver	
		Fine Ounces	Value	Fine Ounces	Value
1902	10	1,989.70	\$ 33,570	—	—
1903	8	819.52	16,941	—	—
1904	16	1,081.42	22,355	—	—
✓1905	13	1,163.76	24,057	262	158
1906	13	1,562.42	32,298	415	278
✓1907	12	741.93	15,337	164	108
✓1908	16	1,106.87	22,881	623	330
✓1909	11	531.45	10,986	131	68
✓1910	13	871.77	18,021	148	80
✓1911	13	573.20	11,849	94	30
✓1912	17	561.73	11,612	138	85
✓1913	17	399.19	8,252	68	41
✓1914	3	998.65	20,644	118	65
✓1915	3	66.23	1,369	14	7
✓1916	7	2,903.27	60,016	315	207
✓1917	5	5,685.22	117,524	518	427
✓1918	8	4,687.39	96,897	408	408
✓1919	6	2,929.68	60,562	306	343
✓1920	7	2,816.88	58,230	716	781
✓1921	10	4,771.52	98,636	525	525
✓1922	7	4,737.95	97,942	507	507
✓1923	14	6,283.92	129,900	657	539
✓1924	9	5,680.70	117,430	584	391
✓1925	10	3,753.41	77,590	401	278
✓1926	11	3,044.88	62,943	324	202
✓1927	24	3,777.80	78,094	400	227
✓1928	13	2,166.12	44,674	224	131
✓1929	14	1,855.46	38,356	245	131
✓1930	8	4,425.96	91,493	685	264
✓1931	8	2,571.94	53,167	332	96
✓1932	17	3,334.97	68,940	435	123
✓1933	25	1,446.98	29,912	215	75
✓1934	33	5,450.02	100,478	897	580
✓1935	41	9,308.61	325,801	1,134	815
✓1936	24	17,803.00	623,105	2,082	1,613
✓1937	23	10,187.00	356,545	1,255	971
✓1938	28	22,501.00	787,535	2,844	1,859
✓1939	32	26,648.00	932,680	3,955	2,695
✓1940	24	24,541.00	858,935	4,421	3,144
✓1941	21	17,383.00	608,405	3,610	2,567
✓1942	15	11,541.00	403,935	2,011	1,430
✓1943	4	32.00	1,120	4	3
TOTAL	—	224,736.52	6,721,017	32,185	22,572

Gold, Silver, Copper, Lead, and Zinc Production in Grant County, Oregon, 1902-1943

(Compiled by Charles White Merrill, Metal Economics Division, Bureau of Mines)

Total Value	Number of Mines	Ore	Gold		Silver	
		Short Tons	Fine Ounces	Value	Fine Ounces	Value
\$ 32,570	8	7,403	2,690.99	\$ 40,871	76,837	\$ 40,076
16,941	12	11,576	4,129.92	85,372	63,775	34,469
22,355	20	11,099	2,898.87	59,925	50,718	29,217
24,215	11	12,662	3,105.14	64,189	24,493	14,794
32,376	12	2,346	1,102.66	22,794	3,304	2,314
15,445	10	9,058	3,159.27	65,308	10,603	6,998
23,211	11	5,251	3,180.90	65,755	17,364	9,203
11,054	16	7,058	1,467.79	30,342	1,563	813
18,101	14	3,215	879.46	18,180	2,174	1,174
11,999	8	4,382	1,233.18	25,492	2,226	1,180
11,697	5	1,400	486.70	10,061	446	274
8,293	3	23,711	2,679.98	55,400	91,589	55,320
20,709	3	13,147	1,898.91	39,254	68,438	37,846
1,376	2	1,864	235.97	4,878	1,428	724
60,223	3	874	173.04	3,577	1,284	845
117,951	1	4,600	976.98	20,196	22,534	18,588
97,305	5	378	245.94	5,084	12,618	12,618
60,905	5	360	190.26	3,933	19,356	21,678
59,011	5	1,766	542.91	11,223	5,270	5,745
99,161	2	900	463.09	9,573	1,088	1,088
98,449	9	1,978	1,080.03	22,326	6,164	6,164
130,439	16	1,581	1,348.22	27,870	10,178	8,346
117,821	8	6,137	2,600.19	58,751	10,274	6,884
77,868	10	1,210	1,645.58	34,017	11,138	7,730
63,145	6	717	2,495.62	51,589	15,415	9,619
78,321	5	9,836	3,621.11	74,855	35,780	20,287
44,805	5	7,170	1,798.95	37,188	25,306	14,804
38,487	5	3,410	1,688.09	34,896	20,573	10,965
91,757	4	991	645.78	13,549	4,835	1,861
53,262	6	549	588.11	12,157	3,944	1,144
69,063	14	429	607.64	12,561	2,120	598
29,987	16	887	442.07	9,138	137	48
191,058	18	1,828	740.80	25,891	1,206	780
326,616	17	4,302	1,466.56	51,330	5,998	4,511
624,718	17	15,345	2,434.00	85,190	17,732	13,733
357,510	15	8,928	1,663.00	58,205	11,385	8,866
789,374	19	2,926	1,146.00	40,110	7,090	4,583
935,365	17	11,222	6,008.00	210,280	9,090	6,170
862,079	17	23,889	8,112.00	283,920	53,197	37,829
610,972	14	31,788	11,522.00	403,270	93,340	66,375
405,365	7	4,721	1,502.00	52,570	2,925	2,080
1,123	—	—	—	—	—	—
6,743,589	—	262,894	84,897.72	2,235,870	824,935	528,131

LODE					Total Value (Lode & Placer)
Copper		Lead		Total Value	
Pounds	Value	Pounds	Value		
4,000	\$ 376	—	\$ —	\$ 80,947	\$ 114,517
4,710	590	500	20	120,187	137,128
1,000	156	—	—	82,952	112,307
42,886	8,277	—	—	79,139	103,354
54,440	10,888	—	—	83,285	65,861
583	67	—	—	83,194	98,639
—	—	—	—	75,025	98,236
—	—	—	—	31,165	42,209
—	—	—	—	19,354	37,455
—	—	—	—	26,672	38,571
424	66	162	7	10,335	22,032
406	54	154	6	110,793	119,086
—	—	—	—	77,160	97,869
1,204	296	—	—	5,602	6,978
—	—	—	—	4,718	64,941
—	—	—	—	38,764	156,715
—	—	—	—	17,702	115,097
—	—	—	—	25,611	86,516
—	—	—	—	16,968	75,979
4,724	638	—	—	10,661	109,822
5,976	878	—	—	29,128	127,577
947	124	513	41	37,094	167,533
—	—	—	—	60,800	178,621
2,566	359	11,273	902	41,747	119,615
1,720	225	5,300	334	62,469	125,614
1,422	205	13,246	768	95,701	174,022
2,040	359	20,180	1,271	52,965	97,770
502	65	6,053	303	47,491	83,978
308	28	1,711	62	15,578	107,335
111	7	1,211	36	13,392	66,655
100	6	—	—	13,202	82,265
2,838	227	689	25	9,192	39,179
6,807	565	1,079	43	26,923	217,961
—	—	—	—	56,249	382,865
—	—	—	—	98,923	723,641
2,000	196	2,000	92	67,011	424,527
2,000	208	4,000	188	44,981	834,355
10,000	1,130	28,000	1,400	216,846	1,152,211
16,000	1,888	64,000	3,648	324,279	1,186,358
4,000	484	—	—	475,181	1,086,153
—	—	—	—	55,134	460,499
—	—	—	—	—	1,123
173,714	28,362	160,071	9,147	2,801,510	9,545,099

Year	PLACER				
	Number of Mines	Gold		Silver	
		Fine Ounces	Value	Fine Ounces	Value
1902	25	5,814.24	\$ 98,758	--	--
1903	34	4,036.41	83,440	20	\$ 11
1904	23	2,508.49	51,855	7	4
1905	19	1,232.40	25,476	296	179
1906	23	1,637.93	33,859	376	252
1907	25	2,987.35	61,754	561	370
1908	29	1,857.45	38,397	409	217
1909	22	796.74	16,470	183	95
1910	29	545.48	11,276	117	63
1911	23	840.80	17,381	178	94
1912	26	1,830.22	37,834	574	353
1913	27	17,400.54	359,701	4,275	2,582
1914	19	17,873.69	369,482	4,450	2,461
1915	14	17,604.05	363,908	4,540	2,302
1916	14	32,027.88	662,075	8,076	5,314
1917	10	25,010.65	517,016	6,263	5,160
1918	22	15,073.11	311,589	3,125	3,125
1919	10	11,974.70	247,539	2,797	3,132
1920	8	16,432.21	339,684	3,849	4,196
1921	12	14,541.18	300,593	3,235	3,235
1922	36	9,195.55	190,089	2,148	2,148
1923	44	5,476.24	113,204	1,177	965
1924	17	8,816.60	182,255	1,511	1,012
1925	19	3,541.54	73,210	509	353
1926	24	1,340.68	27,714	320	200
1927	30	2,962.18	61,234	483	274
1928	17	205.84	4,255	39	23
1929	15	1,054.40	21,796	150	80
1930	12	395.29	8,171	79	30
1931	20	1,578.07	32,622	231	67
1932	14	2,098.37	43,377	384	108
1933	55	1,519.36	31,408	318	110
1934	65	4,570.24	159,730	797	515
1935	51	7,288.40	255,094	1,296	932
1936	28	10,110.00	353,850	2,239	1,734
1937	24	8,999.00	314,965	2,072	1,603
1938	29	14,301.00	500,535	3,247	2,099
1939	39	22,002.00	770,070	5,193	3,525
1940	36	21,206.00	742,210	4,848	3,447
1941	31	23,025.00	805,875	4,881	3,471
1942	11	16,455.00	575,925	3,811	2,710
1943	1	34.00	1,190	4	3
TOTAL	--	358,200.28	9,216,866	79,068	58,554

Gold, Silver, Copper, Lead, and Zinc Production in Baker County, Oregon, 1902-1943

(Compiled by Charles White Merrill, Metal Economics Division, Bureau of Mines)

Total Value	Number of Mines	Ore	Gold		Silver	
		Short Tons	Fine Ounces	Value	Fine Ounces	Value
\$ 98,758	17	18,936	38,136.89	\$ 788,345	34,137	\$ 17,096
83,451	19	47,010	29,958.46	609,097	27,053	14,609
51,859	31	69,973	35,747.82	738,973	76,467	44,351
25,655	18	75,053	36,094.10	746,132	54,864	33,138
34,111	22	58,889	32,014.29	661,794	53,331	35,732
62,124	21	69,881	27,539.45	569,291	69,029	45,559
38,614	21	38,413	22,713.61	469,532	17,086	9,056
16,565	20	32,521	19,401.66	401,068	19,331	10,052
11,339	25	56,263	18,852.99	389,726	29,718	16,048
17,475	11	74,558	18,015.09	372,405	30,766	16,306
38,187	23	70,631	21,585.26	446,207	38,566	23,718
362,283	14	117,040	49,041.56	1,013,779	74,907	45,244
371,943	12	97,722	45,689.46	944,485	53,817	29,761
366,210	12	143,727	63,926.30	1,321,474	105,584	53,531
667,389	13	144,129	47,337.40	978,551	205,407	135,158
522,176	11	131,208	34,403.48	711,183	94,405	77,790
314,714	18	118,960	33,768.99	698,067	87,260	87,260
250,671	12	95,062	28,556.92	590,324	87,666	98,186
343,880	8	80,243	26,639.91	550,696	72,580	79,112
303,828	10	38,569	14,748.18	304,872	36,274	36,274
192,237	18	24,350	6,414.47	132,599	140,434	140,434
114,169	22	47,608	8,572.02	177,199	83,084	68,129
183,267	12	37,239	6,869.11	141,997	25,070	16,797
73,563	116	24,874	5,226.49	108,041	19,787	13,732
27,914	17	12,950	2,314.75	47,850	8,741	5,454
61,508	13	16,518	1,019.31	21,071	8,465	4,800
4,278	9	3,111	346.04	7,153	1,373	803
21,876	11	566	184.07	3,805	317	169
8,201	10	4,907	591.66	12,231	781	301
32,689	15	701	688.52	14,233	144	42
43,485	20	767	710.69	14,691	628	177
31,518	28	5,842	2,948.40	60,949	16,713	5,850
160,245	25	37,376	6,894.66	240,968	37,040	23,945
256,026	28	144,338	12,796.36	447,873	83,054	59,695
355,584	26	88,494	12,700.00	444,500	49,136	38,056
316,568	30	47,409	11,800.00	413,000	32,578	25,199
502,634	23	51,339	22,478.00	786,730	83,750	54,141
773,595	30	38,339	21,994.00	769,790	84,043	57,047
745,657	26	55,941	26,446.00	925,610	128,129	91,114
809,346	22	38,448	18,503.00	647,605	79,165	56,295
578,635	11	6,623	2,731.00	95,585	7,148	5,083
1,193	8	1,283	378.00	13,230	672	478
9,275,420	--	2,267,811	816,778.37	18,832,711	2,158,500	1,575,722



Year	Number of Mines	PLACER			
		Gold		Silver	
		Fine Ounces	Value	Fine Ounces	Value
1902	10	1,989.70	33,570	---	---
1903	8	819.52	16,941	---	---
1904	16	1,081.42	22,355	---	---
1905	13	1,163.76	24,057	262	158
1906	13	1,562.42	32,298	415	278
1907	12	741.93	15,337	164	108
1908	16	1,106.87	22,881	623	330
1909	11	531.45	10,986	131	68
1910	13	871.77	18,021	148	80
1911	13	573.20	11,849	94	50
1912	17	561.73	11,612	138	85
1913	17	399.19	8,252	68	41
1914	3	998.65	20,644	118	65
1915	3	66.23	1,369	14	7
1916	7	2,903.27	60,016	315	207
1917	5	5,685.22	117,524	518	427
1918	8	4,687.39	96,897	408	408
1919	6	2,929.68	60,562	306	343
1920	7	2,816.88	58,230	716	781
1921	10	4,771.52	98,636	525	525
1922	7	4,737.95	97,942	507	507
1923	14	6,283.92	129,900	657	539
1924	9	5,680.70	117,430	584	391
1925	10	3,753.41	77,590	401	278
1926	11	3,044.88	62,943	324	202
1927	24	3,777.80	78,094	400	227
1928	13	2,166.12	44,674	224	131
1929	14	1,855.46	38,356	245	131
1930	8	4,425.96	91,493	685	264
1931	8	2,571.94	53,167	332	96
1932	17	3,334.97	68,940	435	123
1933	25	1,446.98	29,912	215	75
1934	33	5,450.02	190,478	897	580
1935	41	9,308.61	325,801	1,134	815
1936	24	17,803.00	623,105	2,082	1,613
1937	23	10,187.00	356,545	1,255	971
1938	28	22,501.00	787,535	2,844	1,839
1939	32	26,648.00	932,680	3,955	2,685
1940	24	24,541.00	858,935	4,421	3,144
1941	21	17,383.00	608,405	3,610	2,567
1942	15	11,541.00	403,935	2,011	1,430
1943	4	32.00	1,120	4	3
TOTAL	---	224,736.52	6,721,017	32,185	22,572

Gold, Silver, Copper, Lead, and Zinc Production in Grant County, Oregon, 1902-1943

(Compiled by Charles White Merrill, Metal Economics Division, Bureau of Mines)

Total Value	Number of Mines	Ore	Gold		Silver	
		Short Tons	Fine Ounces	Value	Fine Ounces	Value
\$ 33,570	8	7,403	2,690.99	\$ 40,871	76,837	\$ 40,076
16,941	12	11,576	4,129.92	85,372	63,775	34,439
22,355	20	11,099	2,898.87	59,925	50,718	29,417
24,215	11	12,662	3,105.14	64,189	24,493	14,794
32,576	12	2,346	1,102.66	22,794	3,304	2,214
15,445	10	9,058	3,159.27	65,308	10,603	6,998
23,211	11	5,251	3,180.90	65,755	17,364	9,203
11,054	16	7,058	1,467.79	30,342	1,563	813
18,101	14	3,215	879.46	18,180	2,174	1,174
11,899	8	4,382	1,233.19	25,492	2,226	1,180
11,697	5	1,400	486.70	10,061	446	274
8,293	3	23,711	2,679.98	55,400	91,589	55,320
20,709	3	13,147	1,898.91	39,254	68,438	37,846
1,376	2	1,864	235.97	4,878	1,428	724
60,223	3	874	173.04	3,577	1,284	845
117,951	1	4,600	976.98	20,196	22,534	18,568
97,305	5	378	245.94	5,084	12,618	12,618
60,905	5	360	190.26	3,933	19,356	21,678
59,011	5	1,766	542.91	11,223	5,270	5,745
99,161	2	900	463.09	9,573	1,088	1,088
98,449	9	1,978	1,080.03	22,326	6,164	6,164
130,439	16	1,581	1,348.22	27,870	10,178	8,346
117,821	8	6,137	2,600.19	53,751	10,274	6,884
77,868	10	1,210	1,645.58	34,017	11,138	7,730
63,145	6	717	2,495.62	51,589	15,415	9,619
78,321	5	9,836	3,621.11	74,855	35,780	20,287
44,805	5	7,170	1,798.95	37,188	25,306	14,804
38,487	5	3,410	1,688.09	34,896	20,573	10,965
91,757	4	991	645.78	13,349	4,835	1,861
53,263	6	549	588.11	12,157	3,944	1,144
69,063	14	429	607.64	12,561	2,120	598
29,987	16	887	442.07	9,138	137	48
191,058	18	1,828	740.80	25,891	1,206	780
326,616	17	4,302	1,466.56	51,330	5,998	4,311
624,718	17	15,345	2,434.00	85,190	17,732	13,733
357,516	15	8,928	1,663.00	58,205	11,385	8,806
789,374	19	2,926	1,146.00	40,110	7,090	4,583
935,365	17	11,222	6,008.00	210,280	9,090	6,170
862,079	17	23,889	8,112.00	283,920	53,197	37,829
610,972	14	31,788	11,522.00	403,270	93,340	66,375
405,365	7	4,721	1,502.00	52,570	2,925	2,080
1,123	--	--	--	--	--	--
6,743,589	--	262,894	84,897.72	2,235,870	824,935	528,131

LODE

Copper		Lead		Total Value	Total Value (Lode & Placer)
Pounds	Value	Pounds	Value	Value	
--	--	--	--	\$ 80,947	\$ 114,517
4,000	\$ 376	--	--	120,187	137,128
4,710	590	500	\$ 20	89,952	112,307
1,000	156	--	--	79,139	103,354
42,836	8,277	--	--	33,285	65,861
54,440	10,888	--	--	83,194	98,639
583	67	--	--	75,025	98,236
--	--	--	--	31,155	42,209
--	--	--	--	19,354	37,455
--	--	--	--	28,672	38,571
--	--	--	--	10,335	22,032
424	66	162	7	110,793	119,086
406	54	154	6	77,160	97,869
--	--	--	--	5,602	6,978
1,204	296	--	--	4,718	64,941
--	--	--	--	38,764	156,715
--	--	--	--	17,702	115,007
--	--	--	--	25,611	86,516
--	--	--	--	16,968	75,979
--	--	--	--	10,661	109,822
4,724	638	--	--	29,128	127,577
5,976	878	--	--	37,094	167,533
947	124	513	41	60,800	178,621
--	--	--	--	41,747	119,615
2,566	359	11,273	902	62,469	125,614
1,720	225	5,300	334	95,701	174,022
1,422	205	13,246	768	52,965	97,770
2,040	359	20,180	1,271	47,491	85,978
502	65	6,053	303	15,578	107,335
308	28	1,711	63	13,392	66,655
111	7	1,211	36	13,202	82,265
100	6	--	--	9,192	39,179
2,838	227	689	25	26,923	217,981
6,807	565	1,079	43	56,249	382,865
--	--	--	--	98,923	723,641
--	--	--	--	67,011	424,527
2,000	196	2,000	92	44,981	834,355
2,000	208	4,000	188	216,846	1,152,211
10,000	1,130	28,000	1,400	324,279	1,186,368
16,000	1,888	64,000	3,648	475,181	1,086,153
4,000	484	--	--	55,134	460,499
--	--	--	--	--	1,123
173,714	28,362	160,071	9,147	2,801,510	9,545,099

U.S. Bureau of Mines Gold Statistics.

Year	Oregon		Year	Oregon		Year	Oregon	
	Troy ounces	Value (thousands)		Troy ounces	Value (thousands)		Troy ounces	Value (thousands)
1877--	50,303	\$1,040	1911--	30,641	\$633	1941--	96,565	\$3,380
1878--	52,452	1,084	1912--	37,251	770	1942--	46,233	1,618
1879--	55,632	1,150	1913--	78,740	1,628	1943--	1,097	38
1880--	52,729	1,090	1914--	76,987	1,591	1944--	1,369	48
1881--	53,212	1,100	1915--	90,064	1,862	1945--	4,467	156
1882--	40,151	830	1916--	92,018	1,902	1946--	17,598	616
1883--	31,927	660	1917--	72,166	1,492	1947--	18,979	664
1884--	31,926	660	1918--	61,459	1,270	1948--	14,611	511
1885--	38,700	800	1919--	47,303	978	1949--	16,226	568
1886--	47,891	990	1920--	49,221	1,017	1950--	11,058	387
1887--	43,541	900	1921--	42,668	882	1951--	7,927	277
1888--	39,909	825	1922--	25,715	532	1952--	5,509	193
1889--	58,050	1,200	1923--	24,091	498	1953--	8,488	297
1890--	53,213	1,100	1924--	26,695	552	1954--	6,520	228
1891--	79,335	1,640	1925--	18,983	392	1955--	1,708	60
1892--	67,725	1,400	1926--	13,243	274	1956--	2,738	96
1893--	79,592	1,645	1927--	14,676	303	1957--	3,381	118
1894--	68,792	1,422	1928--	10,931	226	1958--	1,423	50
1895--	42,972	888	1929--	17,092	353	1959--	686	24
1896--	60,517	1,251	1930--	14,401	298	1960--	835	29
1897--	65,456	1,353	1931--	15,350	317	1961--	1,054	37
1898--	56,966	1,178	1932--	19,861	411	1962--	822	29
1899--	69,152	1,429	1933--	20,240	517			
1900--	81,980	1,695	1934--	33,712	1,178			
1901--	87,950	1,818	1935--	54,160	1,896			
1902--	87,881	1,817	1936--	60,753	2,126			
1903--	62,411	1,290	1937--	52,662	1,843			
1904--	68,321	1,412	1938--	81,729	2,861			
1905--	60,222	1,245	1939--	93,372	3,268			
1906--	63,860	1,320	1940--	113,402	3,969			
1907--	59,124	1,222						
1908--	43,823	906						
1909--	40,103	829						
1910--	32,963	681						

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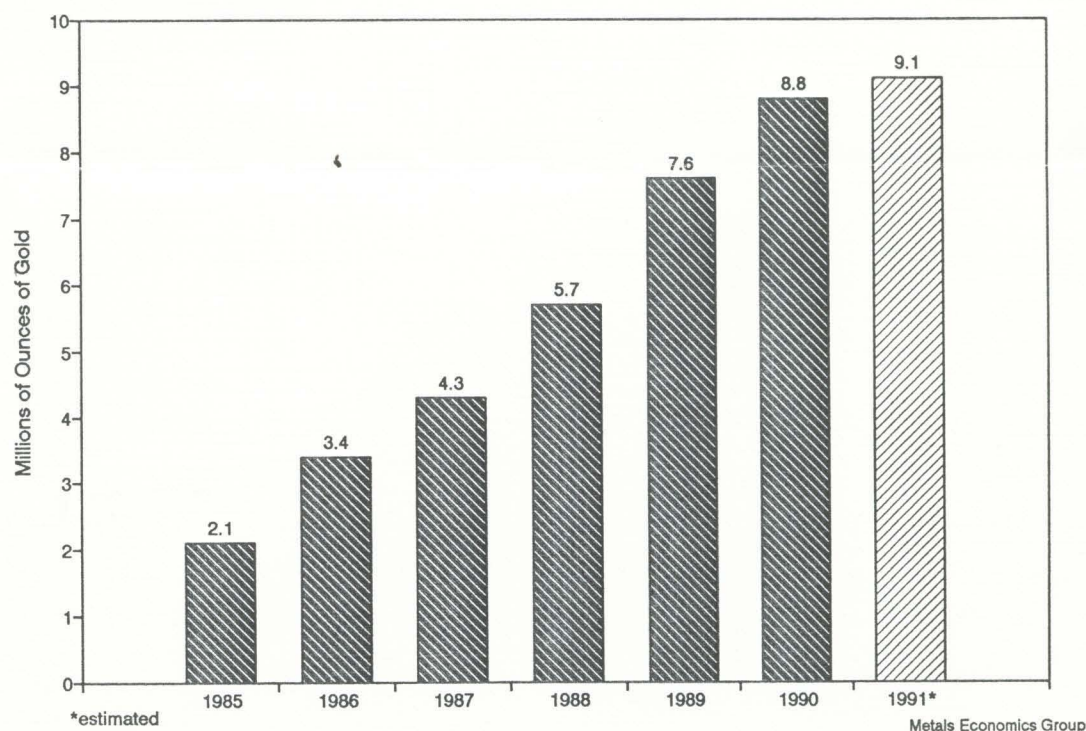
January 2, 1992

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U.S. PRIMARY GOLD PRODUCTION LEVELING OFF IN 1991

Primary non-placer U.S. gold production is expected to reach 9.1 million ounces in 1991. Although this is an all-time high for U.S. gold production, it is the lowest increase in the six years that Metals Economics Group has been tracking U.S. gold output. Due to a large number of mine closings—caused primarily by low gold prices—1991 production will be just 3.3% higher than the 8.8 million ounces of gold produced in 1990. By comparison, 1990 production was 13.6% higher than 1989 production. Of the 112 operations that produced gold in 1990 or started production in 1991, 32 are no longer being mined. Eighteen of these are continuing to produce limited amounts of gold from residual leaching operations; the other 14 have been shut down and are no longer producing gold.



Eighteen mines began initial production in 1990 and 1991. The largest of these new mines, Santa Fe Pacific's *Rabbit Creek* in Nevada, came onstream in the third quarter of 1990 and is expected to have a 10-year life—producing about 115,000 ounces in 1991 and increasing to 200,000 ounces per year in 1992. Echo Bay's *Kettle River* mine in Washington started initial production in the first quarter of 1990 and is expected to produce 100,000 ounces annually for the next six years.

The smallest new mine is Glamis's *Alto* in California, which will produce 8,000 ounces in 1991 and an additional 3,000 ounces from residual leaching operations in 1992. USMX's *Casino/Winrock* mine in Nevada, another short-lived operation, started up in the third quarter of 1990 and is expected to produce a total of 35,000 ounces before being depleted in 1992.

Primary non-placer gold production in Nevada will total more than 6 million ounces in 1991, accounting for about two-thirds of U.S. production. Based on Metals Economics Group's current estimated projections, Newmont's *South Area*, which includes the *Gold Quarry* open pit, should produce 940,000 ounces in 1991, making it the largest gold mine in Nevada as well as the largest in North America. The second largest producer in Nevada this year will be Newmont's *North Area*, which should produce 600,000 ounces, followed by American Barrick's *Goldstrike*, which is scheduled to produce 500,000 ounces. Due to ongoing expansion plans at Goldstrike, production there is expected to reach 900,000 ounces in 1992, and possibly more than 1 million ounces in subsequent years.

Gold mines in California are expected to produce more than 900,000 ounces this year. Production will be dominated by three mines: Homestake's *McLaughlin* with 245,000 ounces, Gold Fields' *Mesquite* with 198,000 ounces, and Sonora's *Jamestown* with 120,000 ounces.

South Dakota's projected 1991 gold production of 567,000 ounces will come primarily from Homestake's *Homestake* mine, which will contribute 400,000 ounces.

The other states expected to produce more than 200,000 ounces of gold in 1990 are Montana, Washington, and Utah.

U.S. Primary Non-Placer Gold Production by State
(Listed by projected 1991 gold production)

State	Number of Mines as of Nov 1991	Ounces Produced in 1990	Estimated Production in 1991
Nevada	58	5,714,793	6,074,236
California	14	900,963	906,994
South Dakota	5	570,256	566,964
Montana	8	419,040	407,780
Washington	3	313,724	319,885
Utah	5	318,349	280,893
South Carolina	4	228,387	179,000
Idaho	6	138,349	106,900
Arizona	4	124,942	149,500
Colorado	4	66,356	119,000
Alaska	1	3,250	0
Totals	112	8,798,409	9,111,152

These are some of the conclusions drawn from Metals Economics Group's recent study—*Active U.S. Gold Mines 1991*, published December 1991. This study looks in detail at each of the 112 currently active U.S. gold projects, provides an overview of 1991 U.S. primary gold production (including tables that compare projects by reserves, capital costs, operating costs, etc.), and provides a current address and phone listing for all companies involved.

The price of *Active U.S. Gold Mines 1991* is US\$1,600. Please order from Metals Economics Group, 2000 Barrington Street, P.O. Box 2206, Halifax, Nova Scotia, B3J 3C4, Canada (902) 429-2880.

—END—

Production of Gold and Silver in Coos County,
Oregon, Lode and Placer Mines, 1902-1961

Year	Placer Mines			Lode Mines	
	Gold	Silver		Tons	Gold Silver
1902	68.4	—	123.	1000	54.7 333.5
1903	330.4	—	406	400	76.4 18.7
1904	128.2	—	180	2600	52.2 11
1905	52.2	19.8	52	—	— —
1906	77.9 ¹¹	19.4 ¹¹	78	—	— —
1907	75.3 ¹¹	11 ¹¹	90	4 ¹¹	14.7 ¹¹ 351 ¹¹
1908	77.6	18	81	3	2.9 2
1909	15.1	6	21	3	5.8 4
1910	10.9	4	19	5	7.6 —
1911	73.5	13	74	—	— —
1912	45.1	10	45	—	— —
1913	78.6	13	79	—	— —
1914	57.4	11	57	—	— —
1915	—	—	—	—	— —
1916	—	—	—	—	— —
1917	48.4	2	48	—	— —
1918	—	—	—	—	— —
1919	—	—	—	—	— —
1920	127.6	20	128	—	— —
1921	35.5	15	36	—	— —
1922	19.1	2	25	2	5.9 2
1923	43.2	2	49	2	5.9 3
1924	35.8	3	36	—	— —
1925	63.6	7	64	—	— —
1926	30.8	4	31	—	— —
1927	14.1	1	14	—	— —
1928	11.4	2	11	—	— —
1929	10.6	4	11	—	— —
1930	18.3	2	18	—	— —
1931	34.6	8	35	—	— —
1932	76.4	10	76	1902-33	— —
1933	140.2	17	140	2030	— —
1934	121.3 ¹¹	17 ¹¹	271	1 ¹¹	149.8 ¹¹ 15 ¹¹
1935	77.5	6	78	—	— —
1936	98	16	98	—	— —
1937	24	—	24	—	— —
1938	114	18	114	—	— —
1939	117	16	117	—	— —
1940	85	14	85	—	— —

1902	68.4	—	123.	1000	54.7	333.5
1903	330.4	—	406	400	76.4	18.7
1904	128.2	—	180	2600	52.2	11
1905	52.2	19.8	52	—	—	—
1906	77.9 ^u	19.4 ^u	78	—	—	—
1907	75.3 ^u	11 ^u	90	4 ^u	14.7 ^u	351 ^u
1908	77.6 ^u	18	81	3	2.9	2
1909	15.1	6	21	3	5.8	4
1910	10.9	4	19	5	7.6	—
1911	73.5	13	74	—	—	—
1912	45.1	10	45	—	—	—
1913	78.6	13	79	—	—	—
1914	57.4	11	57	—	—	—
1915	—	—	—	—	—	—
1916	—	—	—	—	—	—
1917	48.4	2	48	—	—	—
1918	—	—	—	—	—	—
1919	—	—	—	—	—	—
1920	127.6	20	128	—	—	—
1921	35.5	15	36	—	—	—
1922	19.1	2	25	2	5.9	2
1923	43.2	2	49	2	5.9	3
1924	35.8	3	36	—	—	—
1925	63.6	7	64	—	—	—
1926	30.8	4	31	—	—	—
1927	14.1	1	14	—	—	—
1928	11.4	2	11	—	—	—
1929	10.6	4	11	—	—	—
1930	18.3	2	18	—	—	—
1931	34.6	8	35	—	—	—
1932	76.4	10	76	1902-33	—	—
1933	140.2	17	140	2030	—	—
1934	121.3 ^u	17 ^u	271	1 ^u	149.8 ^u	15 ^u
1935	77.5	6	78	—	—	—
1936	98	16	98	—	—	—
1937	24	—	24	—	—	—
1938	114	18	114	—	—	—
1939	117	16	117	—	—	—
1940	85	14	85	—	—	—
1941	100	14	100	1934-42	—	—
1942	17	7	17	900	—	—
1943	—	—	—	—	—	—
1944	—	—	—	—	—	—
1945	—	—	—	—	—	—
1946	—	—	—	—	—	—
1947	—	—	—	—	—	—

Coos County (continued)

Year	Placer Gold	Miner Silver			Lode Tons	Miner Gold	Silver
1948	-	-	-	-	-	-	-
1949	-	-	-	-	-	-	-
1950	-	-	-	-	-	-	-
1951	-	-	-	-	-	-	-
1952	29	3	29	-	-	-	-
1953	-	-	-	-	-	-	-
1954	-	-	-	-	-	-	-
1955	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-
1957	7 1/2	1 1/2	7	-	-	-	-
1958	-	-	-	-	-	-	-
1959	4	-	4	-	-	-	-
1960	4	-	4	-	-	-	-
1961	-	-	1	180	1 1/2	34 1/2	
	2,586.6	336.2		4,200	376.9	774.2	

1943-61-45

1/2 Confidential. Permission to publish must be obtained from each company requesting concealment of data.

Gr. Total 1902-61 -

2480-
2964

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Production of Gold and Silver in Curry County,
Oregon, Lode and Placer Mines, 1902-1961

Year	Placer Mines			Lode Mines		
	Gold	Silver		Tons	Gold	Silver
1902	289.6	—	290	—	—	—
1903	653.5	—	710	310	55.6	—
1904	454.4	—	454	—	—	—
1905	322.2	44.7	383	25	60.5	16.6
1906	301.1	55.2	363	305	61.7	16
1907	269.3 ¹¹	47.1 ¹¹	573	35 ¹¹	303.7 ¹¹	23 ¹¹
1908	338.3	35	430	10	91.9	10
1909	367.3	48	417	901	50.3	15.4
1910	156	18	156	—	—	—
1911	339.7	53	340	—	—	—
1912	618.5	89	659	85	39.9	8
1913	203.1	276	264	60	61	8
1914	29.6	4	30	—	—	—
1915	39	6	39	—	—	—
1916	337	30	337	—	—	—
1917	5	1	5	—	—	—
1918	33.9	5	34	—	—	—
1919	37	2	37	—	—	—
1920	43.4	3	43	—	—	—
1921	26.9	9	41	2	14	9
1922	127.8	11	421	5	292.7	30
1923	44	6	44	—	—	—
1924	13	3	385	271	372.3	44
1925	275.8	46	283	1	7	2
1926	67.2	12	67	—	—	—
1927	18.8	1	49	5	30	4
1928	38.6	5	1854	62	1813.4	276
1929	27.9	3	1855	1,097	1,825.2	316
1930	55.3	6	132	5	77.2	10
1931	67.7	10	72	15	4	—
1932	225.8	17	237	3	11.2	3
1933	342.9	43	397	7	53.9	8
1934	365.8	49	380	4	14.2	2
1935	353.8	29	487	553	133.1	85
1936	211	25	234	9	23	5
1937	82	14	95	4	13	0
1938	85	8	186	152	101	6
1939	197	24	254	186	57	13
1940	121	17	213	250	92	18

Curry County (continued)

Year	Placer Gold	Minus Silver		Lode Tons	Minus Gold	Silver
1948	4 ¹¹	—	22	21 ¹¹	18 ¹¹	5 ¹¹
1949	—	—	20	75	20	4
1950	15	6	18	1	3	1
1951	25	9	33	5	8	—
1952	—	—	—	—	—	—
1953	—	—	4	1	4	1
1954	—	—	—	—	—	—
1955	—	—	—	—	—	—
1956	5	1	—	—	—	—
1957	—	—	—	—	—	—
1958	2 ¹¹	—	—	—	—	—
1959	—	—	—	—	—	—
1960	—	—	—	—	—	—
1961	2 ¹¹	—	—	—	—	—
1962- 1965	7,761.2	1,093.9		4,742	6,082.8	1,007.0

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¹¹ Confidential. Permission to publish must be obtained from each company requesting concealment of data.

Gr. Total 1902-61 13840 035-

Production of Gold & Silver in Douglas County, Oregon, Lode & Placer Mines, 1902-1961

Year	Placer Mines		Tons	Lode Mines		
	Gold	Silver		Gold	Silver	
1902	574.8 ✓	—	903	117.8 ✓	84.0	690
1903	1081.2 ✓	—	5,505	966.7 ✓	1,282.5	2360
1904	426.6 ✓	—	—	—	—	427
1905	273.1 ✓	4.9	207	624.4 ✓	1,389.1	900
1906	453.3 ✓	86.6	2,342	1,675.3 ✓	1,652	2130
1907	215.6 ✓	62	—	—	—	216
1908	760.2 ✓	201	120	159.6 ✓	208	920
1909	5 ✓	—	241	81.8 ✓	27	90
1910	94.4 ✓	24	2,310	481.1 ✓	74	580
1911	104.9 ✓	57	437	107.2 ✓	21	210
1912	539.9 ✓	268	128	144.2 ✓	2,564	680
1913	203.1 ✓	276	—	—	—	203
1914	125.6 ✓	18	146	103.1 ✓	23	230
1915	116.5 ✓	26	—	—	—	117
1916	1,122.5 ✓	99	20	65.8 ✓	34	1190
1917	1,080.7 ✓	63	—	—	—	1081
1918	164.2 ✓	21	11	37 ✓	45	200
1919	35.2 ✓	5	—	—	—	35
1920	33.8 ✓	3	8	45 ✓	11	80
1921	149 ✓	29	—	—	—	149
1922	95.5 ✓	13	15	131.7 ✓	212	230
1923	117.8 ✓	7	—	—	—	118
1924	74.3 ✓	10	17	54.6 ✓	81	130
1925	72.7 ✓	7	—	—	—	73
1926	106.9 ✓	5	389	46 ✓	2,849	150
1927	19.9 ✓	2	1	6.8 ✓	0	27
1928	—	—	1,004	53.2 ✓	2,567	53
1929	22.2 ✓	6	1,673	142.8 ✓	5,970	170
1930	26.2 ✓	6	373	125 ✓	1,078	150
1931	136.4 ✓	1	455	495.1 ✓	756	630
1932	153.4 ✓	18	1,685	569.4 ✓	2,763	1902-1938 720
1933	322.4 ✓	46	1,242	355.5 ✓	331	15620 535 680
1934	419.7 ✓	50	862	199.5 ✓	226	620
1935	349.3 ✓	13	553	133.1 ✓	85	420
1936	248 ✓	30	1,278	246 ✓	4,390	500
1937	221 ✓	19	2,419	213 ✓	5,614	430
1938	326 ✓	33	26	36 ✓	7	360
1939	300 ✓	31	9	40 ✓	18	340
1940	1,467 ✓	107	300	4 ✓	—	1470
1941	142 ✓	14	112	2 ✓	256	145

1902	574.8	—	903	117.8	84.0	690
1903	1081.2 ✓	—	5,505	966.7 ✓	1,282.5	2360
1904	426.6 ✓	—	—	—	—	427
1905	273.1 ✓	4.9	207	624.4 ✓	1,389.1	900
1906	453.3 ✓	86.6	2,342	1,675.3 ✓	1,652	2130
1907	215.6 ✓	62	—	—	—	216
1908	760.2 ✓	201	120	159.6 ✓	208	920
1909	5 ✓	—	241	81.8 ✓	27	90
1910	94.4 ✓	24	2,310	481.1 ✓	74	580
1911	104.9 ✓	57	437	107.2 ✓	21	210
1912	539.9 ✓	268	128	144.2 ✓	2,564	680
1913	203.1 ✓	276	—	—	—	203
1914	125.6 ✓	18	146	103.1 ✓	23	230
1915	116.5 ✓	26	—	—	—	117
1916	1,122.5 ✓	99	20	65.8 ✓	34	1190
1917	1,080.7 ✓	63	—	—	—	1081
1918	164.2 ✓	21	11	37 ✓	45	200
1919	35.2 ✓	5	—	—	—	35
1920	33.8 ✓	3	8	45 ✓	11	80
1921	149 ✓	29	—	—	—	149
1922	95.5 ✓	13	15	131.7 ✓	212	230
1923	117.8 ✓	7	—	—	—	118
1924	74.3 ✓	10	17	54.6 ✓	81	130
1925	72.7 ✓	7	—	—	—	73
1926	106.9 ✓	5	389	46 ✓	2,849	150
1927	19.9 ✓	2	1	6.8 ✓	0	27
1928	—	—	1,004	53.2 ✓	2,567	53
1929	22.2 ✓	6	1,673	142.8 ✓	5,970	170
1930	26.2 ✓	6	373	125 ✓	1,078	150
1931	136.4 ✓	1	455	495.1 ✓	756	630
1932	153.4 ✓	18	1,685	569.4 ✓	2,763	1902-1938 720
1933	322.4 ✓	46	1,242	355.5 ✓	331	15620 535 680
1934	419.7 ✓	50	862	199.5 ✓	226	620
1935	349.3 ✓	13	553	133.1 ✓	85	420
1936	248 ✓	30	1,278	246 ✓	4,390	500
1937	221 ✓	19	2,419	213 ✓	5,614	430
1938	326 ✓	33	26	36 ✓	7	360
1939	300 ✓	31	9	40 ✓	18	340
1940	1,467 ✓	107	300	4 ✓	—	1470
1941	143 ✓	14	42	2 ✓	256	1934-42 145
1942	97 ✓	14	8	13 ✓	10	4450 110
1943	—	—	—	—	—	—
1944	2	—	—	—	—	—
1945	—	—	—	—	—	—
1946	—	—	—	—	—	—
1947	—	—	—	—	—	—

Douglas County (continued)

Year	Placer Minus		Lode Minus			
	Gold	Silver	Tons	Gold	Silver	
1948	-	-	-	-	-	-
1949	9	-	32	32	10	41
1950	8	3	-	-	-	8
1951	13	2	23	27	5	40
1952	19	2	-	-	-	19
1953	-	-	-	-	-	-
1954	35	2	-	-	-	35
1955	39 ¹¹	8 ¹¹	-	-	-	39
1956	-	-	1	-	1	-
1957	1 ¹¹	-	62 ¹¹	2 ¹¹	1	3
1958	14	-	-	-	-	14
1959	65	8	-	-	-	65
1960	78	9	-	-	-	78
1961	36 ¹¹	8 ¹¹	3 ¹¹	1 ¹¹	-	36
	12,597.3	1,717.5	24,850	7,537.7	34,644.6	378
	317			65		5

1943-61 380¹¹

¹¹ Confidential. Permission to publish must be cleared with each company requesting concealment of data.

Gr. Total 1902-61

20450

317

Production of Gold and Silver in Josephine County,
Oregon, Lode and Placer Mines, 1902-1961

Year	Placer Gold	Mines Silver	Total Au ozs	Lode Tons	Mines Gold	Silver
1902	184.6	—	83300	14,157	8,145.6	—
1903	8811.2	61.3	16555.2	21,386	7741	24,346.6
1904	6969.6	17.5	15662.4	24,970 ¹¹	8,693.3 ¹¹	680 ¹¹
1905	5872.2	793	15051.4	27,124	9,179.2	3,493.4
1906	6248.2 ¹¹	1103 ¹¹	13460.0	29,573 ¹¹	7,211.8 ¹¹	1,752 ¹¹
1907	5866.1	894	7772.3	5,005	1,906.2	806
1908	5639.9	3,664	7387.9	3,567	1,748	2,343
1909	5158.3	663	7267.9	5,962	2,049.4	981
1910	4197.7	517	7361	16,415 (A)	2,306.8 ³¹⁶³ (?)	448
1911	4187.2	441	4806.7	5,324	619.5	9,995
1912	2,816.3	389	3679.4	4,081	863.1	10,385
1913	1992.9	273	2358.0	300	365.1	1,820
1914	5006.4	579	5390	4,417	383.9	12,499
1915	3400.7	578	4120	2,417	715.1	3,470
1916	3128.1	384	4570	11,484	1,442.4	14,582
1917	2,381.1	208	3580	6,363	1,196	67
1918	2,802.4	339	3540	4,505	732.6	242
1919	2,037.4	305	2090	547	50	151
1920	1,953.8	194	2110	106	155.7	26
1921	2,301.8	301	6090	346	3,789.5	169
1922	1,368.5	17.9	1740	343	369.9	309
1923	610	88	810	145	197	18
1924	647.1	81	1100	309	447.6	71
1925	851.4	89	2900	279	2,041.7	245
1926	826.8	96	2740	290	1920.7	157
1927	1,461	184	2530	418	1070.3	328
1928	672.6	89	1640	1,133	970.7	376
1929	1,271.1	139	2480	3,673	1,212	1,018
1930	1,201.9	139	2610	1,754	1,408.1	332
1931	2,241.1	289	3540	4,697	1,298.4	336
1932	3,438.5	437	4190	454	750.1	165
1933	3,602.8	462	4400	708	793	188
1934	4,345.5	596	5240	7,851	896.6	933
1935	9,283.5	880	10020	1,707	732	141
1936	8,156	869	9670	6,305	1,516	351
1937	9,759	971	11350	9,939	1,591	565
1938	10,371	1,126	13040	17,476	2,671	648
1939	3,499	379	6600	15,889	3,098	424
1940	3558	415	8810	20,623	5256	744

1902	184.6	—	83300	14,157	8,145.6	—
1903	8,811.2	61.3	16555.2	21,386	7,741	24,346.6
1904	6,969.6	17.5	15662.4	24,970 ¹¹	8,693.3 ¹¹	680 ¹¹
1905	5872.2	793	15051.4	27,124	9,179.2	3,493.4
1906	6,248.2 ¹¹	1103 ¹¹	13460.0	29,573 ¹¹	7,211.8 ¹¹	1,752 ¹¹
1907	5,866.1	894	7772.3	5,605	1,906.2	806
1908	5,639.9	3,664	7387.9	3,567	1,748	2,343
1909	5,158.3	663	7207.9	5,962	2,049.4	981
1910	4,197.7	517	7361	16,415 (A)	2,306.8 (?)	448
1911	4,187.2	441	4806.7	5,324	619.5	9,995
1912	2,816.3	389	3679.4	4,081	863.1	10,385
1913	1,992.9	273	2358.0	300	365.1	1,820
1914	5,006.4	579	5390	4,417	383.9	12,499
1915	3,400.7	578	4120	2,417	715.1	3,470
1916	3,128.1	384	4570	11,484	1,442.4	14,582
1917	2,381.1	208	3580	6,363	1,196	67
1918	2,802.4	339	3540	4,505	732.6	242
1919	2,037.4	305	2090	547	50	151
1920	1,953.8	194	2110	106	155.7	26
1921	2,301.8	301	6090	346	3,789.5	169
1922	1,368.5	17.9	1740	343	369.9	309
1923	610	88	810	145	197	18
1924	647.1	81	1100	309	447.6	71
1925	851.4	89	2900	279	2,041.7	245
1926	826.8	96	2740	290	1920.7	157
1927	1,461	184	2530	418	1070.3	328
1928	672.6	89	1640	1,133	970.7	376
1929	1,271.1	139	2480	3,673	1,212	1,018
1930	1,201.9	139	2610	1,754	1,408.1	332
1931	2,241.1	289	3540	4,697	1,298.4	336
1932	3,438.5	437	4190	454	750.1	165
1933	3,602.8	462	4400	708	793	188
1934	4,345.5	596	5240	7,851	896.6	933
1935	9,283.5	880	10020	1,707	732	141
1936	8,156	869	9670	6,305	1,516	351
1937	9,759	971	11350	9,939	1,591	565
1938	10,371	1,126	13040	17,476	2,671	648
1939	3,499	379	6600	15,889	3,098	424
1940	3,558	415	8810	20,623	5,256	744
1941	3,435	389	7650	22,711	4,215	502
1942	1,521	149	3380	4,795	1,859	377
1943	208	26	208	—	—	—
1944	198	24	198	—	—	—
1945	119	14	133	70	14	5
1946	484	64	520	133	38	10
1947	369	48	390	100	16	4

Josephine County (continued)

Year	Placer Dolst	Minus Silver		Lode Tons	Minus Dolst	Silver
1948	290 ¹¹	35 ¹¹	325	130 ¹¹	35 ¹¹	16 ¹¹
1949	205	22	240	74	36	30
1950	556	56	680	97	120	135
1951	244	31	270	99	28	35
1952	152	15	170	15	15	2
1953	74	8	74	-	-	-
1954	39	-	43	17	4	-
1955	67	2	69	2	2	-
1956	96	10	114	25	18	11
1957	71	9	78	95	7	20
1958	324	40	334	14	10	1
1959	257	33	269	13	12	1
1960	525	72	555	147	30	24
1961	503	72	511	8	8 ¹¹	-

157,857.7

20,169.7

1948-1961

5180

310,587

114,755.3

96,778.0

¹¹ Confidential. Permission to publish must be cleared with each company requesting concealment of data.

1902-1961

Grand 252,741

Total

PRODUCTION OF GOLD IN OREGON
1890 to 1943 inclusive

YEAR	TOTAL PRODUCTION	LODE PRODUCTION	PLACER PRODUCTION	REMARKS
1890	\$ 1,100,000	<i>1852-1863* 10,000,000 ?</i>		All statistics from Mineral Resources and Minerals Year-book except those for 1894 to 1897 inclusive were from U.S.G.S. annual reports.
1891	1,640,000	<i>1863-1889 about \$50,000,000</i>		
1892	1,400,000			
1893	1,645,300			
1894	888,300			
1895	2,113,356			
1896	1,251,000			
1897	1,353,100			
1898	1,177,600			
1899	1,429,500			
1900	1,694,700			
1901	1,818,100			
1902	1,816,700			
1903	1,290,200	\$ 1,083,531	\$ 206,669	Two dredges commenced operations.
1904	1,412,186	1,062,972	349,214	
1905	1,405,235	1,153,616	251,619	
1906	1,366,900	1,005,340	361,560	
1907	1,129,261	797,855	331,406	
1908	865,076	592,483	272,593	
1909	781,964	560,646	221,318	
1910	679,488	508,563	170,925	
1911	633,407	465,133	168,274	
1912	770,041	580,945	189,096	

YEAR	TOTAL PRODUCTION	LODE PRODUCTION	PLACER PRODUCTION	REMARKS
1913	\$ 1,627,710	\$ 1,177,082	\$ 450,628	
1914	1,591,461	1,043,144	548,317	
1915	1,861,796	1,379,626	482,170	
1916	1,902,179	1,029,662	827,517	
1917	1,491,798	764,432	727,366	
1918	1,270,465	772,216	498,249	
1919	977,845	597,194	380,651	
1920	1,017,490	566,373	451,117	
1921	882,034	403,301	478,733	
1922	531,568	185,431	346,137	
1923	498,008	221,238	276,770	
1924	551,482	224,373	327,109	
1925	430,753	243,149	187,604	
1926	273,759	150,475	123,284	
1927	303,383	119,031	184,352	
1928	225,968	106,205	119,763	
1929	353,323	105,997	247,326	
1930	297,702	83,283	214,419	
1931	317,315	88,848	228,467	
1932	410,568	75,645	334,923	
1933	418,391	40,543	377,848	Weighted average price of gold, \$25.56.
1934	1,178,220	400,935	777,285	Weighted average price of gold, \$34.95.
1935	1,895,604	750,963	1,144,641	Weighted average price of gold, \$35.00.
1936	2,126,355	746,620	1,379,735	

YEAR	TOTAL PRODUCTION	LODE PRODUCTION	PLACER PRODUCTION	REMARKS
1937	\$ 1,843,170	\$ 645,505	\$ 1,197,665	
1938	2,860,515	958,930	1,901,585	
1939	3,268,020	1,140,755	2,127,265	
1940	3,969,070	1,463,875	2,505,195	
1941	3,379,775	1,264,725	2,115,050	Preliminary estimates.
1942	1,618,155	276,395	1,341,760	
1943	38,395	31,115	7,280	
1944	47,915	37,660	10,255	TOTAL 1852-1945
1945	156,345 161,000	16,835	139,510	AU \$126,551,433. AG \$4,785,838.
1946	615,930	38,860	577,570	
1947	664,265	46,585	617,680	
1948	511,385	73,115	438,270	
1949	567,910	61,635	506,275	
1950	387,030	71,260	315,770	
1951	277,445	26,705	250,740	TOTAL 1852-1951 \$129,575,338 (AU)
1952	192,815	21,455	171,360	
1953	297,080	41,965	255,115	
1954	228,200	53,480	174,720	
1955	59,780	52,675	7,105	
1956	95,830	83,440	12,390	
1957	118,335	112,070	6,265	" " -1957 \$130,567,438
1958				

TOTAL MINERAL PRODUCTION

OF OREGON

1863 -- 1940

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
702 Woodlark Building
Portland, Oregon

TOTAL MINERAL PRODUCTION OF OREGON

Date	Metals	Non-Metals	Remarks
Up to 1863	\$10,000,000	----	Prof. J. S. Newberry reported in 1855 that Coos Bay Coal field had begun to attract attention. 1st gold 1852?
1864	6,200,000	----	
1865	5,800,000	\$ 1,500	1st report of coal received at S.F. spot value at mines est. at \$3.00 a ton. Coal prod. taken as that amount rec'd at S.F.
1866	8,000,000	6,360	Browne states statistical tables supposed to be worthy of credit show a probable yield of \$20,000,000 for 1866.
1867	4,000,000	15,000	First report--J. Ross Browne, spec. commissioner--
1868	3,677,850	29,736	1st cast of pig iron at Oswego. Non-metals all coal as above. Willamette Salt Wks. described. Queen of Bronze copper mine mentioned.
1869	3,000,000	44,472	
1870	3,000,000	61,701	
1871	2,000,000	86,070	
1872	2,000,000	97,686	Coal received at S.F. value est. @ \$3.00.
1873	1,376,389	114,198	" " " " " " " "
1874	609,070	145,152	Tonnage of coal from Mineral Industry (Vol.1--1892) value est. @ \$3.00 by F.W.L.
1875	1,165,046	96,768	Ditto
1876	692,091	90,000	Report Director of Mint fiscal year ending 6/30/1877 (for gold and silver). Tonnage coal est. by Min. Industry value by F.W.L. at \$3.00--ditto to 1885.
1877	633,564	105,000	No report available for gold and silver. Estimated average of 76 and 77.
1878	575,037	120,000	Director of Mint fiscal year ending 6/30/79 for gold and silver.
1879	583,365	126,000	Fiscal year ending 6/30/80 for gold and silver.
1880	1,125,494	135,000	
1881	1,150,000	120,000	
1882	866,382	123,000	1st Hg of \$1,382--50 flasks.
1883	680,000	129,000	
1884	680,000	135,000	
1885	810,000	125,000	Value of coal taken @ \$2.50.
1886	995,000	112,500	First prod. of min. waters mentioned in Mineral
1887	914,592	70,000	First Platinum recorded.
1888	841,360	225,000	
1889	1,224,282	258,904	1st stone production recorded (\$93,574). 1st min. water \$1,680. Coal value \$2.89.
1890	1,196,969	230,444	Non-metals only coal and rock.
1891	1,937,374	155,478	Only \$3,000 of rock. No report of min. waters.
1892	1,447,425	189,546	
1893	1,660,557	199,655	Contains \$8,800 min. waters.
1894	2,123,707	350,895	No rep. min water. 1st prod. clay products recorded (\$161,988)
1895	954, 230	389,137	No rep. min. water.
1896	1,329,998	427,298	Min. water 2,840.
1897	1,394,500	408,695	No min. water. Rock only \$1,125.
	74,644,282	4,916,100	

Fwd.	\$74,644,282	\$4,916,100	
Date	Metals	Non-Metals	Remarks
1898	1,255,600	359,842	Gypsum--\$450
1899	1,510,080	605,301	
1900	1,775,236	540,719	
1901	1,917,794	477,864	Copper & Lead produced but amount not recorded.
1902	1,866,149	545,695	
1903	1,353,920	791,443	
1904	1,524,769	960,204	Copper & Lead first reported \$37,299.
1905	1,463,656	978,317	Non-metals contain some copper and lead. Black sand investigation by U.S.G.S.
1906	1,525,552	1,159,042	
1907	1,391,030	1,247,557	
1908	975,153	1,768,281	
1909	925,575	1,888,995	
1910	708,918	3,031,009	
1911	672,279	2,520,400	
1912	850,899	1,702,650	
1913	1,747,077	1,816,842	
1914	1,679,528	1,651,604	
1915	2,001,950	1,654,612	Non-metals include small amts. platinum and antimony.
1916	3,017,981	1,480,651	Chrome \$37,806 1st prod. 3000 ±
1917	2,485,049	1,589,198	6,700
1918	2,928,662	1,263,078	18,454
1919	1,575,850	2,386,972	538
1920	1,552,550	3,943,703	955
1921	956,235	4,243,568	159 Tot. 29,806 tons
1922	839,178	4,650,778	
1923	780,216	5,273,707	
1924	680,698	6,683,534	
1925	449,611	7,377,100	
1926	340,004	6,601,351	
1927	638,850	6,182,374	1st large Hg prod. \$242,761
1928	760,594	5,926,394	Hg--458,147 Gold only 225,968.
1929	933,554	5,943,149	
1930	661,341	5,508,557	
1931	758,119	4,287,188	
1932	564,127		No prod. by states of non-metals.
1933	607,393		Ditto. Av. weighted price gold--\$25.56 an oz.
1934	1,476,049	2,735,348	
1935	2,262,902	3,333,582	
1936	2,591,389	4,555,343	
1937	2,392,133	5,234,776	Total for year--\$7,626,909
Total	\$129,041,932	\$112,900,728	

1938	3,284,925	5,500,000	Total for year--\$8,784,925
1939	3,746,427	5,500,000	" " " \$9,246,427
1940	5,479,670	5,750,000	" " " \$11,229,670
1941			\$12,830,176
1942	3,159,860	10,905,712	\$14,065,572

Metals include: gold, silver, copper, lead, zinc, quicksilver, platinum, chromium.
 Non-metals include: sand, gravel, crushed rock, limestone (except cement rock), diatomite, clay products, cement, mineral waters, small amt. gypsum.

1938 Minerals Yearbook gives total production for gold, silver, lead, copper, and zinc for years 1852-1937 as \$120,047,694.

1943	1,346,000	10,964,000	\$12,310,000
1944	766,000	8,891,000	9,668,000
1945	680,150	8,716,000	9,398,000

METALS

Year	Gold	Silver	Hg.	Year	Gold	Silver	Copper	Lead	Zinc	Hg.	Pt.	Pt.
1840				1900	1,694,700	71,548				8,988		
to				1901	1,818,100	96,060				3,634		
1863	10,000,000			1902	1,816,700	49,449						
inc				1903	1,290,200	63,720						
				1904	1,412,186	75,284						
1864	6,200,000			1905	1,405,235	54,744				1,558		
1865	5,800,000			1906	1,366,900	53,162	80,250			118		
1866	8,000,000**			1907	1,222,200	63,400						
1867	4,000,000			1908	905,900	30,000						
1868	3,677,850			1909	829,000	36,200						
1869	3,000,000			1910	681,400	23,600						
1870	3,000,000			1911	633,407	23,965						
1871	2,000,000			1912	770,041	35,105						
1872	2,000,000**			1913	1,627,710	108,139						
1873	1,376,389			1914	1,591,461	78,831	5,220	641				3,375
1874	609,070			1915	1,861,796	57,799	78,955	2,959		441		
1875	1,165,046			1916	1,902,179	152,223	881,144	1,932		38,145		1,780
1876	692,091-Rpt. Dr. Mint			1917	1,491,798	103,541	675,535			40,864		9,208
fiscal yr. end. 6/31/77				1918	1,270,465	107,323	605,401	753		82,485		7,185
1877				1919	977,845	124,455	411,955			39,276		12,567
1878	575,037			1920	1,017,490	90,190	433,371			1,912		2,101
fiscal Yr. end. 6.30/79												
1879	583,365	1,174		1921	882,034	42,120	22,485					
fiscal yr. end. 6.30/80												
1880	1,097,701	27,793		1922	531,568	151,812	141,281					
1881	1,100,000	50,000		1923	498,008	78,984	188,671					
1882	830,000	35,000	1,382	1924	551,842	25,529	100,660					
1883	660,000	20,000		1925	392,409	22,758	15,098					
1884	660,000	20,000		1926	273,759	18,553	41,504					
1885	800,000	10,000		1927	303,383	25,986	63,954			242,761		
1886	990,000	5,000		1928	225,968	18,091	51,619			458,147		
1887	900,000	10,000	2,754*	1929	353,323	15,995	115,411			446,684		* 1,838 ?
1888	825,000	15,000	1,360	1930	297,702	3,465	22,919			335,711		
1889	1,200,000	23,382	900	1931	317,315	2,104	155			437,716		
1890	1,100,000	96,969		1932	410,568	2,430	2,029			146,145		
1891	1,640,000			1933	517,326	7,266	733			79,483		
		297,374										
1892	1,400,000	47,425		1934	1,178,220	30,099	3,070	1,539	3,147	255,573		
1893	1,645,300	15,257		1935	1,895,604	79,339	33,017	2,383		248,798		
1894	2,113,356	10,351		1936	2,126,355	65,880	52,808	7,268	6,100	329,750		
1895	888,300	65,930		1937	1,843,170	46,846	99,220	12,862	3,120	384,527		
1896	1,251,000	78,998	com. vl.	1938	2,860,515	64,974	7,448	2,116	—	347,917	1,075	
1897	1,353,100	41,400	" "	1939	3,268,020	71,536	9,984	1,410	—	477,293		
		Ag. est. 60¢		1940	3,469,070	155,813	19,888	3,500	—	1,599,436		
1898	1,177,600	78,000		1941	3,379,775	196,379	19,588	6,272	—	1,671,101		Sb
1899	1,429,500	80,580		1942	1,618,155	62,131	24,926	3,082	—	1,361,687		4,563
				1943	38,395	7,483	1,560	600	—	907,922		12,170
				1944	47,915	14,395	810	640	—	373,899		16,089

* Agents of Consumers (dealers) bought \$1,838 from placer Operators in Oregon & Wash. (448 oz.)
Platinum

** Estimated by Raymond
1933 av. weighted price Au \$25.56 Au oz.

1945	161,000	7,607	82	886	575
1946	615,930	5,597	2268	436	—
1947	664,265	27,493	5,580	3,456	242
1948	511,385	12,305	868	2,506	—
1949	567,910	11,037	7,880	3,792	1,488
1950	387,030	12,277	7,904	4,590	5,964

Total

					NON-METALS				
Year	Clay Products	Coal	Stone	Min. Waters	Year	Clay Products	Coal	Stone	Min Waters Gypsum
1865		1,500*			1900	281,385	220,001	25,663	11,960 1,710
1866		6,360*			1901	263,891	173,646	36,305	4,022
1867		15,000*			1902	318,604	160,075	59,671	7,345 with others
1868		29,736**			1903	425,544	221,031	138,007	6,861
1869		44,472*			1904	446,340	243,588	256,980	13,296
					1905		282,495		8,107
					1906	506,192	212,338	142,067 Lime	5,556 " "
								107,644	32,388
1870		61,701*			1907		106,304		
1871		86,070*			1908				
1872		97,686	Coal rec'd at SF		1909				
			value @ 3.00 (est.FWL)		1910				
1873		114,198							
1874		145,152	Tonnage coal	Min. Industry, vol.1					
1875		96,768	(1892) value taken @ 3.00						
1876		90,000	Tonnage Est. by Min. Ind.						
1877		105,000	"						
1878		120,000	"						
1879		126,000	"						
1880		135,000	"						
1881		120,000	"						
1882		123,000	"						
1883		129,000	"						
1884		135,000	"						
1885		125,000	"						
1886		112,500	"						
1887		70,000	"						
1888		225,000	"						
1889		163,650	93,574	1,680					
1890		177,875	52,574						
1891		155,478	3,000						
1892		148,546	41,000						
1893		164,500	26,355	8,800					
1894	161,988	183,914	4,993						
1895	138,543	247,901	2,698						
1896	126,345	294,564	3,549	2,840					
1897	115,798	291,772	1,125						
1898	131,864	212,184	15,344	Gypsum—450					
1899	327,324	260,917	15,165	" 1,895					

* Received at S.F. spot value fob mine \$3.00 est.
 ** Average of 1867 and 1869

In 1892 Oregon produced 11,500 long tons brown hematite
 1891 29,013
 1880 6,225

CHROMITE:

1935-1939 435
 1940 269
 41 840
 42 2,683 ~~\$2,683~~
 43 16,363 \$374,119
 44 7,818 ~~312,096~~
 28,408 @ \$40 Grand total 58,214

Chromite production at Stockpiles.
 1942 to end of 1944

Grants Pass * (partly from N. California)

High A 15,890.66 @ \$48 = 762,751.68
 A 14,860.109 @ \$40 = 594,404.00
 B 219.008 @ \$32 = 7,108.00
 1364,263.68

Seneca

High A 109.806 G.T. @ \$48 = 5,270.6
 A 2086.5912 @ \$40 = 83,463.68
 B 252.655 @ \$32 = 8,085.17
 896,819.45

33,418.827

ORE CR A 5,000

200,000.00
 96,819.40
 1,364,263.68

TOTAL

\$1,661,083.08

In 1889 & 1890 Oregon's brown hematite included with other states
 In 1888 & 1891 Pig iron reported at 2,509 and 10,411
 In 1889 & 1890 Pig iron reported at 29,421 and 12,305
 In 1867 first pig iron produced at Oswego

STATE PLACER
FINE OIL

1900-1933

~~1 7 6, 1 3 2.0 0~~ *

*

*

1 5, 2 6 8.0 0

6 8, 7 9 0.0 0

1 1, 7 9 8.0 0

1 0, 0 0 0.0 0

1 6, 8 9 5.0 0

1 2, 1 7 2.0 0

1 7, 4 9 0.0 0

1 6, 0 3 1.0 0

1 3, 1 8 6.0 0

1 0, 7 0 6.0 0

8, 2 6 8.0 0

8, 1 4 0.0 0

9, 1 4 7.0 0

2 1, 7 9 9.0 0

2 6, 5 2 4.0 0

2 3, 3 2 4.0 0

4 2, 2 0 8.0 0

3 5, 1 8 6.0 0

2 4, 1 0 2.0 0

1 8, 4 1 3.0 0

2 1, 8 2 2.0 0

2 3, 1 5 8.0 0

1 6, 7 4 4.0 0

1 3, 3 8 8.0 0

1 5, 7 5 0.0 0

9, 0 3 7.0 0

5, 9 3 8.0 0

8, 8 8 6.0 0

5, 8 3 0.0 0

1 1, 9 4 7.0 0

1 0, 3 7 2.0 0

1 1, 1 1 9.0 0

1 6, 2 0 1.0 0

1 4, 7 8 2.0 0

5 9 4, 4 2 1.0 0 *

STATE PLACER
FINE OIL

1934-1963

*

2 2, 2 3 9.0 0

3 2, 7 0 4.0 0

3 9, 4 2 1.0 0

3 4, 2 1 9.0 0

5 4, 3 3 1.0 0

6 0, 7 7 9.0 0

7 1, 5 7 7.0 0

6 0, 4 3 0.0 0

3 8, 3 3 6.0 0

2 0 8.0 0

2 9 3.0 0

	8, 2	6	8.0	0
	8, 1	4	0.0	0
	9, 1	4	7.0	0
2	1, 7	9	9.0	0
2	6, 5	2	4.0	0
2	3, 3	2	4.0	0
4	2, 2	0	8.0	0
3	5, 1	8	6.0	0
2	4, 1	0	2.0	0
1	8, 4	1	3.0	0
2	1, 8	2	2.0	0
2	3, 1	5	8.0	0
1	6, 7	4	4.0	0
1	3, 3	8	8.0	0
1	5, 7	5	0.0	0
	9, 0	3	7.0	0
	5, 9	3	8.0	0
	8, 8	8	6.0	0
	5, 8	3	0.0	0
1	1, 9	4	7.0	0
1	0, 3	7	2.0	0
1	1, 1	1	9.0	0
1	6, 2	0	1.0	0
1	4, 7	8	2.0	0
5	9	4, 4	2	1.0 0 *

STATE DEPT
FINE CL

1934-1963

					*
2	2, 2	3	9.0	0	
3	2, 7	0	4.0	0	
3	9, 4	2	1.0	0	
3	4, 2	1	9.0	0	
5	4, 3	3	1.0	0	
6	0, 7	7	9.0	0	
7	1, 5	7	7.0	0	
6	0, 4	3	0.0	0	
3	8, 3	3	6.0	0	
		2	0	8.0 0	
		2	9	3.0 0	
	3, 9	8	6.0	0	
1	6, 5	0	2.0	0	
1	7, 6	4	8.0	0	
1	2, 5	2	2.0	0	
1	4, 4	6	5.0	0	
	9, 0	2	2.0	0	
	7, 1	6	4.0	0	
	4, 8	9	6.0	0	
	7, 2	8	9.0	0	
	4, 9	9	2.0	0	
		2	0	3.0 0	
		3	5	4.0 0	
		1	7	9.0 0	
		5	4	5.0 0	
		4	5	0.0 0	
		6	6	8.0 0	
		7	0	5.0 0	
		4	1	1.0 0	
		5	2	8.0 0	
5	1	7, 0	6	6.0 0 *	

Gold and Silver Production in Oregon 1900 - 1963

	GOLD				SILVER				E&MJ Yearly averages
	Lode (fine oz)	Placer (fine oz)	Total (fine oz)	Total value	Lode (fine oz)	Placer (fine oz)	Total (fine oz)	Total value	
1900	68,319	15,268	83,587	1,727,894	132,042				61.330 cents/oz
1901	19,969	68,790	80,759	1,834,808	163,873				58.950
1902	77,086 (1)	11,798	88,884	1,837,392	109,436				52.160
1903	55,447	10,000	65,447	1,352,907	125,599				53.570
1904	51,426	16,895	68,321	1,412,186	131,981	96	90,636		57.221
1905	55,806.17	12,172.06	67,978.23	1,405,235	88,691	1,945	79,346		60.352
1906	48,633.32	17,490.46	66,123.78	1,366,900	75,992	3,354	86,718		66.791
1907	38,596.23	16,031.77	54,628.00	1,129,261	83,927	2,791	43,602		65.237
1908	28,661.37	13,186.68	41,848.05	865,076	37,751	5,851	27,827		52.864
1909	27,121.25	10,706.26	37,827.51	781,964	25,773	2,054	35,978		51.502
1910	24,601.73	8,268.50	32,870.23	679,488	34,739	1,239	45,221		53.486
1911	22,500.81	8,140.25	30,641.06	633,407	43,964	1,257	57,081		53.304
1912	28,103.21	9,147.52	37,250.73	770,041	55,140	1,941	179,036		60.835
1913	56,941.34	21,799.13	78,740.47	1,627,710	173,543	5,493	142,552		59.791
1914	50,462.09	26,524.83	76,986.92	1,591,461	137,040	5,512	117,947		54.811
1915	66,739.41	23,324.97	90,064.38	1,861,796	112,420	5,527	231,342		49.694
1916	49,809.90	42,208.01	92,017.91	1,902,179	222,093	9,249	125,656		65.661
1917	36,979.40	35,186.33	72,165.73	1,491,798	118,496	7,160	107,323		81.417
1918	37,355.95	24,102.79	61,458.74	1,270,465	103,221	4,102	111,121		96.772
1919	28,889.26	18,413.99	47,303.25	977,845	107,451	3,670	82,743	90,190	111.122
1920	27,398.29	21,822.79	49,221.08	1,017,490	77,890	4,853	42,120	42,120	100.900
1921	19,509.68	23,158.71	42,668.39	882,034	37,829	4,292	151,812	151,812	62.654
1922	8,970.24	16,744.36	25,714.60	531,568	148,801	3,011	96,322	78,984	67.528
1923	10,702.39	13,388.75	24,091.14	498,008	94,260	2,062	38,103	25,529	
1924	10,945.32	15,750.04	26,695.36	551,842	35,824	2,279	32,793	22,758	
1925	9,945.42	9,037.38	18,982.80	392,409	31,662	1,131	29,733	18,553	
1926	7,304.68	5,938.42	13,243.10	273,759	28,890	843	45,830	25,986	
1927	5,789.80	8,886.36	14,676.16	303,383	44,675	1,155	30,924	18,091	
1928	5,110.79	5,830.40	10,941.19	225,968	30,145	779	30,009	15,995	
1929	5,144.87	11,947.13	17,092.00	353,323	28,231	1,778	9,000	3,465	
1930	4,028.80	10,372.54	14,401.34	297,702	7,421	1,579	7,254	2,104	
1931	4,231.07	11,119.03	15,350.10	317,315	5,690	1,564	8,616	2,430	
1932	3,659.31	16,201.90	19,861.21	410,568	6,371	2,245	20,760	7,266	
1933	5,456.90	14,782.76	20,239.66	517,326	18,594	2,166	46,560	30,099	
1934	11,471.68	22,239.91	33,711.59	1,178,220	42,983	3,577	110,385	79,339	
1935	21,456.08	32,704.03	54,160.11	1,895,604	106,410	3,975			

BAKER COUNTY

GOLD			SILVER		
	Placer	Lode		Placer	Lode
1902	\$ 203,498.40	\$1,334,791.15	\$ -		\$ 30,893.99
1903	141,274.35	1,048,546.10	18.10		24,482.97
1904	87,797.15	1,251,173.70	6.34		69,202.64
1905	43,134.00	1,263,293.50	268.79		49,651.92
1906	57,327.55	1,120,500.15	340.28		48,264.56
1907	104,557.25	963,880.75	506.80		62,471.25
1908	65,010.75	794,976.35	370.15		15,462.83
1909	27,885.90	679,058.10	165.62		17,494.56
1910	19,091.80	659,854.65	105.89		26,894.79
1911	29,428.35	630,528.15	161.09		27,843.23
1912	64,057.70	755,484.10	519.47		349,022.30
1913	609,018.90	1,716,454.60	3,868.88		67,790.84
1914	625,579.15	1,599,131.10	4,027.25		48,704.39
1915	616,141.75	2,237,420.50	4,108.70		95,553.52
1916	1,120,975.80	1,656,809.00	7,308.78		185,893.34
1917	875,372.75	1,204,121.80	56,680.15		85,436.53
1918	527,558.85	1,181,914.65	2,828.13		78,970.30
1919	419,114.50	999,492.20	2,531.29		79,337.30
1920	575,127.35	932,396.85	3,483.35		65,684.90
1921	508,941.30	516,186.30	2,927.68		32,827.97
1922	321,844.25	224,506.45	1,943.94		127,092.77
1923	191,668.40	300,020.70	1,065.19		75,191.02
1924	308,581.00	240,418.85	1,367.46		22,688.35
1925	123,953.90	182,927.15	460.65		17,907.24
1926	46,923.80	81,016.25	289.60		7,910.61
1927	103,676.30	35,675.85	437.12		7,660.83
1928	7,204.40	12,111.40	35.30		1,242.57
1929	36,904.00	6,442.45	135.75		286.89
1930	13,835.15	20,708.10	Total - 1,277.86		
1931	55,232.45	24,098.20	209.06		130.32
1932	73,442.95	24,874.15	347.52		568.34
1933	53,177.60	103,194.00	287.79		15,125.27
1934	159,958.40	241,313.10	721.29		33,521.20
1935	255,094.00	447,872.60	1,172.88		75,163.87
1936	353,850.00	444,500.00	2,026.30		44,468.08
1937	314,965.00	413,000.00	1,875.16		29,483.09
1938	500,535.00	786,730.00	2,938.54		75,793.75
1939	770,070.00	769,790.00	4,699.67		76,058.92
1940	742,210.00	925,610.00	4,387.44		115,956.75
1941	805,875.00	647,605.00	4,417.31		71,644.33
1942	575,925.00	95,585.00	3,448.96		6,468.94
1943	1,190.00	13,230.00	3.62		608.16

Year

Number of
Mines

Gold

Fine Ounces

Value

Value as corrected to
\$35.00 gold

1902

25

5,814.24

\$ 98,758

\$ 203,498.40

1903

34

4,036.41

83,440

141,274.35

1904

23

2,508.49

51,855

87,797.15

1905

19

1,232.40

25,476

43,134.00

1906

23

1,637.93

33,859

57,327.55

✓1907

25

2,987.35

61,754

104,557.25

✓1908

29

1,857.45

38,397

65,010.75

✓1909

22

796.74

16,470

27,885.90

✓1910

29

545.48

11,276

19,091.80

✓1911

23

840.80

17,381

29,428.35

✓1912

26

1,830.22

37,834

64,057.70

✓1913

27

17,400.54

359,701

609,018.90

✓1914

19

17,873.69

369,482

625,579.15

✓1915

14

17,604.05

363,908

616,141.75

✓1916

14

32,027.88

662,075

1,120,975.80

✓1917

10

25,010.65

517,016

875,372.75

✓1918

22

15,073.11

311,589

527,558.85

✓1919

10

11,974.70

247,539

419,114.50

✓1920

8

16,432.21

339,684

525,127.35

✓1921

12

14,541.18

300,593

508,941.30

✓1922

36

9,195.55

190,089

321,844.25

✓1923

44

5,476.24

116,204

191,668.40

✓1924

17

8,816.60

162,255

308,581.00

✓1925

19

3,541.54

73,210

123,953.90

✓1926

24

1,340.68

27,714

46,923.80

✓1927

30

2,962.18

61,234

103,676.30

✓1928

17

205.84

4,255

7,204.40

✓1929

15

1,054.40

21,796

36,904.00

✓1930

12

395.29

8,171

13,835.15

✓1931

20

1,578.07

32,622

55,232.45

✓1932

14

2,098.37

43,377

73,442.95

✓1933

55

1,519.36

61,408

53,177.60

✓1934

65

4,570.24

159,730

159,958.40

✓1935

51

7,238.40

255,094

255,094.00 OK

✓1936

28

10,110.00

353,850

353,850.00

✓1937

24

8,999.00

314,965

314,965.00

✓1938

29

14,301.00

500,535

500,535.00

✓1939

39

22,002.00

770,070

770,070.00

✓1940

36

21,206.00

742,210

742,210.00

✓1941

31

23,025.00

805,875

805,875.00

✓1942

11

16,455.00

575,925

575,925.00

✓1943

1

34.00

1,190

1,190.00

TOTAL

358,200.28

9,216,866

\$ 12,537,000

1st Sample Ridge

2nd Sample Ridge

Gold, Silver, Copper, Lead, and Zinc Production in Baker County, Oregon, 1902-1943

(Compiled by Charles White Merrill, Metal Economics Division, Bureau of Mines)

Total Value	Number of Mines	Ore	Gold		Silver	
		Short Tons	Fine Ounces	Value	Fine Ounces	Value
98,758	17	18,936	38,136.89	\$ 788,345	34,137	\$ 17,096
83,451	19	47,010	29,958.46	809,097	27,053	14,609
51,859	31	69,973	35,747.82	738,973	76,467	44,351
23,655	18	75,053	36,094.10	746,132	54,864	38,138
34,111	22	58,889	32,014.29	631,794	53,331	35,732
62,124	21	69,881	27,539.45	569,291	69,029	45,559
39,614	21	38,413	22,713.61	469,532	17,086	9,056
16,565	20	32,521	19,401.66	401,068	19,331	10,052
11,339	25	56,263	18,852.99	389,726	29,718	16,048
17,475	11	74,558	18,015.09	372,405	30,766	16,306
38,187	23	70,631	21,585.26	446,207	38,566	23,718
362,883	14	117,040	49,041.56	1,013,779	74,907	45,244
371,943	12	97,722	45,689.46	944,485	53,817	29,761
366,210	12	143,727	63,926.30	1,321,474	105,584	53,531
667,382	13	144,129	47,337.40	978,551	205,407	136,158
522,176	11	131,208	34,403.48	711,183	94,405	77,790
314,714	18	118,960	33,768.99	698,067	87,260	87,260
250,671	12	95,062	28,556.92	590,324	87,666	98,186
343,880	8	80,243	26,639.91	550,696	72,580	79,112
303,828	10	38,569	14,748.18	304,872	36,274	36,274
192,237	18	24,350	6,414.47	132,599	140,434	140,434
114,169	22	47,608	8,572.02	177,199	83,084	68,129
183,267	12	37,289	6,869.11	141,997	25,070	16,797
73,563	116	24,874	5,226.49	108,041	19,787	13,732
27,914	17	12,950	2,314.75	47,850	8,741	5,454
61,508	13	16,518	1,019.31	21,071	8,465	4,800
4,278	9	3,111	346.04	7,153	1,373	803
21,876	11	566	184.07	3,805	317	169
8,201	10	4,907	591.66	12,231	781	301
32,689	15	701	688.52	14,233	144	42
43,485	20	767	710.69	14,691	628	177
31,518	28	5,842	2,948.40	60,949	16,713	5,850
160,245	25	37,376	6,894.66	240,968	37,040	23,945
255,026	28	144,338	12,796.36	447,873	83,054	59,695
355,584	26	88,494	12,700.00	444,500	49,136	38,056
316,568	30	47,409	11,800.00	413,000	32,578	25,199
502,634	23	51,339	22,478.00	786,730	83,750	54,141
773,595	30	38,339	21,994.00	769,790	84,043	57,047
745,657	26	55,941	26,446.00	925,610	128,129	91,114
809,346	22	38,448	18,503.00	647,605	79,165	56,295
578,635	11	6,623	2,731.00	95,585	7,148	5,083
1,193	8	1,283	378.00	13,230	672	478
9,275,420	—	2,267,811	816,778.37	18,832,711	2,158,500	1,575,722

Copper		Lead		Total Value	Total Value (Lode & Placer)
Pounds	Value	Pounds	Value		
---	---	---	---	\$ 805,441	\$ 904,199
1,800	232	8,121	290	623,706	707,157
3,200	499	---	---	793,846	835,705
---	36	---	---	779,769	805,424
---	---	---	---	697,562	731,073
---	---	---	---	614,850	676,974
13,861	1,760	---	---	478,588	517,202
---	---	---	---	411,120	427,085
951	157	---	---	407,534	418,873
2,783	431	---	---	388,711	406,186
692	92	19,796	871	470,082	508,269
397,103	69,493	11,179	436	1,060,325	1,422,608
2,631,727	647,405	1,872	88	974,774	1,346,717
1,386,271	376,452	---	---	1,444,586	1,810,796
1,655,319	408,864	7,663	---	1,761,114	2,428,503
2,095,491	389,761	---	544	1,167,425	1,689,601
2,355,276	433,371	---	---	1,194,735	1,509,449
174,300	22,425	---	---	1,078,271	1,328,942
1,041,196	140,561	75,694	---	1,063,179	1,407,059
1,277,494	187,792	26,666	4,183	363,031	667,459
761,141	99,709	---	1,867	417,757	609,994
106,325	15,098	2,079	---	434,987	549,156
254,578	32,841	---	181	258,503	441,770
486,480	63,729	---	---	137,052	210,615
71,841	10,345	---	---	86,145	114,059
126	22	---	---	89,600	151,108
---	---	---	---	18,301	22,579
---	---	---	---	3,996	25,872
9,071	561	2,480	---	12,532	20,733
26,150	2,092	517	92	14,275	46,964
352,945	29,294	2,610	119	14,868	58,553
422,000	38,824	14,000	104	67,472	98,990
556,000	67,276	32,000	644	267,024	427,269
74,000	7,252	42,000	1,238	536,966	792,992
92,000	9,568	18,000	1,932	528,024	877,608
132,000	14,916	16,000	846	507,563	823,931
88,000	10,384	14,000	800	850,055	1,352,689
6,000	726	---	798	837,251	1,610,846
6,300	819	---	---	1,032,440	1,778,097
---	---	---	---	715,082	1,524,428
---	---	---	---	101,594	680,029
---	---	---	---	14,527	15,720
16,462,606	3,084,867	294,677	15,563	23,508,863	32,784,283

**METALS
ECONOMICS
GROUP**

COGSWELL TOWER, SUITE 804
2000 BARRINGTON STREET
P.O. BOX 2206
HALIFAX, NOVA SCOTIA
CANADA B3J 3C4
PHONE: (902) 429-2880
FAX: (902) 429-6593
TELEX: 0636700485 MBX CA

U.S. OFFICE:
P.O. BOX 1699
BOULDER, COLORADO
80306-1699 USA
PHONE: (303) 442-7501
FAX: (303) 442-7403

PRESS RELEASE

December 5, 1991

**Metals Economics Group
2000 Barrington Street
P.O. Box 2206
Halifax, Nova Scotia
CANADA B3J 3C4
(902) 429-2880**

POTENTIAL NEW U.S. PRIMARY GOLD PRODUCTION

Despite the low gold price, ten primary gold projects with a combined 568,000 ounces of projected annual gold production are in the preproduction stage and are scheduled to come onstream in 1991 or 1992. Metals Economics Group's newly published study, *Potential New U.S. Gold Production*, profiles 138 projects, 79 of which are undergoing active advanced-stage development, and 59 projects that did undergo active development programs during the past three years, but which are now on hold primarily for financial reasons. Total reserves for the 79 active development projects are 36.8 million ounces of gold contained in approximately 779 million st of ore, with a weighted average grade of 0.047 oz/st Au. Total reserves for the 59 inactive U.S. development-stage projects are 12.2 million oz of gold contained in approximately 267 million st of ore with a weighted average grade of 0.046 oz/st Au.

The following table from the study lists the current gold reserves in active late-stage projects and the number of advanced-stage projects in each state.

U.S. Gold Reserves by State in Active Late-Stage Development Projects

(Listed from high to low contained gold)

<u>State</u>	<u>Number of Development Projects</u>	<u>Total Ounces of Contained Gold</u>
Alaska	11	11,332,500
California	17	6,841,540
Idaho	8	4,285,920
Montana	7	4,016,530
Nevada	17	3,190,150
Oregon	4	3,132,910
Washington	2	1,044,460
Arizona	6	822,075
South Carolina	1	672,000
South Dakota	1	572,000
New Mexico	1	349,800
Maine	1	144,000
Colorado	1	140,472
Georgia	1	129,250
Utah	1	80,000
Totals	79	36,753,607

Metals Economics Group

Twenty of the 59 inactive projects are in Nevada, with 4.6 million oz of contained gold; eight are in California, with almost 2 million oz of contained gold; seven are in Montana with about 1.7 million oz of contained gold; and six are in Colorado with approximately 1 million oz of contained gold.

This 640-page study looks in detail at each of the 138 projects, provides an overview of U.S. primary gold development (including tables that compare projects by reserves, capital costs, operating costs, etc.), and provides a current address and phone listing for all companies involved.

The price of *Potential New U.S. Gold Production 1991* is US\$1,600. Please order from Metals Economics Group, 2000 Barrington Street, P.O. Box 2206, Halifax, Nova Scotia, B3J 3C4, Canada (902) 429-2880.

—END—

Gold mining can be a rush

By Jeff Welsch

Gazette-Times sports editor

QUARTZVILLE — Though the chances of striking it rich through recreational mining are worse than the odds of winning the lottery, the search for gold still has a mystical quality that lures people back to rivers and mountains year after year.

And there definitely is gold in them thar hills.

But to find it, you've got to do it right and be ready to pay the price initially, says Jerry Kelly, an Oregon State University physical plant employee who teaches a "Quest for Gold" class every spring.

Here are some of Kelly's tips for having an enjoyable and successful recreational-mining experience:

■ **Take a gold-mining course or go with somebody who knows what they're doing.**

"I played around with a little prospecting for years and never had any luck," Kelly said. "Then I found a couple miners who showed me how and now every time I come up here I find gold."

■ **Be prepared to spend money.**

Though pans only cost about \$10, the serious miner invests in a sluice box (\$40) at the very least and a dredge (\$900-\$1,500) at the most. The cost of a dredge varies depending on the size of the suction nozzle.

"It can get you into the money real fast," Kelly said.

■ **Know where to find gold.**

Gold is frequently trapped by moss or found in gravel bars that build up during high water. It hugs the inside turns and becomes caught along with bigger material.

Look for natural riffles where water has a chance to slow down and keep an eye out for black

sand. The confluence of streams is often an ideal location.

■ **Know how to pan.**

1. Fill your pan about half to two-thirds full of soil, gravel and rock from a stream bank or stream channel.

2. Put the pan under water, break up the lumps of clay and discard the stones.

3. Holding the pan level under water, rotate it back and forth rapidly to wash out the clay and concentrate the heavy material at the bottom of the pan.

4. Still holding the pan under water, tilt it away from your body and down slightly, then rotate and shake until the light gravel and sand slide out the front. Repeat until a deposit of fine-grained dark material remains at the bottom.

5. Lift the pan out of the water, rotate in a circular motion and watch the water separate the light material from the heavier material — including gold. If

done properly, the gold should lag behind the other material at the bottom of the pan.

6. Stop rotating. If you're lucky, flecks of gold will be present. Carefully drain the water and let the gold and sand dry.

■ **Don't expect to get rich.**

Kelly said he usually finds about \$20 worth of gold each time he goes to Quartzville, though it's not unusual to "hit a vein" and find \$40 within a few minutes.

Most of the gold comes in flecks the size of a pin prick.

■ **All that glitters is not gold.**

Some of the shiny material in your pan is pyrite, or "Fool's Gold." But pyrite is brassy in color, sometimes tarnished and, because it occurs as crystals, changes shades when it's rotated in the sun.

— Sources: Jerry Kelly and Oregon Department of Geology and Mineral Industries

Where to pan

Oregon's recreational mining sites

■ **Quartzville Recreational Corridor:** Located 25 miles northeast of Sweet Home in the Cascades, the QRC is a 9.9-mile strip along Quartzville Creek above Green Peter Reservoir. No charge. Information: 1-399-5646.

■ **Butte Falls Recreational Area:** Located in the Medford District of Bureau of Land Management territory about 20 miles north of Medford. No charge. Information: 1-770-2200.

■ **Applegate Ranger District:** Located in the Rogue River National Forest south of Grants Pass and west of Medford. \$1 fee at four sites. Information: 1-899-1812.

■ **Wallowa-Whitman:** Located on three sites in the Wallowa-Whitman National Forest of northeastern Oregon. No charge. Information: 1-523-6391.

■ **NOTE:** Gold panning is permitted on nearly all streams and rivers running through campgrounds on BLM and Forest Service land in Oregon.

• Gold

Continued from Page B1
planted the gold in there."

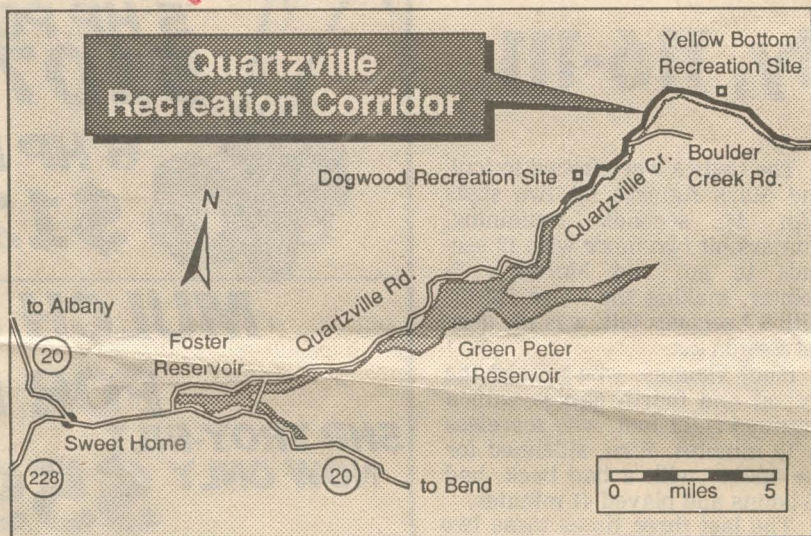
His "Quest for Gold" class members groaned, but Kelly quickly explained. All kidding aside, he had made three important points with his exhibition in the Cascade Mountains about 25 miles northeast of Sweet Home:

■ He had shown his pupils how to pan for gold.

■ He had shown that gold mining, for all its strike-it-rich dreams, is much harder work than merely and scooping up a pan of streamside sand.

■ He had shown that, even in 1991, there is still gold in them thar hills.

"I found that nugget up near Quartzville last year," Kelly said. "Every time I come up here I



Rich Hochadel/Gazette-Times

Particularly on this blustery Saturday morning. The creek is running high — too high to cross and work the sand bar on the on-

Luc Thelliez, an OSU student from France, nodded.

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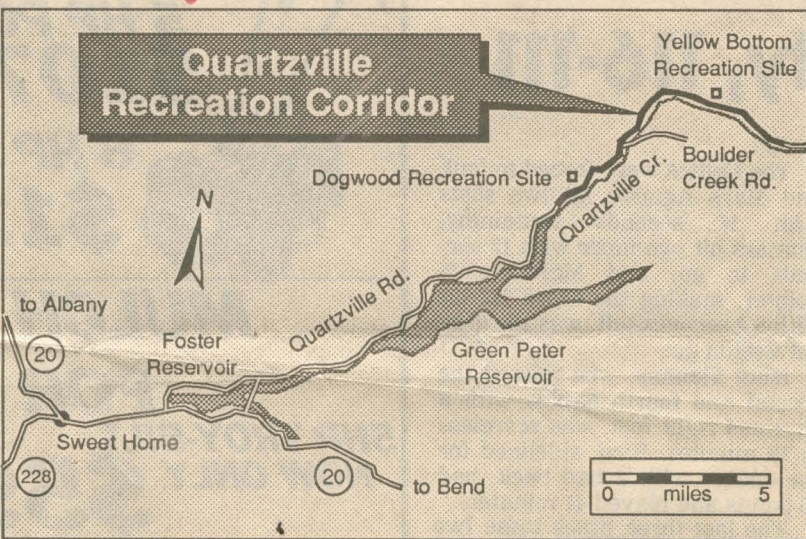
"I found that nugget up near Quartzville last year," Kelly said. "Every time I come up here I find gold."

Lots of folks are finding gold these days in the Quartzville Recreation Corridor, a 9.9-mile strip along Quartzville Creek that has been set aside for modern-day miners. The region first produced the coveted mineral in 1863 and the town of Quartzville became its hub.

The town is gone but gold remains. The corridor is one of four areas in Oregon set aside for recreational mining.

Kelly has been coming to this secluded spot just north of Green Peter Reservoir for many of the 45 years he's lived in Corvallis; for the past three he's been bringing students through OSU's Outdoor Recreation program. The cost is \$7 and all students need is a willingness to get wet and a bundle of patience.

"Gold panning," Kelly said, "is hard work."



Particularly on this blustery Saturday morning. The creek is running high — too high to cross and work the sand bar on the opposite side of where the frothing forces of smaller Canal Creek merge with the less-powerful Quartzville, leaving appetizing deposits just out of reach.

Small matter.

After a short training session in which Kelly deftly displays the proper panning technique, the group eagerly fans out just above a chasm. Some swirl water and sand in pans; others set up 3-foot sluice boxes in the stream.

It doesn't take long for Kelly to prove prophetic on one count: After an hour of picking and sifting and sorting, not one rookie prospector had amassed a retirement fortune.

"Heh, not even a start," OSU student Scott McComb said in mock disgust as he stood hunched over his black pan. "But, I'm having fun, and that's what it's all about."

Luc Thelliez, an OSU student from France, nodded.

"There are some places in France where there's a chance to do it, but I never did it," he said, "It's a beautiful opportunity to go outdoors."

Alas, Thelliez also has come up empty. Not even a fleck of pyrite, or "Fool's Gold."

"This is first time I do it," he said, smiling. "I guess I do it a bad way."

But just as it seemed a morning shutout was inevitable, McComb was seen squinting into his pan and poking at something in the center with an index finger.

Gold? McComb nods.

"It's pretty small, but it's gold," he said triumphantly.

"It's gold."

5018

May 3, 1991

Letters to the Editor
New Scientist
Stamford Street
London SE1 9LS
England

Dear Editor,

We read with interest your article on "Going for Gold" (13 April, 1991, p. 50). We in Oregon like gold panning so much that our agency has published the enclosed brochure on recreational gold panning. Copies of the brochure may be obtained by writing to the Oregon Department of Geology and Mineral Industries, 910 State Office Building, Portland, OR 97201, USA.

Things may be different in Quebec than they are in Oregon. Wolf Seufert recommends looking for gold on the outside of river bends where the current is fastest moving. Here in Oregon we like to look on the inside of river bends where the current has slowed enough to drop those pretty and heavy little nuggets and flecks of gold. Our brochure recommends other favored places to look, all involving locations where the current slows enough to drop the gold.

However you do it, gold panning is fun but hard work. Come to Oregon where you can enjoy the scenery while you labor in the rivers and streams.

Sincerely,

Beverly F. Vogt
Beverly F. Vogt
Publications Manager



910 State Office Bldg.
1400 SW Fifth Ave.
Portland, OR 97201-5528
(503) 229-5580
FAX 229-5639

Nov. 17, 1971

A Buyer for Placer Gold

Mr. Ralph I. Clark, 3028 92nd Place N.E., Bellevue, Washington, 98004 is in the market for placer gold. Prices to be determined by quality of flakes which will be used in jewelry.

STATE DEPARTMENT OF GEOLOGY
AND MINERAL INDUSTRIES
1069 STATE OFFICE BUILDING
PORTLAND, OREGON 97201

COPY

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

August 1, 1963

Mr. Darrell Brown
Canyonville
Oregon

Dear Mr. Brown:

After examining your Warner mill the other day I would like to offer the following suggestions which I hope will be helpful to you.

Since the Warner is a high-grade mine which produces most of its values in narrow and irregular veinlets and crushed zones which are quite well defined, it follows that the tonnage of ore will be small but high grade. By carefully cleaning out the pay streaks for several feet in advance of driving the workings to full access width, the grade can be kept at a maximum. Dilution due to an admixture of ore with wall rock not only lowers the grade but increases the tonnage to be milled and tends to lower the overall recovery. By careful mining of the pay zones and hand sorting, it should be possible to produce shipping ore without further treatment.

Due to the fact that both free gold and base ore in the form of arsenopyrite are present, it might be advantageous to run the feed through a set of rolls before shipment. This will permit easier handling of the ore and make sampling more accurate. Values in ore of this type are bound to be

spotty, and crushing would tend to average this out by mixing it more thoroughly. Smelter returns also could conceivably be higher due to better sampling.

If the decision is made to continue milling, several things might be done to improve present practice. As it was operated during my visit, the Marcy rod mill was underfed and was overgrinding the ore. Good mill practice calls for a much higher circulating load. Excessive rod and liner wear occurs in mills having too little burden. A larger mill feed pipe might also help.

Since you already have a 12 x 12 duplex Denver jig, it might be profitable to install it between the rod mill and the table, with a scalping screen if necessary, ahead of the jig. If a high-grade product could be obtained from the jig, several savings would ensue. First, the circulating load would be decreased; second, losses from sliming and other sources in the circuit would be eliminated. The feed from the lip of the jig to the table would have better classification. Tables work best with a fairly close size range of the feed. A two-deck screen, which need not be very large, would give a three-way split which could be diverted to either two or three tables. In addition to the sizing done by the screens, another benefit in the form of a clarified feed free of muddy water would help in adjusting the tables since it would then be possible to see just what was going on.

As presently operated, the table is not pulsing smoothly. Perhaps some longitudinal stiffeners attached to the underside of the deck might help. Variation in the number of pulses per minute might also be tried.

If after trying the procedures above, it is still impossible to achieve good milling practice, it might be advisable to do some testing with a

flotation system. Samples of your ore should be pre-tested by some of the companies making either flotation reagents or manufacturing flotation equipment. The Denver Equipment Company, 1400 Seventeenth Street, Denver, Colorado; The Dow Chemical Company, Midland, Michigan; and the American Cyanamid Company, 30 Rockefeller Plaza, New York City, are the principal companies that come to mind.

Amalgamation of the free gold should not be overlooked. Many times when operators report that their gold will not amalgamate, the trouble can be traced to either excessive oil or grease in the mill circuit or improperly prepared and dressed plates. Amalgamation should provide a relatively inexpensive method for removing the free gold from the circuit.

One further suggestion might be in order. The services of a registered mining engineer to assist in setting the mill in order would probably be profitable. We will be happy to recommend a qualified person to you if you wish. It is impossible in the scope of a letter to cover all of the various possibilities that might be tried in your mill, and only the most obvious courses of action have been touched upon. I hope, however, that the foregoing observations will prove useful to you.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
cc Len Ramp

2033 First Street
Baker, Oregon

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 State Office Building
Portland 1, Oregon

239 S.E. "H" Street
Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full Department of Geology and Mineral Industries

Post office address _____

Are you a citizen of Oregon? _____ Date on which sample is sent 7-26-63

Name (or names) of owners of the property Warner mine

Are you hiring labor? _____ Are you milling or shipping ore? _____

Name of claim sample obtained from _____

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Jackson Mining District Gold Hill

Township 33 S Range 4 W Section 4 Quarter section _____

How far from passable road? On road Name of road USFS

	<u>Channel (length)</u>	<u>Grab</u>	<u>Assay for</u>	<u>Description</u>
Sample no. 1 <u>3</u>		<u>x</u>	<u>Au, Ag, Te</u>	<u>High-grade, back main drift</u>
	<u>4</u>	<u>x</u>	<u>Au, Ag</u>	<u>High-grade from ore bin</u>
Sample no. 2 <u>5</u>		<u>x</u>	<u>Au, Ag</u>	<u>Mill feed</u>

(Samples for assay should be at least 1 pound in weight)

(Signed) R. S. Mason

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description #3, 4, and 5 - Arsenopyrite in crushed metavolcanics.

Sample number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
28598, #3	59.60	\$2,086.00	11.00	\$ 9.95	---	---	---	---
28599, #4	154.20	\$5,397.00	29.40	\$26.60	---	---	---	---
28600, #5	4.30	\$ 150.50	13.70	\$12.39	---	---	---	---

Report issued _____ Card filed _____ Report mailed _____ Called for _____

2033 First Street
Baker, Oregon

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 State Office Building
Portland 1, Oregon

239 S.E. "H" Street
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Your name in full Department of Geology and Mineral Industries

Post office address _____

Are you a citizen of Oregon? _____ Date on which sample is sent 7-26-63

Name (or names) of owners of the property _____

Are you hiring labor? _____ Are you milling or shipping ore? _____

Name of claim sample obtained from Warner mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Jackson Mining District Gold Hill

Township 33 S Range 4 W Section 4 Quarter section NE $\frac{1}{4}$

How far from passable road? On road Name of road USFS

	<u>Channel (length)</u>	<u>Grab</u>	<u>Assay for</u>	<u>Description</u>
Sample no. 1	<u>30"</u>	<u> </u>	<u>Au, Ag</u>	<u>Bill White shaft</u>

Sample no. 2	<u>30"</u>	<u> </u>	<u>Au, Ag</u>	<u>East wall near sill</u>
--------------	------------	-------------	---------------	----------------------------

(Samples for assay should be at least 1 pound in weight)

(Signed) R. S. Mason

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description Arsenopyrite in crushed metavolcanics.

Sample number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
#1 P-28596	6.48	\$226.80	1.16	\$1.05	---	---	---	---
#2 P-28597	1.82	\$ 63.70	0.40	\$0.36	---	---	---	---

Report issued _____ Card filed _____ Report mailed _____ Called for _____

COPY

THE RUTH COMPANY

DENVER 2, COLORADO

CABLE ADDRESS: RUTHCO

U. S. A.

October 1, 1962

Scripps-Howard Newspapers
c/o Rocky Mountain News
Denver, Colorado

Gentlemen:

In regard to Lawrence Fertig's views in your newspapers on our dollar, I have this to say:

When Nixon in a campaign speech said Kennedy was devaluating the dollar by his tirade against the Republican administration and thereby raising the price of gold to \$46 per ounce in England, I pointed out in a letter to the Denver Post that Eisenhower's stupidity in not raising the price of gold as President Roosevelt had was the actual cause. I sent a copy of that letter to every major newspaper in the United States, stating that gold goes to the nation where the owner can get the most for it.

Under the Roosevelt \$35 per ounce price for gold, any one from abroad could buy in the U.S.A. more for one ounce of gold than in any other nation in the world. When Roosevelt in 1934 raised the price, we had \$6 billion of \$35 gold in the U.S. Treasury. In seven years, \$15 billion worth of foreign gold flowed into our treasury to pay for goods manufactured in the U.S.A. An ounce of gold then would buy more in the U.S.A. than elsewhere in the world.

Now, gold is worth more than \$35 per ounce and will buy more of any thing any where in the world than it will in the U.S.A., because gold is worth more than \$35 per ounce every where else but in the U.S.A.

Foreign holders of dollars are therefore converting our dollars into gold where abroad an ounce of gold will now buy 70 hours of 50-cents per hour labor to make any thing they can ship into the United States, sell it, and get our \$35 per ounce gold in exchange for it.

This is the free trade President Kennedy wants. Fiscally, he is just as stupid as Eisenhower was, and as is your feature writer, Lawrence Fertig.

It was American labor and American factories--not miners--who in seven years, from 1934 to 1941, put \$15 billion of gold in the U.S. Treasury. All of the miners in Christendom could not do that, but American labor and factories did it.

Substantially every ounce of gold that leaves our country is going into the manufacture of products to ship back to the U.S.A. for more of our under-valued gold, and this will continue as long as our gold holds out. We pay millions to store wheat, while Canada drops her dollar value in gold to 92.5 cents, which raises the price she will pay for gold to 35/.925 or \$37.80 per ounce; so we pay storage on wheat because the hungry countries who would buy our wheat buy wheat from Canada with gold, getting \$37.80 worth of wheat for an ounce of their gold in Canada, but only \$35 worth in the U.S.A.

President Kennedy says he won't raise the price of gold--ha. Maybe he won't, but he would if he had as much fiscal sense as President Roosevelt had and wanted to get rid of our stored wheat.

In the year 1100, England started quoting the value of silver money--that is, the value they would give for silver in exchange for commodities they manufactured or imported. In 1200 they set the price of gold at \$10 per ounce. Germany, by 1876, through bullion brokers, had surreptitiously exchanged all of her silver for substantially all of England's gold, and then demonetized England's silver standard.

In 1930 England worked this racket on the U.S.A. by raising the price of gold to \$30 per ounce while ours was \$20 per ounce. President Hoover, like a bull dog, held our gold at \$20 per ounce and permitted England to usurp all of our customers from abroad who bought with gold. President Roosevelt saw the handwriting on the wall and in 1934 raised the price the U.S.A. would give for gold to \$35 per ounce, and got all of our business back that Hoover had lost to England. Our factories and labor started back to work, and the depression was over.

By raising the price of gold \$5 above the \$30 per ounce price England had established worldwide for gold, President Roosevelt broke the depression, eradicated unemployment, and in seven years put \$15 billion in gold in our treasury. England said "We will never let this happen to us again," so she got Alger Hiss, the traitor, and Dexter White to freeze the price of our gold by law in the World Bank at \$35 per ounce.

England now has the Rothschilds bank directors each week quote with impunity the price of gold in England for the ensuing week high enough

October 1, 1962

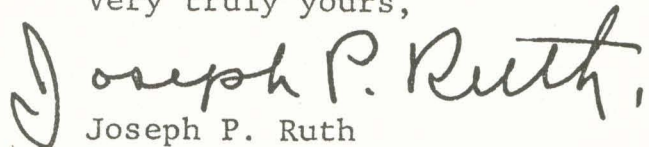
to get all of the business the world over from the nations who buy with gold, including the U.S.A.

With Kennedy's free trade, Woolworth, with an ounce of U.S. \$35 gold, can get \$37.80 worth of an identical product from England or Canada to sell in the U.S.A.

The fiscal brains of our nation and our newspaper economic columnists would have as much room in a mustard seed as a rowboat has on the Pacific ocean. The three columns in the paper today by Lawrence Fertig is nothing but English bafflegab to bamboozle the American public into holding the price of gold down so Europeans can take it from us.

All of this talk about modernization of our factories is ridiculous--you can't beat a price sheet with new machinery for an article made where the manufacturer gets 70 hours of labor for an ounce of our \$35 per ounce gold. You can beat it by raising the price we will pay for an ounce of gold, as President Roosevelt did. Gold has climbed from \$10 per ounce in the year 1200 to \$35 now. Gold should be from \$70 to \$105 per ounce to protect our manufacturers and labor from foreign competition. It would also stop our big companies from building factories in foreign countries.

Very truly yours,


Joseph P. Ruth

JPR:mlb

P.S. The value of our gold is fixed by law at \$35 per ounce. By law, U.S. citizens are now seeing gold they once possessed going to Europe and Asia to pay for labor to make products to ship into our nation which are taking the bread and butter out of our labor's mouth and putting their bread and butter into foreign labor's mouth. The ounce of gold once owned by U.S. workmen will buy 70 hours of labor in Europe and 175 hours of labor in Asia to make products they ship into our nation which ultimately will displace him and the shop he worked in. The diminishing production of our steel workers and the increased imports of steel prove this point. Our scroll of laws should be renovated and the Alger Hiss laws relegated to Russia, where they belong. President Kennedy would then be relieved of his obligation to enforce them. J.P.R.

Shaky Dollar Worries International Economists

By LAWRENCE FERTIG

Economic Columnist for Scripps-Howard Newspapers

KNOCKE, Belgium, Sept. 30 — "It is ironic that the threat to international monetary order should come from the once-powerful U.S. dollar. And it is depressing indeed that the leader of the non-Communist world—the U.S.—seems unable to put its house in order so the dollar can be depended upon as an anchor of the West."

This significant comment was made by a distinguished European economist at this pleasant Belgian seaside resort which is host to the members of the Mont Pelerin Society.

It is typical of the sentiment prevailing here.

The Mont Pelerin Society is a small group of about 200 economists of the non-Communist world who are dedicated to the principles of traditional liberalism—the preservation of individual freedom and the essential corollary policies of free markets, encouragement of private enterprise and limited central government.

Distinguished Group

John Jewkes of Oxford is president of the society. Among the distinguished members are Jacques Rueff, former finance minister of France; Ludwig Erhard, economics minister of Germany; the eminent Ludwig von Mises, Frank Knight and Friedrich Hayek of the U.S.

Among other important U.S. members are Gottfried Haberler of Harvard, Fritz Machlup of Princeton, Milton Friedman and George Stigler of the University of Chicago and Henry Hazlitt of New York.

Discussions here range over many areas, but informal talks invariably come around to the subject of the dollar. This is what worries Europe.

The great danger of dollar weakness is the fact that in every major country of the West dollars are used interchangeably with gold as the base for the currency and credit structures of these nations.

Thus deep mistrust in the dollar and an ensuing dollar crisis could have grave repercussions throughout the non-Communist world.

Could Cause Crises

As the French economist, Jacques Rueff, has pointed out, a dollar crisis could cause a disastrous credit collapse not only in the U.S. but in other key countries.

This is the danger that must be avoided at all costs. A dollar crisis means a non-Communist world crisis.

Why do so many foreign holders of dollars insist on cashing them in for other currencies, or for gold? Why is the U.S. slowly being bled of its limited stock of gold, now down to \$16 billion from a peak a few years ago of \$24.5 billion?

Because confidence in the future of the dollar — which is based on appraisal of American economic policies — is lacking.

International monetary authorities are trying to halt this slow bleeding by propping up the dollar through loans to the U.S. from the International Monetary Fund and by other arrangements.

Support of this kind can be of temporary value. It can give the dollar a surface appearance of strength.

But in the long run only our policies will count. Only our actions against inflation — against the maintenance of artificial low-interest money, against federal deficits and the monetizing of these deficits — only such action will make the dollar sound again.

Foreign nations have accumulated massive dollar claims against the U.S. During the last 12 months we lost \$1.2 billion, and every month we continue to lose more gold.

Our total short-term liabilities are \$23.5 billion. About \$15 billion of these claims are being held by foreign central banks alone.

Against these liabilities we have \$16 billion of gold — \$12 billion of which must be held by the Federal Reserve System as a legal gold reserve.

Plainly our position is precarious.

ious if the run on the dollar continues.

Some people say why not do away with our legal gold reserve and tell foreign holders that our gold is available to meet their dollar claims?

Then, they assert, foreigners will have no fear and will not demand gold. But in this case the U.S. dollar would be pure paper currency — fiat money.

This would undermine confidence in the dollar at home, and probably abroad. The ultimate result of doing away with a gold reserve could be cataclysmic.

While there is no unanimous agreement by economic theorists here, a great body of opinion favors a revaluation of all currencies in terms of gold and the reestablishment of the international gold standard.

Frowned Upon

Revaluation of the dollar by itself is frowned upon. It would solve nothing. Other currencies would follow suit in a matter of days.

If all currencies are revalued in terms of gold this could result in another round of worldwide inflation — unless each nation makes specific monetary moves to offset this force.

But if the U.S. continues inflationary policies while other nations do not, then in time we would have the same trouble all over again.

Our gold would continue to flow out. The real solution of the problem of establishing international monetary order is to make the key currency of the world—the U.S. dollar—sound again.

Economic Predictions **Perseus**

Denver 1, Colo., Monday, Oct. 1, 1962

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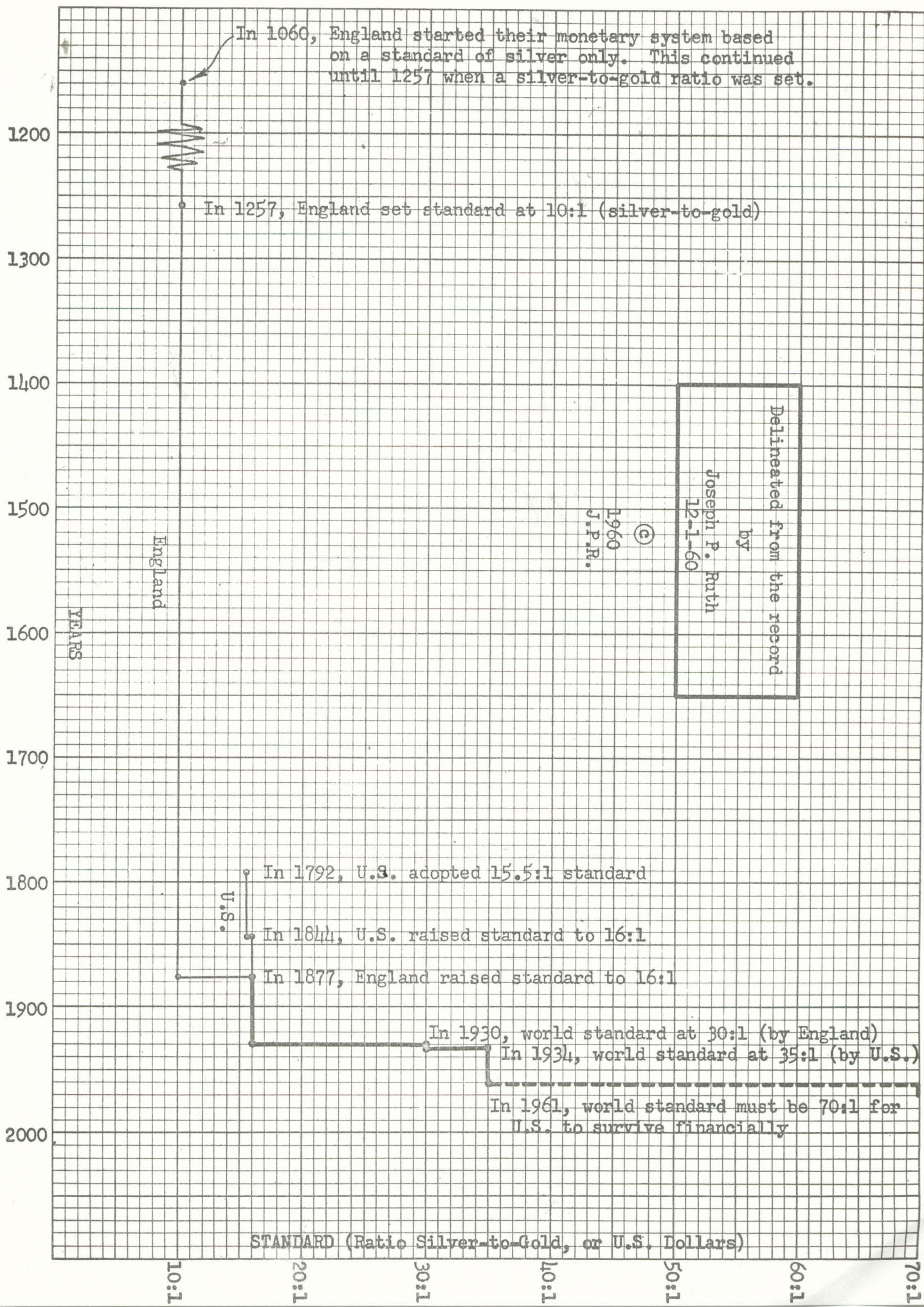
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Some Conclusions



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STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

August 1, 1963

Mr. Darrell Brown
Canyonville
Oregon

Dear Mr. Brown:

After examining your Warner mill the other day I would like to offer the following suggestions which I hope will be helpful to you.

Since the Warner is a high-grade mine which produces most of its values in narrow and irregular veinlets and crushed zones which are quite well defined, it follows that the tonnage of ore will be small but high grade. By carefully cleaning out the pay streaks for several feet in advance of driving the workings to full access width, the grade can be kept at a maximum. Dilution due to an admixture of ore with wall rock not only lowers the grade but increases the tonnage to be milled and tends to lower the overall recovery. By careful mining of the pay zones and hand sorting, it should be possible to produce shipping ore without further treatment.

Due to the fact that both free gold and base ore in the form of arsenopyrite are present, it might be advantageous to run the feed through a set of rolls before shipment. This will permit easier handling of the ore and make sampling more accurate. Values in ore of this type are bound to be

spotty, and crushing would tend to average this out by mixing it more thoroughly. Smelter returns also could conceivably be higher due to better sampling.

If the decision is made to continue milling, several things might be done to improve present practice. As it was operated during my visit, the Marcy rod mill was underfed and was overgrinding the ore. Good mill practice calls for a much higher circulating load. Excessive rod and liner wear occurs in mills having too little burden. A larger mill feed pipe might also help.

Since you already have a 12 x 12 duplex Denver jig, it might be profitable to install it between the rod mill and the table, with a scalping screen if necessary, ahead of the jig. If a high-grade product could be obtained from the jig, several savings would ensue. First, the circulating load would be decreased; second, losses from sliming and other sources in the circuit would be eliminated. The feed from the lip of the jig to the table would have better classification. Tables work best with a fairly close size range of the feed. A two-deck screen, which need not be very large, would give a three-way split which could be diverted to either two or three tables. In addition to the sizing done by the screens, another benefit in the form of a clarified feed free of muddy water would help in adjusting the tables since it would then be possible to see just what was going on.

As presently operated, the table is not pulsing smoothly. Perhaps some longitudinal stiffeners attached to the underside of the deck might help. Variation in the number of pulses per minute might also be tried.

If after trying the procedures above, it is still impossible to achieve good milling practice, it might be advisable to do some testing with a

flotation system. Samples of your ore should be pre-tested by some of the companies making either flotation reagents or manufacturing flotation equipment. The Denver Equipment Company, 1400 Seventeenth Street, Denver, Colorado; The Dow Chemical Company, Midland, Michigan; and the American Cyanamid Company, 30 Rockefeller Plaza, New York City, are the principal companies that come to mind.

Amalgamation of the free gold should not be overlooked. Many times when operators report that their gold will not amalgamate, the trouble can be traced to either excessive oil or grease in the mill circuit or improperly prepared and dressed plates. Amalgamation should provide a relatively inexpensive method for removing the free gold from the circuit.

One further suggestion might be in order. The services of a registered mining engineer to assist in setting the mill in order would probably be profitable. We will be happy to recommend a qualified person to you if you wish. It is impossible in the scope of a letter to cover all of the various possibilities that might be tried in your mill, and only the most obvious courses of action have been touched upon. I hope, however, that the foregoing observations will prove useful to you.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
cc Len Ramp



RECEIVED
JAN 3 1964

State of Oregon
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
Baker Field Office
2033 First Street,
Baker, Oregon.

STATE DEPT. OF GEOLOGY
& MINERAL IND.

January 1, 1964

Dear Hollis;

For your personal information, but not for Ore-Bin announcement till further notice, the Small Business Association has approved Jim's Buffalo mine loan. Ullman phoned this much of an announcement, later confirmed by the SBA office in Boise.

Reason for delaying Ore-Bin announcement is that various requirements must yet be met by Jim before any dough is received. This is all technical trivia but will take time, especially since it was just recently discovered that Art Thies never did record various deeds, etc, with the Grant County recorded pertaining to the original purchase of the property from the Dennis estate. Most of this is already done but the SBA has yet to confirm and clear the records.

Regarding the Ore-Bin, Jim is preparing me a summation of production made during the past year and other pertinent data which I will organize into a page and a half or so article. We will get this together with the idea of having it for the January issue if possible but the probabilities are that final clearance of the loan will not be actual till later. In other words you had best figure on a February release.

Wag

67

PS: With the SBA loan an established fact, Jim may possibly apply for an OMEA loan for the numbers 2 and 3 veins. He has been given to understand that he could probably do this by putting up his rolling stock and equipment as his share. At least the SBA mining examiner who examined the mine a month or two ago said this was being done. Such a loan, restricted to the other unexplored veins would not interfere with the present SBA loan covering the Constitution, and vica-versa.



State of Oregon
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
Baker Field Office
2033 First Street,
Baker, Oregon.

January 7, 1964

Dear Hollis;

Enclosed herewith are two signed documents which should be placed in permanent safe-keeping in the Sanger mine file. I am keeping the original here and am now negotiating with Kauffman as to whether to deposit a third copy with him now or wait until such time as we secure sufficient production data to warrant publishing.

The Oregon Historical is checking over some records of La Grande-Union banks for me in the hope of finding data covering Sanger shipments by Townley. I have had some correspondence with the Mint on the subject and have secured permission to check the local U.S. National Bank's early gold purchase records. Whether these steps will serve to smoke out missing data for a known three year period of activity for which no records are currently available, I can't say. However, the USBM is also endeavoring to trace these same records through the Mint and GSA files; hence the importance of the attached releases to us should they secure the data from the Mint or Treasury sources.

Sincerely

Wag
Wag

RECEIVED
JAN 9 1964
STATE DEPT. OF GEOLOGY
& MINERAL IND.



STATE DEPARTMENT OF GEOLOGY
AND MINERAL INDUSTRIES

BAKER FIELD OFFICE
2033 FIRST STREET
BAKER, OREGON

November 12, 1963

United States Bureau of Mines
P.O. Box 492
Albany, Oregon

Attention: A.J. Kauffman, Jr., Chief
Albany Office Mineral Resources
Resources Area VII

Dear Mr. Kauffman;

This is to certify that my father, Mr. W.J. Townley, operated the Sanger mine, Eagle Creek District, Baker County, Oregon, from approximately 1888 to 1897 and that he maintained ownership in the property till it was sold to J.K. Romig, Baker, Oregon, sometime around 1900. The operating Company was known as the C.T. Bradley Mining Company and it had been in existence, and in limited production, for a year or so prior to the time my father took over.

Permission is hereby granted for the United States Bureau of Mines to release to the State Department of Geology and Mineral Industries (Oregon), for incorporation in published reports, all available records pertaining to production from the Sanger property during the period the C.T. Bradley Mining Company was in operation.

Mrs. Walter Bridgman

Mrs Walter Bridgman
247 Cheney
Reno, Nevada

The above permission obtained
by N.S. Wagner, Nov. 1963 _____



STATE DEPARTMENT OF GEOLOGY
AND MINERAL INDUSTRIES

BAKER FIELD OFFICE
2033 FIRST STREET
BAKER, OREGON

October 18, 1963

United States Bureau of Mines
P. O. Box 492
Albany, Oregon

Attention: Mr. A. J. Kauffman, Jr., Chief
Albany Office of Mineral
Resources Area VII

Dear Mr. Kauffman:

This is to certify that the Sanger mine in the Eagle Creek district, Baker County, Oregon, was first acquired by my father, J. K. Romig in approximately 1900 from W. J. Townley, the previous owner and operator, and that the property has been controlled by joint Romig-Wendt family interests from 1900 to, and including, the present date. Permission is hereby granted for the United States Bureau of Mines to release to the State of Oregon, Department of Geology & Mineral Industries, all available production records pertaining to the Sanger property for incorporation in published reports.

Margaret Wendt
(Mrs. William) Margaret R. Wendt
October 18, 1963

The above permission obtained by
N. S. Wagner Oct. 18, 1963 N. S. Wagner

COPY

THE RUTH COMPANY

DENVER 2, COLORADO

CABLE ADDRESS: RUTHCO

U. S. A.

May 15, 1961

The Editor
The Rocky Mountain News
Denver, Colorado

Dear Sir:

Urging the gold incentive plan as outlined by Representative J. Edgar Chenowith and reported in the Rocky Mountain News as of May 8 is certainly based on a lack of knowledge of the status gold commands in world affairs. The following short history of gold and money will, I hope, convince Mr. Chenowith and others in Washington that the price of gold is vital; gold should be raised to \$70 per oz. and bought and sold on the free market if this nation is to prosper, or even survive against foreign competition. I have made a study of gold and its place in our way of life. I made a good living mining and milling gold ore, the gold of which went into our treasury via the mint, until it became economically impossible to continue. I have for years built mining machinery which I exported, which resulted in gold, in the form of U. S. dollars, being sent to pay for it.

The Constitution of the United States -- the organic law of our country -- vests in Congress alone the power to coin money and to regulate the value thereof and that of foreign coin. It also provides that "no State ... shall make any but gold and silver coin" a tender of payment of debts. So Congress can provide the answer to our gold dilemma, if it so chooses.

By raising the price of gold to \$70 per ounce we will boom our own gold mines, as President Roosevelt did when he raised the price from \$20.67 to \$35 per oz. This will boom business, as foreign nations, which buy with gold alone, will buy from us for they will not be able to obtain more for their gold from any other nation in the world than from the United States, because of our mass purchasing and production methods.

Gold at \$70 per oz. makes one ounce pay for twice as much in keeping our armies all over the world. At this price, when our tourists go abroad, it will require only half as much gold to pick up our paper money which tourists spend in foreign lands, and to pay other debts. Roosevelt did it -- why can't Kennedy?

Money has a very interesting history, which every U. S. citizen should know. The earliest recorded history of the use of silver as a medium of exchange was about the year 1870 B. C., and that of gold as early as 1100 B. C. From these early periods to 1300 A. D. there is not too good a continuity in the record of money's history, although the record that is available indicates a preference for silver over gold in early history, because of the dearth of gold in those years and because of the necessity for payment of small but numerous transactions. In the years that followed, many attempts were made to establish bi-metalism, with ratios of silver to gold ranging from 10 to 1 to 15 to 1. All of these failed when silver ceased to be a precious metal and was demonetized by Germany.

Germany foresaw what England did not foresee, namely, that silver had ceased to be a rare metal. Silver was not only being mined in huge quantities in Mexico, Peru, and on the Comstock Lode in the U.S.A., but was being produced as a by-product in the worldwide mining and production of copper, zinc, and lead.

After the Franco-Prussian War of 1862, Germany demanded of France 50 million pounds sterling reparations, in gold. England's pound sterling consisted of 12 troy ounces of 5400 grains of pure silver; Germany wanted this amount in gold. France sent it to England's Exchequer and got in exchange one ounce of gold (450 grains) for every ten ounces (4500 grains) of silver.

Germany then sent 80 million pounds sterling of her own silver to England and was given gold on the same basis of 10 to 1, or, based on the 1844 U. S. gold price of \$20.67 per ounce, \$2.07 per ounce for the silver.

Apparently England, who had for 600 years been exchanging silver for gold in a 10 to 1 monetary way, had accumulated a vast store of gold and apparently was able to give France and Germany the 156 million ounces of gold in exchange for their silver in the regular course of business with her bullion brokers, suspecting nothing of the holocaust to come.

Surreptitiously, Germany, by 1870, had cornered most of England's gold. When this was accomplished, Germany promptly demonetized silver. England was loaded with silver, but could no longer use it for foreign exchange except in her Silver Bloc. This is precisely the position the United States is in right now, with loads of silver, but no gold of her own.

When England found out that Germany had demonetized silver and had tricked her out of nearly all of her gold, the House of Commons appointed a "Select Committee on Depreciation of Silver." They first called in Sir Hector Hay, bullion broker; then bullion broker Mr. Stewart Pixley; then an economist, Mr. Robert Givven;

then Mr. Fredrick G. Wilkins, a bullion broker; Mr. Patrick Campbell, Chief Manager of the Oriental Bank Corporation; Mr. Robert Wigram Crawford, Manager of the Bank of England; Mr. Samuel Sheldon, head of the Statistical Office in the Custom House; Col. Henry Hyde, Director of the Mint in Calcutta; Mr. J. T. Mackenzie; A. Seminder of India, chairman of one of India's railways; Mr. Walter Bagehot, Editor of the "Economist"; and many others. These men were interrogated by the following men on the Committee:

Mr. Baxter	Mr. Christopher Becket Denison
Mr. Goschen (Chairman)	Mr. Massey
Mr. Kirman Hodgson	Mr. Mulholland
Mr. Hubbard	Mr. Fawcett
Lord George Hamilton	Mr. Cave
Mr. Shaw	Mr. Charles Mills
Mr. Hermon	

It was ordered that the Committee had power to send for persons, papers, and records, and that three of the Committee would constitute a quorum.

England found from these executives what Germany had known all along: that silver's prevalence precluded its use any longer as money in relation to the value of gold.

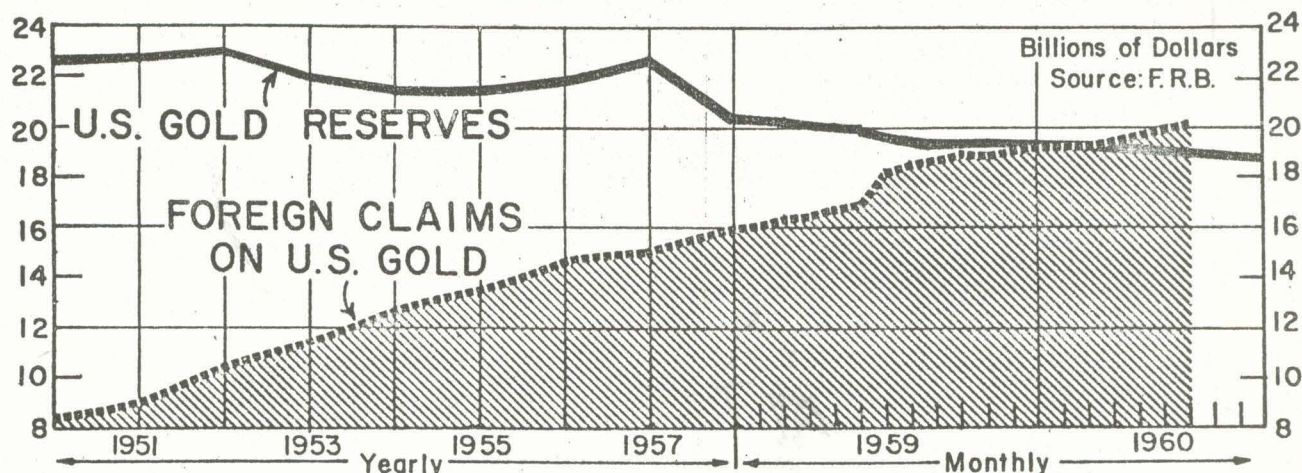
With Germany possessing all of the gold, England was forced to collaborate with Germany in extending the single gold standard and to allow silver to drift around in the commodity market, where it has fluctuated from 24 1/2¢ to \$1.375 per ounce down through the years.

We like to think our government cannot be forced into bankruptcy as private business can, because the government controls the printing presses and can pay its obligations by printing paper money and short-term bonds which banks can be induced to monetize; but this is what broke Germany after World War I, when she had lost all of her gold in paying reparations. WE HAVE LOST OURS IN THE COLD WAR, by not raising the price of gold at the right time as President Roosevelt did.

George Washington told us in his Farewell Address to be wary of European friendships and enmities; their way of thinking was foreign to us. These words ring in my ears, because, while President Roosevelt was canny enough for the Europeans and raised the price of gold to \$35 at the right time, the administration of the last eight years has unknowingly let our gold slip out of our possession. If you look at the attached graph I have made, you will see that, money-wise, in years of experience, the United States is Johnny-come-lately and that England and Germany and other European nations have been sparring about money for hundreds of years, and now it is apparent that Europe has ganged up on us and made our statesmen think gold was no good, while they were cornering the 21 million gold dollars in reserve we had in our treasury.

GOLDEN TROUBLES

The U.S. gold supply stood below \$19 billion in Sept. -- the lowest level since 1940. The outflow has increased sharply since midyear, mostly because of investors, both U.S. and foreign, who are shifting to European short-term investments which provide a bigger yield. A smaller portion of the outflow, Washington officials admit, represents the decision of some foreigners to change their dollar holdings into gold or foreign securities because they fear the dollar will be devalued.



Treasury and FRB officials continue to scoff at the possibility of devaluation. They contend that the disparity in short-term yields between the U.S. and Europe cannot go on indefinitely. Even though the U.S. has a deficit in total international payments, they reassure, its healthy and growing balance in export-import trade is working to correct the money flow.

A \$35 per ounce subsidy as an incentive to the gold miner would turn him into a beggar, and no nation can survive if all of the miners are mendicants living on government subsidies, which now include the lead, zinc, iron, and copper mines.

When our government's stupid statesmen, out of deference to foreign countries and blind to their intrigue, fixed the price of all U.S. gold at \$35 per ounce at Dumbarton Oaks, this act hobbled and hog-tied all American labor so they could be clobbered by all foreign labor and business. This stupidity is just now catching up with zinc, lead, iron, and copper mines, because they, for awhile, could raise the price of their metals, but now those prices are a boomerang for the U.S. producer and a boom for the foreign producer.

The big mining companies like Newmont, A.S. & R., St. Joe Lead, and American Zinc, all curtailed mining in the U.S.A. and went abroad with money from Uncle Sam to open up foreign mines, and are now producing lead, zinc, iron, and copper, and shipping it into the U.S.A. without the expense of Social Security, workmen's compensation, unemployment insurance, and other fringe benefits and social reforms extant in the good old U.S.A.; and what do these companies get in exchange for their metals? Gold. Gold, which

in the U.S.A. at \$3.50 per hour gets them just ten hours of labor, but in foreign countries with 50¢ per hour labor they get 70 hours of labor for the one ounce of gold, without the expense of the democratic social reforms. Uncle Sam must dish out this gold to them (U.S. companies in foreign countries) or to any foreign nation that imports products or manufactured goods sold into the U.S.A. in excess of our exports, which are becoming less and less.

In 1959, the good old U.S.A. imported 668,070 European motor cars, which are made of iron, zinc, lead, copper, and labor. The United States exported only 226,318 motor cars. Therefore, the value of imports over exports was paid for in gold from our treasury at the price fixed at Dumbarton Oaks of \$35 per pure ounce. If gold was \$70 per ounce, the importer would get in return only half as much gold to pay for the labor and material which went into the manufacture of these foreign cars which were imported into our country.

England before 1877 had accumulated 140 million ounces of gold by her industries manufacturing things which she exchanged worldwide for gold on the basis that 10 ounces of silver was equal to one ounce of gold. England lost all of this gold to France and Germany who swapped silver for it on the basis of 10 to 1 when the U.S. held it at 16 to 1. Then the price of gold went to 20 to 1 -- twenty silver dollars of one ounce each equal to one ounce of gold worth \$20. England in 1930 raised the price of gold to 30 silver dollars for one ounce of gold. President Hoover liked this, because his investments were principally in England. Over the radio he said, "I shudder to think what would happen to us if we went off the gold standard." England was then off the gold standard of \$20 per ounce and was paying \$30 per ounce for gold in England to all comers.

All of the countries, like the South American, which buy with gold took their business to England, where they got \$30 per ounce, equal to 50% more for an ounce of gold than they could get for the same ounce of gold in the United States.

It took President F. D. Roosevelt about four years to see what England and Mr. Hoover had in mind. The \$30 per ounce which the English were paying for gold was getting all of the foreign business away from the United States, which allowed only \$20 per ounce for the foreigner's gold. Roosevelt saw this, and raised the price of gold to \$35 per ounce, ~~we then had~~ we then had 26 billion in the treasury, England did not try to push it higher. It was American industry and labor that put all this gold in the treasury, not miners; but now we are back where we were in 1934, except that we have lost most of that 24 billion from our treasury. A higher price for gold must be set by us, or European and Oriental factories, that pay from 20¢ to 50¢ per hour for labor, will not only get all of our gold, but will also continue to keep our laborers out of work, to the great benefit of Oriental and European labor, who,

May 15, 1961

while they get very low wages, can convert the money they get into gold, which we cannot do. A free market on gold like England had for 817 years on silver and gold would stabilize the world's business. As it is now, the U. S. gold is making the rest of the world prosperous and putting our labor out of work, because we can't raise the price of gold to protect our labor.

The U.S. Steel Company is also at the crying well. An English steel concern manufactured, fabricated, shipped, and erected a huge steel building in the city of Los Angeles cheaper than could the U. S. Steel Company. It is a fair assumption that U. S. Steel's labor and equipment are just as efficient as those of the English company. The difference is that England got one ton of gold at \$35 per ounce for every \$840,000 that the building cost. If gold had been \$70 per ounce, England would have gotten only 1000 pounds for each \$840,000, with which to pay her labor.

The Europeans and the Asiatics are having a Roman holiday on our \$35 per ounce fixed gold price. Their secret is that, no matter how little they work for per hour, their workmen can ultimately turn their labor into gold, whether it be 20¢ per hour in Hong Kong or 50¢ per hour in Italy, France, or England. By this incentive of gold to their labor, they are all clobbering our labor on the \$35 per ounce price for the gold we exchange for their labor and material

If the U. S. raises the price of gold, foreign nations that buy with gold will give U.S.A. the business on the basis of whoever will give the most, or at least equal value, for gold, will get the business, and keep her factories working. At present, the value of gold is higher in every nation throughout the world than in ours, so we lose business to them, and, what is worse, buy products from them with our gold that we used to make for ourselves and could have kept. Naturally, the foreigner buys with his gold in the market where gold has the higher value.

I made my living mining and milling gold ores for ten years, just as Max Boen did, but I am no beggar, and I can wait until Europe and Asia take all of our business, as well as our gold, if it takes that to wake up our statesmen to raising the price to \$70 per ounce.

The price of gold and tariffs are the only protection we have against foreign labor which works for low wages if paid in gold. The higher we value gold (\$70) the lesser amount they get of it for the products they sell us; and there will come a time when they will decide that the amount of gold they get for one hour's work is not worth the effort.

We export aluminum, scrap iron, etc. These products furnish little labor, but we import products which require a great deal of labor, thereby making our citizens unemployed.

Mr. Chenowith says that by incentive payments only can we build up our gold reserves. This is not true. To restore to our treasury the 24 billion that has now gone to Europe or is committed, by extracting from the public 24 billion for the miners is, on the face of it, ridiculous. If the price of gold is raised to \$70, American industry, labor, and manufacturers will put the 24 billion back in the treasury in a comparatively short time, compared to mining it, and it would require all the labor we could muster in the U.S.A. to do it.

F.D.R. tried all of the pump-priming and ran out of alphabetical combinations such as the WPA, etc., and got nowhere until he raised the price of gold from \$20 to \$35. To stop this method of recovery used by F.D.R., the 817 years money-wise Europeans, at Dumbarton Oaks, pegged our price at \$35 per ounce, which took American labor out of production for the foreign market and gave the American market to foreign labor. Gold simply goes to the nation that will pay the most in labor for it, and foreign labor coming into this country as manufactured goods would be required to do a lot more labor to get an ounce of our gold at \$70 per ounce than they do at \$35 per ounce. In effect, it would cut their pay in half.

Nixon, with England's cooperation by England's devaluing the gold in the U.S. gold dollar, almost knocked Mr. Kennedy out of the presidential race by telling the public Kennedy was responsible for the \$46 per ounce gold price then quoted on the open market in London. This is a market on gold that is denied the U.S.A. by the Dumbarton Oaks fix at \$35 per ounce as our price for gold.

While \$35 incentive to the gold miner might make the miner prosperous, only a \$70 per ounce gold open market price will make our nation prosperous. The Republicans were barking up the wrong tree for eight years, and Chenowith is still barking up the wrong tree. The Democrats are barking up the wrong tree, if they think \$80 billion spent in modernizing our industrial plants will enable the industry to hurdle the handicap of the low price of our gold or accomplish what labor will do for our own industry in the rest of the world, if the U.S. raises the value of gold to seventy silver dollars for one ounce of gold. This is the only solution.

The ingenuous, art-loving Italians created the plastic flowers, but with the 50¢ per hour in gold for Italian labor they lost out to the 20¢ per hour in gold labor of the Hong Kong Chinese. In Hong Kong one \$35 ounce of U.S. gold will pay for 175 hours of Chinese labor at 20¢ per hour. For the same ounce of gold in Italy, it will pay for only 70 hours of 50¢ per hour labor. Our U.S.A. gold for plastic flowers first went to Italy, but now goes to Hong Kong.

That gold is nothing but a means of storing labor is appreciated greatly by foreigners, but because U.S. citizens can't eat

The Editor
The Rocky Mountain News

- 8 -

May 15, 1961

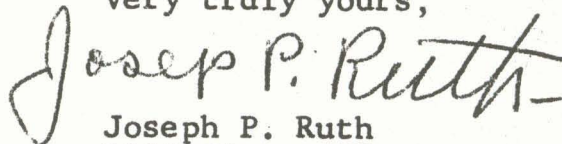
or possess gold, we are indifferent to gold. We will either wake up to the stimulus gold has on foreign labor that makes it possible to usurp American labor, or the 1929 depression will make our new one look like a Sunday School picnic.

It is deplorable that our big corporations connive amongst themselves to fix prices, but this price fixing could be to offset the stupid price fixed on gold at \$35 per ounce in America which permits foreign competition to wax rich on our \$35 fixed price per ounce for U.S. gold. How else could English labor mine, smelt, fabricate, and ship 10,000 miles an immense steel building and erect it in Los Angeles cheaper than could the U. S. Steel Company or any other American steel company? This economic debacle lies at the feet of the American statesmen who permitted gold to be fixed in the U.S.A. at \$35 per ounce. If this building cost \$1,000,000, the English, at \$35 per ounce, would pay 2,381 troy pounds of gold. If gold was \$70 per ounce, they could get only 1,190 pounds of gold for one million dollars.

Says TIME, Dec. 12, 1960: 59 - 28 pounds (troy) of gold goes out of our mint every hour. From the above it is crystal clear that the gold exported represents American labor's loss. What we need now is another F.D.R. with the guts to raise the price of gold and protect American big business and American labor.

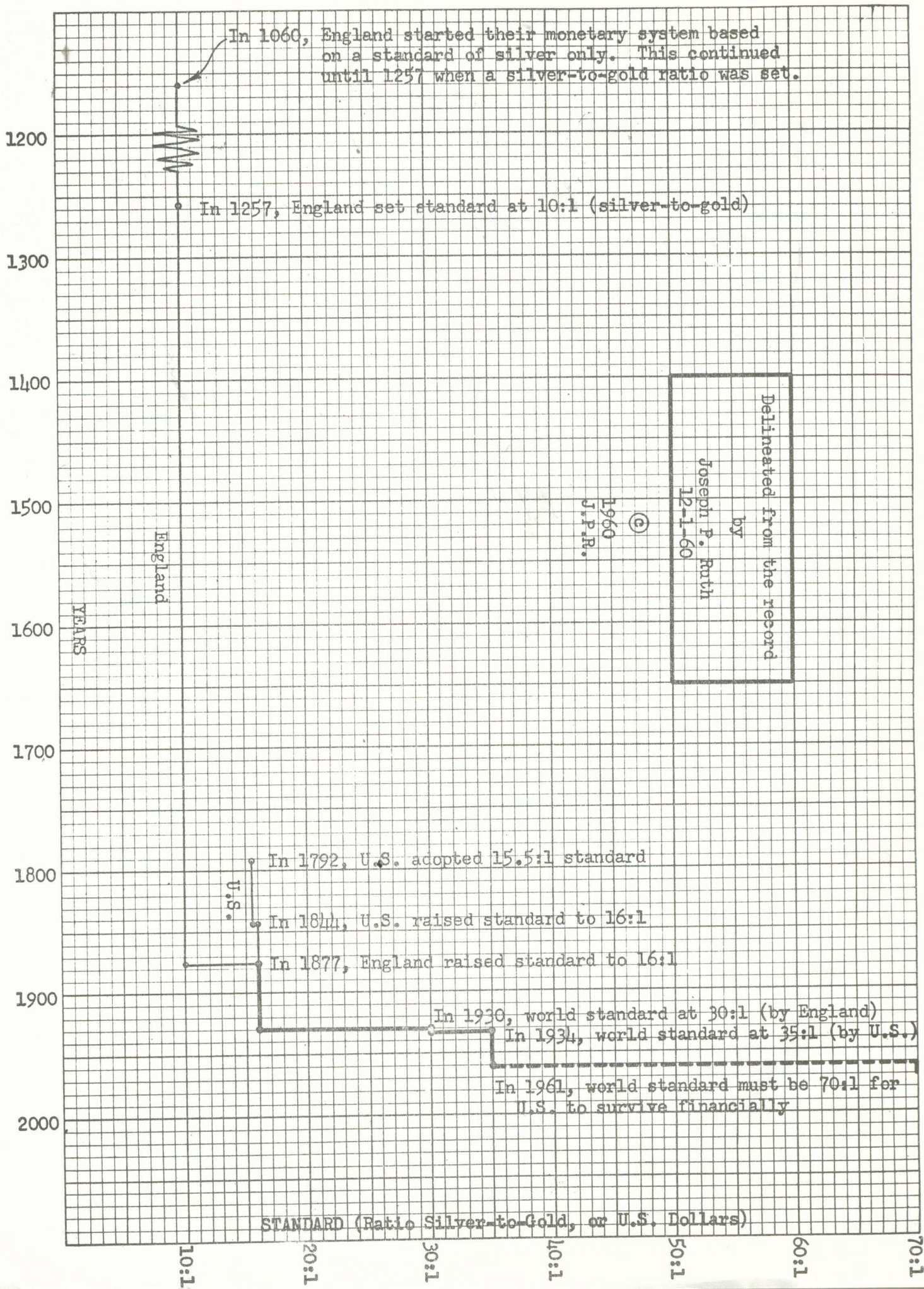
Gold is a matter of functioning four, a medium, a measure, a standard, a store.

Very truly yours,



Joseph P. Ruth
1325 Glenarm Street
Denver, Colorado

JPR:mlb



GOVERNING BOARD

MASON L. BINGHAM, CHAIRMAN, PORTLAND
LES R. CHILD, GRANTS PASS
NADIE STRAYER, BAKER



FIELD OFFICES:

2033 FIRST STREET
BAKER
239 SOUTHEAST "H" STREET
GRANTS PASS

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1069 STATE OFFICE BUILDING
PORTLAND 1

January 5, 1959

Mr. Dewey Van Curler
Ashland Mining Company
835 N. Main
Ashland, Oregon

Dear Mr. Van Curler:

The annual round-up of information on Oregon's mineral and metallurgical industry will appear in the January issue of The Ore.-Bin. A complimentary copy will be mailed to you immediately it is printed.

Before we go to press, however, we need some first-hand information on your activities in 1958. News about improvements in your operation, changes in ownership, new markets or products is particularly welcome. If you wish you can write the information on the bottom of this sheet.

A stamped self-addressed envelope is enclosed. Since we go to press about January 15 we would appreciate hearing from you promptly.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

Dear Mr. Mason

We have not been operating steady since Chrome Closed. But we have changed our mill to Gold Recovery and Hope to be in operation soon. We are figuring to open the Ashland Mine again and will mill that ore. No change in ownership etc Sincerely Dewey VanCurler

GOVERNING BOARD

MASON L. BINGHAM, CHAIRMAN, PORTLAND

LES R. CHILD, GRANTS PASS

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239 SOUTHEAST "H" STREET

GRANTS PASS

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
1069 STATE OFFICE BUILDING
PORTLAND 1

January 5, 1959

Mr. Ward L. Hill
Greenhorn Mountain Development Company
P.O. Box 908
Baker, Oregon

Dear Mr. Hill:

The annual round-up of information on Oregon's mineral and metallurgical industry will appear in the January issue of The Ore.-Bin. A complimentary copy will be mailed to you immediately it is printed.

Before we go to press, however, we need some first-hand information on your activities in 1958. News about improvements in your operation, changes in ownership, new markets or products is particularly welcome. If you wish you can write the information on the bottom of this sheet.

A stamped self-addressed envelope is enclosed. Since we go to press about January 15 we would appreciate hearing from you promptly.

Sincerely yours,

A handwritten signature in cursive script, reading "Ralph S. Mason".

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

January 7, 1959

Have done nothing - can't operate at present price of gold.

GREENHORN MOUNTAIN DEVELOPMENT CO.
Secy-Treas.

A handwritten signature in cursive script, reading "Paul L. Rice".

RECEIVED
JUL 24 1959

STATE DEPT. OF GEOLOGY
& MINERAL INDS.

22 July 1959
Medical Springs, Oregon

Mr. Hollis M. Dole, Director
Portland

Dear Hollis:

Herewith is a report on conditions in the Granite district which I spent part of yesterday and today visiting. This report is confidential.

Except for the Buffalo and a new placer property there is little or no activity at the mines in the district. Langdon Rand and Barton Haskins are living at the Cougar-Independence but do not appear to be accomplishing anything in particular.

At the Buffalo, Jim Jackson succeeded in reopening his lower tunnel the day that I got to the mine. When he finishes some mucking and the installation of about four sets of timber he will be ready to lay rails and put in pipe and drive ahead. Reopening this tunnel has proved to be an excellent operation as the tunnel was longer than anyone expected and is in excellent condition and of good size.

The tunnel is shown in green on the attached map. Its portal is some 65' from the old portal as a lot of ground has been cleared away and leveled. The total length of remaining tunnel is 490', curving as shown, based on a rough tape and Brunton survey that Jackson and I made. Except for the last 80', driven between the point marked with a green cross and the face, on a bearing of S 60 E, the tunnel direction is good. The tunnel is entirely in argillite except for the last round or two which are in good, clean granodiorite. There is no mineralization visible at the contact and the granite contains no inclusions of argillite. At the place marked "Muck" on the map the adit is partly blocked by muck that has fallen out of a fractured zone. There are two fairly strong shears crossing the tunnel here and they may represent the No. 1 vein. There is nothing here to encourage drifting on, however.

Jim Jackson and I discussed further development. Positions of certain veins, projected to the level of the newly opened tunnel, are shown by dotted lines on the map. The No. 2 and Constitution veins may be close to the face of the tunnel. Jackson plans to bore a drill hole to a depth of about 250' if necessary to intersect these veins. If anything is encountered that looks promising, he will crosscut to it from the present face and then will drift northward on it. Otherwise he will back up to the point marked by a cross on the map and crosscut from there on a east or northeast bearing. This will lose 80' of existing tunnel but some of this will be useful for a switch.

All in all, conditions look encouraging at the Buffalo mine. There is a lot of development work before returns can be expected but it looks to me like a good risk.

The placer property is on Onion Creek. Information on this property was given by Barton Haskins and Langdon Rand who visited the property with me.

Mr. Hollis H. Dole, Director

2

22 July 1959

Haskins, Langdon Rand, and Irving Rand are said to have placer claims covering a large part of Sections 2 and 11 of T. 8 S., R. 35 1/2 E. They have leased the property to Messrs Frazer and Britton, who were away obtaining equipment at the time of my visit. Terms of the lease require 150 days work a year by two men.

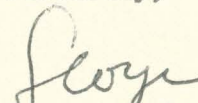
The outstanding fact about this operation is that the placer ground was left by the early miners, it would seem to me, clearly because of a large amount of very sticky clay in the gravel. The gravel does pan gold and is said by Langdon Rand and Haskins to run from \$2 to \$4 per yard though no kind of adequate test pits have been dug to determine this. However, the clay is a very sticky type that I believe will be hard to clean. The operators plan to use a shovel and various screens to clean to clay.

I visited the placer operation because Wag suggested that you might want to list it in the Ore Bin as one of the current operations in Oregon. However, I think it would be better to wait until when and if they actually begin working. I know next to nothing about placer mining but this does not look like a promising undertaking.

I know nothing about Frazer and Britton and evidently Rand and Haskins don't know much about them either, though one is said to have some experience. Their names may be spelling wrong, also.

On another matter, Tennissen phoned me Monday and plans to visit here on the 26th. He hopes to see you on the 27th but I suppose has been in touch with you already about this.

Sincerely,


George Koch

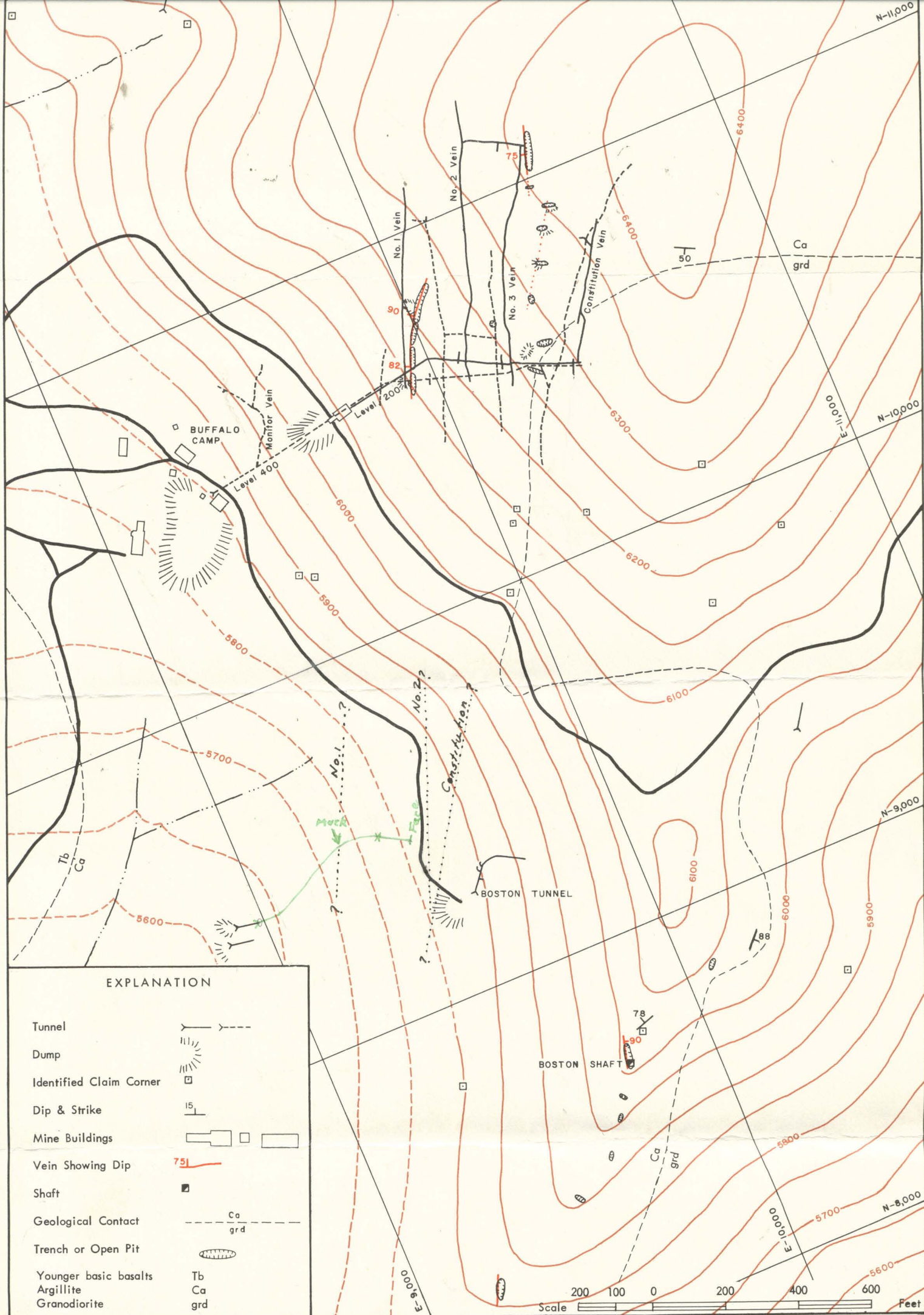


Figure 7 - Buffalo mine. Geologic map of surface based on a survey with plane table and alidade. Geology by G. S. Koch, Jr. Topography by S. H. Pilcher. Locations of certain buildings and information in southwest corner of map from maps by Philo Anderson.

CINDERELLA MINE

BLUE RIVER DISTRICT
AMERICAN SMELTING AND REFINING COMPANY

LANE COUNTY

Revised Settlement

CONTRACT NO. 680

TACOMA SMELTER

P. O. BOX 1605

Tacoma 1, Washington

DATE December 27-1960

SMELTER LOT NO. 2324

MINE LOT NO.

MATERIAL One

DATE RECEIVED Nov 10-60

ENTRY

MINE NAME

CAR OR VESSEL Truck

STATEMENT OF SETTLEMENT

NAME OF SHIPPER

Emerald Empire Mining Company
Route 3 Box 270
Corvallis, OregonGROSS WEIGHT LBS.
CONTAINERS LBS.
NET WEIGHT 15675 LBS.
MOISTURE 32.75 %
NET DRY WEIGHT 10541 LBS.

METAL QUOTATIONS:

DATES

PRICE

LESS

NET

GOLD

SILVER 444

11/10-16

34.9125

91.375 1.0 90.375

LEAD

COPPER

COPPER

ASSAY & ANALYSIS

METAL CONTENTS

DEBITS

CREDITS

	ASSAY & ANALYSIS	METAL CONTENTS						
GOLD	184	OZS. 9.7	OZS. @ 91.14	%		8.8	OZS.	
SILVER	119	OZS. 6	OZS. @	% MIN. 1/2	OZS.	3	OZS.	
LEAD	—	%	LBS. LESS	UNITS @	%		LBS.	
COPPER	17	%	LBS. LESS	UNITS @	%		LBS.	
COPPER	—	%	LBS. LESS	UNITS @	%		LBS.	
ZINC	—	% LESS	UNITS	% @		\$		
ARSENIC	—	% LESS	UNITS	% @				
ANTIMONY	—	% LESS	UNITS	% @				
NICKEL	—	% LESS	UNITS	% @				
BISMUTH	—	% LESS	UNITS	% @				
TIN	—	% LESS	UNITS	% @				
CHLORINE	—	% LESS	UNITS	% @				
SILICA	671	% LESS	UNITS	% @				
IRON	58	% LESS	UNITS	% @				
LIME	2	% LESS	UNITS	% @				
SULPHUR	1	% LESS	UNITS	% @				
ALUMINA	126	% LESS	UNITS	% @				
Silica	less 2/3 Iron Assay	63.2% deficiency	6.8% @ 7¢			48		

BASE CHARGE

LABOR PER HR. \$ BASE \$ @ c FOR EA. c

OIL PER BBL. \$ BASE \$ @ c FOR EA. c

METAL VALUE PER TON \$ 58.81 BASE \$ 50.00 @ 10 % 88

TOTAL TREATMENT PER TON

10541 LBS. @ \$ 236

SAMPLING AND ASSAYING

FREIGHT LBS. @ \$ PER TON \$ TAXES \$

SMELTER LABOR (DISCHARGING) \$ SWITCHING \$

SACK CHARGE LBS. @ \$ PER TON

IN SOLID BOTTOM CAR LBS. @ \$ PER TON

UMPIRE CHARGES \$: CUSTOMS \$: REPRESENTATION \$

ADDITION ON Settlement 12-16-1960

LESS COINAGE SILVER PAYMENT PENDING RECEIPT OF AFFIDAVIT

ROYALTY % OF \$

DUE SHIPPER

DUE SMELTER

TOTALS

17 84

XXXXXXXX XXXXXX

309 94

XXXXXXXX XXXXXX

309 94

Mason

COPY

STATE DEPARTMENT OF GEOLOGY AND
MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

April 26, 1962

To: Staff
From: R. S. Mason
Subject: Gold Nuggets

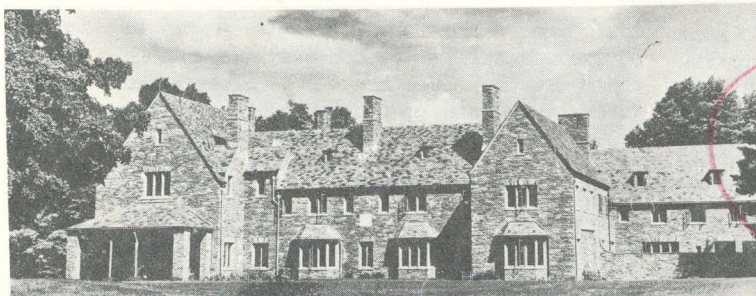
Mr. R. M. Bielenberg, Avon, Montana, operates a small dragline washing plant in Montana. From time to time he has fair quantities of gold, which runs about 960 fine, for sale. He asks about \$45 an ounce but have the feeling that this would be shaded a bit for fairly large sales. Most of the gold is quite fine, but he finds an occasional pumpkin-seed sized or larger nugget.

This information is for your files against the time that someone comes in and wants to know where to get some placer gold.

RSM:lk

ECONOMIC NEWS

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VOL. V, No. 2

FEBRUARY 1962

\$1 A YEAR

THE GOLD CRISIS

At first thought, one might believe that money-credit matters are too complicated for all but a few exceptional individuals to understand. However, commercial banking is the outcome of an evolutionary process that is simple and readily understood when viewed one step at a time, as it must have occurred. In the following paragraphs, this evolution is described step by step. Many of the original dates are lost in the haze of man's unwritten history, but some of the steps have recurred in recent decades and may be expected to recur again.

We begin with a primitive society where exchanges were simple barter. The grower of wheat exchanged it directly for skins obtained by the tribal hunters, for meat obtained by the hunters and by those who had cattle, and for gold obtained in crude form from alluvial deposits.

As the tribe increased in number and the exchanges to be made increased greatly, a time came when the bartering was concentrated, for the most part, at a convenient meeting place. Of the many things that were exchanged in the markets, we shall focus attention on wheat, beaver skins, and gold.

As market activity increased, some individuals became specialists in marketing. Once these specialists had established themselves, many of those bringing in things to barter discovered a process more convenient than carrying on their backs the things they wished to offer in exchange. The processor of wheat delivered wheat to the warehouse and took in exchange a claim check or warehouse receipt for his wheat. Similarly the processors of skins and gold took receipts from merchants specializing in skins and gold respectively.

Claim Checks

The processors then exchanged the claim checks among themselves until they had claims on the things they wanted. When each had claim checks for whatever he wanted, he went to the appropriate merchant warehouses and obtained wheat, or skins, or gold in exchange for the respective claim checks.

The earlier claim checks for wheat read as follows: "This certifies that John Doe

has placed in my warehouse 35 bushels of wheat, which I promise to deliver to the bearer of this claim check on demand." (Signed by the wheat merchant.) Similar warehouse receipts or claim checks were written by the merchants handling skins and gold.

As the market increased in size and activity men found that gold or claim checks on gold were a convenient medium of exchange. With gold or claim checks on gold they could obtain what they wanted with the least difficulty. Each seller saw how readily

The threat of a "run" on the dollar can be understood by anyone who will read this non-technical explanation of the gold crisis.

he could buy other things with gold and how conveniently he could hold gold until he wanted to buy other things.

As a result of the increasing use of gold and claims on gold in effecting exchanges, men developed the habit of estimating the exchange value of other things in amounts of gold. Thus prices, instead of being thought of and talked about in such ways as, "two bushels of wheat equals in exchange value one beaver skin," came to be thought of and talked about in such ways as, "one bushel of wheat equals one thirty-fifth of an ounce of gold, and one beaver skin equals two thirty-fifths of an ounce of gold (also the exchange value of two bushels of wheat)."

The Goldsmiths

At about this stage of development, the gold merchants, or goldsmiths as they were called, saw the possibility of greatly simplifying the marketing and exchange processes. A goldsmith suggested to a wheat merchant that more growers of wheat would bring their wheat to his warehouse if he would give them in exchange claim checks on gold instead of claim checks on wheat. When the merchant replied that he had neither gold nor claim checks on gold to offer the growers, the goldsmith explained that claim checks on gold could be borrowed by the merchant,

and could be repaid when the wheat was sold.

When the next wheat grower arrived with a load of wheat, the merchant offered him a choice between claim checks on wheat and claim checks on gold. When the wheat grower said he preferred the claim checks on gold, the merchant stepped next door and gave to the goldsmith the claim checks on wheat accompanied by a promissory note for gold. Whereupon the goldsmith gave the merchant claim checks on gold, which were delivered to the wheat grower in exchange for the wheat he had delivered. The wheat merchant's promissory note read like this: "This is to certify that I have received and now offer for sale in my warehouse 100 bushels of wheat for which this note is a claim check. Received this date from the goldsmith 100 claim checks for 1/35 ounce of gold each. As the wheat is sold I promise to return to the goldsmith corresponding claim checks on gold with interest at 6 percent, and if I fail to return all the claim checks within 30 days the goldsmith may claim the wheat not yet sold." And each of the 100 claim checks on gold issued by the goldsmith read like this: "I promise to pay to the bearer on demand one thirty-fifth of an ounce of gold." (Signed by the goldsmith.)

At first the goldsmith had issued claim checks totaling no more than the gold in his possession. However, few people who obtained his claim checks ever demanded gold. Most of them used the claim checks on gold as purchasing media to buy other things, and the sellers then returned the claim checks to the goldsmith as agreed in order to repay their borrowings. Occasionally, someone demanded gold, but even that gold usually returned to the goldsmith, for safekeeping if for no other reason.

Commercial Banking

The great convenience provided by the claim checks on gold facilitated increases in trade. Soon the goldsmith was being urged to issue claim checks for greater amounts of gold than he had. He knew from experience that few who had claim checks

Continued on page two

THE GOLD CRISIS

Continued from page one

would want gold if other things were available for purchase in the markets. He reasoned thus:

a. If I am prudent in judging the gold exchange value of the things the merchants have to sell, and if I am sure that they are offering those things on the markets, I can issue claim checks on more gold than I actually have in my possession. Few people who get my claim checks will want gold; most will use them to buy other things.

b. If I make sure that the merchants repay their loans promptly by returning to me the claim checks on gold that they receive when they sell wheat, skins, etc., I shall be sure that there are no more claim checks outstanding than the total value of things left in the market place plus my gold. Obviously, I must lend my claim checks only for short periods and must insist that a merchant promptly repay me when he sells the wheat or other thing that serves as security for his promissory note.

c. If many individuals suddenly decide to demand gold for their claim checks on gold, I can refuse to lend any more and insist that the merchants repay past loans. This will force the merchants to reduce prices on what they have for sale; the lower prices will attract purchasers who have claim checks on gold; thus people who have such claims will not demand gold from me but will exchange their claim checks for other things available at bargain prices. Then the merchants, in order to repay their borrowings, will return to me the claim checks on gold. In a short time, there will be no claim checks on gold outstanding, or at least no more than I can readily redeem with gold if necessary.

Thus commercial banking was begun and was soon undertaken by other goldsmiths.

In a market area not far from the first, the cost of producing wheat was less because the alluvial valley land was richer. On the other hand, beaver skins were more plentiful in the first market area. Even in the days of simple barter, exchange values of wheat and skins in the two markets had differed. But with the regular use of gold or claims on gold as purchasing media, the price differences became more apparent and the advantages of trade between the two areas became obvious. Thus inter-area commerce increased to the advantage of both areas. The goldsmiths wondered at first whether the supply of gold would be adequate for the growing volume of exchanges and commercial banking. But as new inventions occurred in the general advance of a trading civilization, gold production was stimulated. Crude pumps were developed to provide water for hydraulic washing of gravel, and the new wheeled carts lessened costs of hauling.

In addition to lending to merchants, the goldsmiths began lending to traders shipping from one market to another and to processors of wheat and skins such as the millers and furriers. For a time the goldsmiths continued to be careful to apply the basic principle of commercial banking, i.e., that each new issue of claim checks on

gold created for a borrower should, in effect, represent either additional gold received or other things being offered in the markets.

Savings Deposits

In time some of the people employed by manufacturers, merchants, and traders found that their wages would buy more than their immediate needs. Consequently, they began to save and invest part of their incomes. At first, they invested the claim checks that they had saved directly in new houses to rent or other things, but later they realized that the goldsmiths were in a position to make such investments, to safeguard documents in their vaults, and to exercise continuing supervision.

Of course, the purchasing media in the form of claim checks received by the goldsmiths from savers had been created and issued originally by the goldsmiths as commercial loans were made; the individuals who had received the claim checks from the merchants and other borrowers chose not to buy some of the things in the market but to deposit some of their claim checks with a goldsmith instead. Consequently, things that those claim checks could have bought still were for sale in the markets; and those claim checks could be loaned or invested by the goldsmiths in other than commercial loans. For those claim checks, the goldsmiths could safely disregard the commercial-loan principle, because those claim checks had been issued in the first place to represent things being offered and still available in the markets. The goldsmiths promptly invested or loaned those claim checks, and anyone who borrowed them could find things of equivalent value already in the markets.

Readers may wonder whether the goldsmiths might not become confused by making two types of loans with claim checks. However, the goldsmiths had an exact record of the savings deposited with them. Thus they knew precisely how much they could invest in bonds, mortgages, or other loans that did not involve simultaneous offerings of things in the markets.

Inflation

During a period of peace and prosperity when the goldsmiths were actively conducting their usual business of both commercial and noncommercial lending, an unusual event occurred. A would-be borrower who had nothing to offer on the market desired one of the new chariots then becoming fashionable. He asked his goldsmith friend for a loan, but was at first told, "I am sorry to disappoint you, but my records show that all the savings deposited with me already have been invested. As you can understand, a loan to you for the purpose you have indicated would not be a commercial loan because you would not be simultaneously offering anything on the market from which the proceeds of sale would repay the loan. Therefore, I should not issue new claim checks on gold in order to lend them to you. Not until I receive more savings, can I lend to you for such a purpose."

The would-be borrower, a long-established customer of the goldsmith's, had his

reply ready. "I realize that what I am asking is unusual, but what harm can result? If you fear for the safety of the loan, I can give you a chattel mortgage on the chariot I buy; it will serve as security for the loan. If I fail to repay when the note falls due, you can repossess the chariot and reoffer it on the market yourself. Moreover, I am willing to pay an unusually high rate of interest. You will be well protected and can profit by the arrangement."

Now the goldsmith in this instance, although he was by no means stupid, was not well-informed on the principles of sound commercial banking. He had fallen into the habit of thinking more about the security for his loans than of their purpose. He had not experienced and could not foresee the consequences of departing from the basic principles of commercial banking. He therefore issued some additional claim checks on gold and loaned them to the persistent borrower. Thus was inflation begun.

As soon as the borrower had the claim checks in his hands he rushed to the market and bought one of the few chariots then available. Within the next several days, other individuals who in the usual course of events would have purchased chariots likewise sought to buy. The chariot merchant realized that demand for his product was exceeding the supply; his haggling over prices altered in tone with the result that chariots soon commanded higher prices.

The chariot merchant then ordered additional chariots for early delivery. The manufacturer was encouraged to push ahead with plans for expansion of his manufacturing facilities. He went to the goldsmith and proposed to borrow on a large scale either by giving his note or bond (another form of promissory note).

The goldsmith's reply was, "I can see how advantageous your early expansion seems to be; but I have already invested all the savings at my disposal. In fact, my noncommercial, investment-type assets (holdings of bonds, mortgage notes, etc.) already exceed the savings heretofore deposited with me plus my capital funds. You will have to wait until additional savings are brought to me for investment."

But the chariot manufacturer was eager to proceed; consequently he urged, "Your loan will be well-secured. Within a year at most, I shall be producing additional chariots from the new plant, and in 8 or 10 years your loan can be repaid in full."

Thus the goldsmith was persuaded to create more claim checks on gold and lend them to the chariot manufacturer. The latter then started bidding for labor and construction materials in order to build his new plant. Of course, the new purchasing media thus made available were in excess of the value of things then being offered in the markets for sale. Inevitably, competitive bidding forced prices and wages up. All makers of things found demand in the marketplace increased; all tried to increase their plants, all bid for scarce materials and labor at higher and higher prices. The goldsmiths were urged to make more and more noncommercial loans at higher and higher rates of interest, and the more they

Continued from page two

disregarded the "old-fogey" principles of sound commercial banking the more their new-found "wisdom" seemed justified by increasing prosperity.

Such were the effects at first. Then merchants in this market area discovered that they could buy at lower prices in other market areas. First wheat, then skins, and finally even chariots were being brought in from adjacent market areas in large quantities. The local merchants of course had to pay for the things thus brought in, and they gave the claim checks on gold issued by the local goldsmiths.

Then the goldsmiths made an important discovery. Formerly, few claim checks were presented as demands for gold. However, the goldsmiths in other markets (Communities B, C, etc.) had no use for the claim checks issued by goldsmiths in the market where prices (exchange values of other things for gold) had increased so greatly; consequently, the claim checks were presented as demand claims for gold held by goldsmiths in Community A. At first, the goldsmiths in Community A were not concerned about the outflow of gold from their vaults. Occasionally in the past, claim checks had been presented for their gold, and they had encountered no difficulty in satisfying those who, for one reason or another, wished to hold gold. Now, however, the demand persisted until the gold left in their vaults was far below the amounts that they formerly had considered reasonable in relation to claim checks outstanding.

Deflation

At this stage, the goldsmiths in Community A became alarmed. Unless some way could be found to alleviate their situation, they soon would be bankrupt. First, they turned to the borrowers who were building new factories or who had bought new chariots and urged them to repay their borrowings. But the manufacturers answered, "Surely you remember that we have bought bricks with the claim checks you loaned to us. We shall not be able to repay you for a few more years." And those who had borrowed to buy chariots said, "We simply cannot repay until our future earnings are received."

Finally, in desperation, the goldsmiths turned to the merchants and said, "We cannot lend you more claim checks to buy more goods; we must have repayment of your outstanding loans." Then the rush to liquidate began. Merchants marked down prices in order to persuade more shoppers to buy with claim checks that could be used to repay loans. Merchants canceled orders for things from manufacturers in order to avoid becoming obligated for incoming goods. Manufacturers reduced production, and the number of unemployed in Community A greatly increased.

As prices generally fell, prices of second-hand chariots declined rapidly. Some of the goldsmiths in Community A realized that their loans secured by the chariots were "frozen" because the borrowers were unemployed and the chariots involved were worth much less than the unpaid loans. These goldsmiths repossessed chariots and sold them at auction, but the proceeds were insufficient to cover the unpaid loans. Some goldsmiths were bankrupt and were forced to close their doors to the dismay of savings depositors and people who still held claim checks issued by those goldsmiths.

Gold Production

One interesting development during and after the boom was the trend of gold production. When businessmen generally were bidding for raw materials and labor at rising prices and wages, gold production markedly decreased. The prices of everything gold producers had to buy and the wages they had to offer in order to attract labor rose rapidly. The gold producers thus were forced to discontinue producing in all but the richer gravel deposits and mines. Labor and new machinery that might ordinarily have been used in producing gold were diverted to other activities. Later, after prices and wages had fallen extensively and many were unemployed, gold miners found that old, abandoned mine shafts and gravel deposits could be worked again. Even placer mining by individuals became popular.

Some of the economic theorists in this society had become concerned during the early days of the depression and developed learned theories about the "shortage" of

gold, blaming that for the depression difficulties. However, their books hardly were published before gold production was stimulated again as described above and increased to levels never before reached.

With our understanding of the entire situation in Community A, we can see that the decrease in gold production was desirable. It tended to discourage continued issuance of claim checks by the goldsmiths when they already had issued too many. Moreover, the subsequent increase in gold production during the depression had a reverse effect; that it made more gold available to the goldsmiths and encouraged them to create more claim checks (purchasing media, which increased demand for other things). In addition, as their gold holdings increased once more, the goldsmiths were in a better position to resume commercial lending.

Experience in the United States

Although the basic principles of sound commercial banking were applied in England during the 1800's, they were not so widely understood in the United States. Hundreds of banks were started by individuals who knew nothing of banking beyond the fact that they wanted to participate in that mysteriously profitable business. These amateur goldsmiths were easily induced to provide claim checks on gold (their banknotes) to borrowers who wished to speculate in land, in railroads, in almost anything; or when they accepted a borrower's promissory note and created claims on gold for him, they might add the amount to his checking account.

The inevitable result of such banking was a long series of minor booms and recessions, with occasional great booms followed by severe depressions. Efforts were made by both Federal and State governments to remedy the situation. One of the first methods was to limit the amount of claim checks on gold that the goldsmiths (or commercial bankers as we shall call them from this point on) could legally issue in relation to their actual holdings of gold. Thus were initiated the legal reserve requirements that have become characteristic of American banking. Evidently the thousands of banks that failed had overexpanded; therefore, when

Continued on page four

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THE GOLD CRISIS

Continued from page three

not limit the creation of claim checks to a smaller multiple of a bank's gold? Another attempt at better banking was the organization of the National banks in 1861. By certain safeguards, such as requiring deposits of Government bonds in relation to note issues, the credit "rope" with which the Nation's bankers periodically "hanged" themselves, and nearly everyone else, was somewhat shortened.

At long last, after a particularly disastrous experience with an inflationary "boom and bust," a Monetary Commission was formed. Early in the 1900's the Commission discovered the principles of commercial banking that had been applied in England for nearly a century. Following its recommendations, the United States established in 1914 a Federal Reserve System including 12 Federal Reserve banks and thousands of member banks. This new system at least recognized and attempted to apply the principles of sound commercial banking.

During World War I, the governments of warring nations chose inflation as the expedient means of financing their war efforts. In England, the long-established principles of commercial banking were put aside as the commercial banks were persuaded to create claims on gold for the national Treasury in the form of banknotes and checking accounts, in exchange for Government bonds. The resulting great increase in purchasing media had the usual effect on prices, wages, and business activity.

Similarly, in the United States after 1916, the new Federal Reserve System was used as an "engine of inflation." Commercial banks including the 12 Reserve banks were induced to accept Government bonds in exchange for additions to the Treasury's checking accounts. Shortly after the war, the Federal Reserve Board sold Government bonds from the Federal Reserve banks and forced deflation. Thus most of the inflationary purchasing media were removed from circulation and sound commercial banking could have been resumed.

Unfortunately, the wartime practice of having the 12 Federal Reserve banks create new purchasing media (additions to the

Treasury checking accounts) in exchange for Government bonds soon was resumed in the hope that this "easy-money" policy would stimulate business. The result was another great inflation with unbridled stock market speculation. The speculators who borrowed to buy more stocks obtained newly created purchasing media that became the profits of those who sold at higher prices; and when successful speculators bought new cars, new homes, etc., with their gains, the boom in business was augmented. The outcome, when the great speculative bubble burst, was drastic deflation and accompanying depression. Hundreds of banks failed, but by mid-1932 the remaining ones had liquidated inflationary loans and were back on a sound basis. As on past occasions, a recovery of business began as soon as the necessary deflation with accompanying reductions in prices and wages was accomplished. By the fall of 1932, the recovery was well under way.

Devaluation

As it happened, however, a presidential election was held in that year. Although the President-elect had espoused sound money and had ridiculed assertions concerning threats to the gold standard, he permitted some close advisers to learn in December 1932 that he favored managed-money panaceas and that he intended to do something about the seeming shortage of gold. Rumors spread, and a run on the banks was begun by depositors who feared that claims on gold would not be honored after the new Administration came into office. By March every bank in the Nation was forced to close although nearly all were soon found to be in excellent condition and were reopened.

In 1934 by newly enacted laws all existing claim checks on gold were, in effect, reworded so that they became claims for about 40 percent less gold (i.e., only 60 percent of the original amount). But the devaluation of the dollar failed to raise prices immediately and restore prosperity as some naive advisers had predicted. Another experiment, planned inflation as recommended by Lord Keynes, was undertaken. By again persuading the banks to accept Government bonds in exchange for newly created additions to

Treasury checking accounts, the Government's deficits were monetized in substantial part. The initial result was a short-lived boom that still left 7,500,000 unemployed and the aftermath was one of the most extensive and most rapid business contractions in the Nation's history. By 1939 nearly 10,000,000 were unemployed.

World War II and Postwar Inflation

In World War II so great an amount of inflationary purchasing media was created in monetizing Treasury deficits that the early recipients could not find what they wanted to buy. New cars and houses were not available, and businesses could not obtain new plant and equipment except for wartime needs. Consequently, a large portion of the inflationary purchasing media, both currency and checking accounts, were hoarded or held idle until the postwar year.

Instead of forcing deflation, as was done after World War I, the Federal Reserve Board (the money-credit policy agency of the United States) continued its easy-money program, apparently influenced by an Administration fearful of a depression. Inflation continued with only minor cyclical interruptions, each of which was cut short primarily by the continuing flow of hoarded inflationary purchasing media into circulation and secondarily by further monetizing of public and private debt.

By 1958 the economy of the United States in relation to other leading industrial nations, had become like Community A in relation to Communities B, C, etc., as described earlier in this discussion. Foreign claims on U.S. gold and foreign withdrawals increased rapidly.

Although some understanding of the situation was evidenced by the Federal Reserve Board when it pursued its tight money policy throughout 1959, this policy was abandoned by mid-1960, apparently because a business recession was developing. Even after a run on gold occurred in October 1960, the Board failed to force deflation. Foreign claims on U. S. gold have continued to increase, and the status of the dollar has steadily weakened.

* See the charts in *Economic News*, January 1962.

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GOLD-SILVER MINES IN SOUTHWESTERN OREGON

Map No.	Mine	Sec.	T.	R.	Mining District	Production *	References & Remarks
<u>JOSEPHINE COUNTY</u>							
1.	Greenback	32	33S	5W	Greenback	A	Bull.14-C
2.	Anaconda	29	33S	5W	"	S	"
3.	Almeda	13	34S	8W	Galice	C	"
4.	Albright	16	41S	9W	Waldo	S	"
5.	Black Bear	26	34S	8W	Galice	S	"
6.	Benton	22,23,27	33S	8W	Galice	B	Bull.34
7.	Becca & Morning	7	38S	9W	Illinois River	S	Bull.14-C
8.	Arnold	16	41S	5W	Waldo	S	"
9.	Black Jack Pocket	3,4	35S	8W	Galice	S	"
10.	Bradbury	12	34S	8W	Galice	NR	"
11.	Bunker Hill (Robertson)	2	35S	9W	"	C	"
12.	California	25,26	33S	8W	"	S	Bull.34
13.	Gold Bug	26	33S	8W	"	B	"
14.	Golden Wedge	14,23	34S	8W	"	D	Bull.14-C
15.	Gold Plate	4	35S	8W	"	S	"
16.	Ajax	36	33S	8W	"	S	Bull.34
17.	J.C.L.	34,35	33S	9W	"	C	"
18.	Nesbit Group	34	34S	8W	"	NR	Bull.14-C
19.	Reno	34	33S	8W	"	S	Bull.34
20.	Oriole	26	34S	8W	"	S	Bull.14-C
21.	Sugar Pine	3	35S	8W	"	S	"
22.	Victor	32	34S	8W	"	S	"
23.	Howland	24	35S	9W	"	NR	Mine file
24.	Gopher	8	35S	5W	Grants Pass	NR	Bull.14-C
25.	Granite Hill	26	35S	5W	"	D	"
26.	Ida	26	35S	5W	"	NR	"
27.	Jewett	NW34	36S	5W	"	D	"
28.	Lambtongue (Baby)	17	35S	5W	"	S	"
29.	Lucky Queen	30,31	34S	5W	"	NR	"
30.	Oak	4	35S	5W	"	NR	"
31.	Oro Fino (Elkhorn)	3	35S	5W	"	S	Mine file
32.	Red Jacket	34	35S	5W	"	S	Bull.14-C
33.	Golden Mary	34	36S	5W	"	S	"
34.	Copper Queen	15	34S	6W	Greenback	S	Mine file
35.	Daisy (Hammersly)	14	34S	5W	"	C	Bull.14-C
36.	Dorothea	22	33S	5W	"	D	"
37.	Gold Note	25,30	33S	4,5W	" & Gold Hill	NR	"
38.	Horseshoe Lode	28	33S	5W	Greenback	S	"
39.	Jim Blaine	5	34S	5W	"	NR	"
40.	John Hall	18	34S	5W	"	D	"
41.	Livingstone	22	33S	5W	"	S	"

* PRODUCTION CLASS

A - More than \$1,000,000.

B - \$500,000 to \$1,000,000.

C - \$100,000 to \$500,000.

D - \$20,000 to \$100,000.

S - Small production only - less than \$20,000.

NR - Production records not available (unknown or none recorded).

GOLD-SILVER MINES IN SOUTHWESTERN OREGON

Map No.	Mine	Sec.	T.	R.	Mining District	Production *	References & Remarks
<u>JOSEPHINE COUNTY (cont.)</u>							
42.	Martha	28	33S	5W	Greenback	NR	Bull.14-C
43.	Shot	33	33S	5W	"	NR	"
44.	Silent Friend	15	33S	5W	"	D	"
45.	Hayden (Little Dandy)	13	34S	6W	"	S	"
46.	Eureka	22	37S	9W	Illinois River	S	"
47.	Gold Ridge	14	38S	9W	"	S	"
48.	Mood	34	38S	9W	"	S	"
49.	Hoover Gulch	10	38S	9W	"	S	"
50.	Exchequer	35	37S	5W	Lower Applegate	NR	Bull.14-C
51.	Humdinger	21	38S	5W	"	D	14-C, USGS 830B
52.	Oregon Bonanza	16	38S	5W	"	S	" Mine file
53.	Red Rose	19,20	38S	5W	"	S	" "
53a.	Snow Bird	20	38S	5W	"	S	Mine file
54.	Boswell	36	39S	7W	Waldo	D	"
55.	Gem Quartz	36	39S	7W	"	S	Bull.14-C
56.	Mountain View	23,24	40S	5W	"	S	"
57.	Rainbow	12	40S	7W	"	D	"
58.	Portland Group	3	40S	7W	"	NR	"
59.	Bone of Contention	24,25	38S	5W	Lower Applegate	NR	"
60.	Brooklyn	30	40S	6W	Waldo	NR	"
61.	Oro Grande	28	33S	5W	Greenback	S	Mine file
62.	Briggs Pocket	14	41S	6W	Waldo	D	GrantsPass Courier
63.	Queen of Bronze	36	40S	8W	"	C	USGS 846B

JACKSON COUNTY

1.	Ashland	6,7,12	39S	1E	Ashland	A	14-C, Mine file
2.	Barron	23	39S	2E	"	S	"
3.	Growler	13	39S	1W	"	S	"
4.	Mattern	31	39S	1E	"	NR	"
5.	Reeder	20	39S	1E	"	NR	"
6.	Shorty Hope	12	39S	1W	"	D	"
7.	Skyline	30	39S	1E	"	NR	"
8.	Double Jack	14	39S	1W	"	S	"
9.	Hidden Treasure	16	36S	4W	Gold Hill	S	"
10.	Bill Nye	34	36S	3W	"	S	"
11.	Blossom	19	35S	3W	"	S	"
12.	Braden	27	36S	3W	"	D	"
13.	Bull of the Woods	15	36S	3W	"	S	"

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GOLD-SILVER MINES IN SOUTHWESTERN OREGON

Map No.	Mine	Sec.	T.	R.	Mining District	Production *	References & Remarks
<u>JACKSON COUNTY (cont.)</u>							
14.	Carbonate	17	35S	3W	Gold Hill	NR	Bull.14-C
15.	Corporal G	19	35S	3W	"	NR	"
16.	Dunroamin	36	36S	3W	"	S	"
17.	First Hope	7	37S	4W	"	S	"
18.	Gold Hill Pocket	14	36S	3W	"	B	"
19.	Hazel Group	27,34	36S	4W	"	S	"
20.	Lone Eagle	29	35S	3W	"	NR	"
21.	Lucky Bart	29	35S	3W	"	C	"
22.	Millionaire	30,31	36S	2W	"	NR	"
23.	Mountain View	17	34S	4W	"	NR	"
24.	Owl Hollow	32	36S	4W	"	NR	"
25.	Revenue Pocket	11	37S	3W	"	C	"
26.	Sylvanite	2	36S	3W	"	B	"
27.	Tinpan	31	36S	3W	"	S	"
28.	Trust Buster	36	35S	3W	"	S	"
29.	Warner	4	33S	4W	"	C	"
30.	Little Arctic	8	33S	4W	"	S	"
31.	Bowden	19	36S	2W	"	S	"
32.	Buckskin	7	36S	2W	"	S	"
33.	Calumet	5	37S	4W	"	S	"
34.	Gold Plate	17	35S	3W	"	S	Mine file
35.	Kubli (Gold Standard)	5	37S	3W	"	NR	Bull. 14-C
36.	Reed	1	35S	3W	"	S	"
37.	Norling	26	37S	3W	Jacksonville	D	"
38.	Opp	36	37S	3W	"	C	"
39.	Town	25	37S	3W	"	D	"
40.	Afterthought	27	38S	4W	Upper Applegate	S	"
41.	Fleming	23	38S	3W	"	S	"
42.	Gold Pan (Ray)	2	40S	4W	"	D	"
43.	Great I am	31	38S	4W	"	D	"
	Golden Star	3,4,9	40S	4W	"	S	"
44.	Grubstake	9	41S	2W	"	NR	"
45.	Hematite	6	41S	2W	"	S	"
46.	None Such	23	38S	4W	"	S	"
47.	Oregon Belle	6	38S	3W	"	C	"
48.	Steamboat	17,20	40S	4W	"	C	"
49.	Star	6	39S	4W	"	NR	"
50.	Maid of the Mist	4	39S	4W	"	NR	"
51.	Ray	5	37S	3W	Gold Hill	S	14-C, Mine file
52.	Miller Mine	19	37S	4W	Upper Applegate	S	" "
53.	Buzzard	29	31S	2E	Cascade	S	" "

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Map No.	Mine	Sec.	T.	R.	Mining District	Production *	References & Remarks
<u>DOUGLAS COUNTY</u>							
1.	Cloudy Day	33	32S	4W	Riddle	S	Mine files
2.	Forget-Me-Not	12	33S	5W	"	S	"
3.	Golden Gate	22,23	31S	6W	"	S	14-C, Shenon
4.	Gold Bluff	5	31S	6W	"	D	Mine files
5.	Huckleberry	7	31S	5W	"	S	Bull.14-C
6.	Levens Ledge	5	31S	5W	"	D	14-C, Mine file
7.	Mildred	33	32S	4W	"	S	Bull. 14-C
	Puzzler	33	32S	4W	"	S	"
8.	Quartz Mill	1,2	33S	5W	"	S	"
9.	Silver Peak	23,26	31S	6W	"	D	14-C, USGS 830B
10.	Chieftain	20	29S	3W	Tiller-Drew	C	" "
11.	Continental	20	29S	3W	"	C	" "
12.	Zinc Mine	23-24	29S	1W	Umpqua	NR	14-C, USGS 893

COOS COUNTY

1.	Nicoli Group	23	33S	12W	Powers	S	Bull.14-C
2.	Salmon Mountain	19,20, 21,22	32S	12W	Powers	D	Bull.14-C

CURRY COUNTY

1.	Frazier	26	38S	10W	Chetco	S	Mine file
2.	Peck (Robert E)	23	38S	10W	"	C	14-C, USGS 830B
3.	Young	35	38S	10W	"	S	" "
4.	Mammoth	3,4	33S	10W	Mule Creek	NR	Mine files
5.	Marigold (Tiny H)	33	32S	10W	"	NR	"
6.	Mule Mountain	17	33S	10W	"	NR	14-C, Mine file
7.	Cliffside Lode	4	33S	14W	Sixes River	NR	" "
8.	Big Ben (Rusty Butte)	23	32S	13W	"	NR	Mine file
9.	Combination	22	32S	13W	"	NR	"

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Gold Nuggets

Siberian nugget found June, 1971 , 4885 grams or 157.07 troy ounces or 133.51 fine ounces (850 fine gold) = \$5,340.52 at \$40.00 per fine troy ounce.
\$6,675 @ 50.00 " " " "

Armstrong nugget found June 18, 1913, Buck Gulch placer near Susanville, Grant County, Oregon. Weight 80.4 troy ounces, or 68.34 fine ounces (850 fine gold) = \$ 2733.60 at \$40.00 per fine troy ounce.
3415 " 50.00 " " " "

Most important nugget ever discovered in North America was the gold flake picked up at Coloma, California at Sutter's mill January 24, 1848. Directly as a result of this discovery over \$2.5 billion in gold has been mined in the state.

Value of all large nuggets from a collector's standpoint is many times the value of the metal alone.

Gold mining in Oregon at the present time is restricted to a few small one or two man operations plus an undetermined number of skin divers and recreationists using simple sluices, suction dredges and gold pans to recover placer gold from streams in southwestern and northeastern Oregon.

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SUNDAY, MARCH 11, 1962

Timely Gold

Did Northwest gold win the Civil War?

That question will soon project this corner of the nation into the centennial observance of the war, the histories of which do not take the West much past Vicksburg. It is the subject of the annual Pacific Northwest History Conference, in Boise, Idaho, April 13 and 14. Participants will include Dr. Arthur Throckmorton, Portland, professor of history at Lewis and Clark College.

Just 100 years ago, the pioneer mining bonanza in Idaho, which was mined and supplied through Portland and other new Oregon settlements, was at its height. Idaho mines produced as much as 20 per cent of the nation's new gold during the war years, and there is a theory that this rich flow tipped the economic balance for the North.

However far-fetched that view may be, the West's gold strikes of the mid-19th century were of far greater significance to the nation than is generally

appreciated. As Dr. Throckmorton has pointed out in his "Oregon Argonauts," recently published by the Oregon Historical Society, the gold of California, Oregon and Idaho came in the nick of time to keep the Pacific frontier in business. Thus, it can be said to have had an important part in winning the United States and extending the national boundaries to the western ocean. That development ranks with the Civil War as one of the major events of American history.

One need not claim the winning of the Civil War to prove either the significance or the timeliness of the frontier's gold.

Rising prices may revive gold mines

By ANDREW MERSHON

of The Oregonian Staff

A number of pressures are acting on the gold market, experts said Tuesday, and all the movement will be toward higher prices, which will probably result in re-opening Oregon mines.

Inflation, increased smelting costs due to environmental controls, the 50-50 chance that Congress will lift the prohibition against Americans owning bullion, and the metal's own mystical attraction are all driving the price up.

Portland attorney William Murray, who represents a number of mine operators from Alaska to California, said gold prices will climb,

"regardless of whether Americans are allowed to own gold again."

Murray said 1974 gold futures are now at \$100 per ounce on world markets and the spot price is about \$90.

Murray predicts a number of mines will be reopening in the West and depending on how high the price goes, new properties.

How much the individual gold miner will benefit from all this activity in world markets is open to debate, however.

Murray feels that exploration "has become too sophisticated" for most weekend miners. He said even trained professionals are in short supply. "Only 150 mining engineers are being

graduated a year from American universities," he said, "and half of those are foreign students."

Ralph Mason, mining engineer with the Oregon Department of Geology and Mineral Industries, pointed out that smelting the ore which comes from the hard-rock mines of northeastern and southwestern Oregon is becoming an increasing problem.

"The smelters are going down like tenpins," he said. "Most of these are sulfide ores and the smelters just cannot meet the emission standards."

The one remaining smelter in the Northwest, at Tacoma, Wash., is "very visible and

under constant attack," he said. "They have made some strides in emission controls, but these things keep getting tighter all the time."

The closing of smelters also concerned Howard Yates, operator of Oregon's only commercial gold mining property near Halfway.

Cornucopia Minerals Co. has a placer operation in Baker County, but also has interests in other western mines, some of which are ore-type properties which will produce the basic material for bullion gold.

"This smelter situation is getting bad," Yates said. "Particularly for the miner. You send them \$100 worth of gold in the ore and get back maybe \$40 if you're lucky. It's a miserable situation."

Mason feels there is still a lot of room for the independent operator in the gold market, however, and believes there will be a run on mining properties in the state this year.

Yates said last fall he was getting double the bullion price for placer, or natural gold, which is legal for Americans to buy and sell without license. At that time, gold was trading at around \$40 per ounce on the world bullion markets.

The move in Congress to legalize bullion for Americans started in the Senate and is now before the House Banking Committee.



Ralph

May 2, 1973

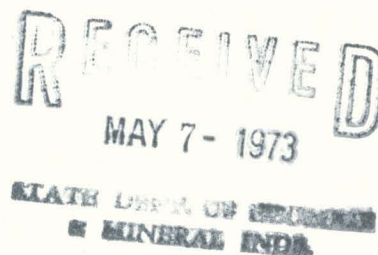
MEMORANDUM

TO: AMC Gold Committee
Officials of State Mining Organizations - Metal

FROM: J. Allen Overton, Jr.

The attached statement by Kenneth C. Kellar, a director of Homestake Mining Company, was submitted to the Subcommittee on Production and Stabilization of the Senate Committee on Banking, Housing and Urban Affairs. The Committee held hearings May 1 and 2 on legislation that would provide for ownership of gold by U.S. citizens. Mr. Kellar urged support of S. 359, introduced by Senator James McClure (R-ID).

Attachment



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J. ALLEN OVERTON, JR., President

TESTIMONY OF

KENNETH C. KELLAR

MAY 2, 1973

BEFORE THE SUBCOMMITTEE ON PRODUCTION

AND STABILIZATION

OF THE

SENATE BANKING, HOUSING AND URBAN AFFAIRS COMMITTEE

in foreign circles as, in effect, establishing a two-price system for gold and further that it might be interpreted as an indication of an intent to devalue the dollar. Similar objections were raised by Treasury at prior hearings before the Subcommittee on Minerals, Materials and Fuels of the Senate Interior and Insular Affairs Committee when S2125, a somewhat similar bill, was under consideration in the Fall of 1963. In subsequent years, legislation concerning gold was introduced by various members of the Congress that called for subsidies to domestic producers for the establishment of a strategic stockpile of gold for defense purposes and for the use of gold in commemorative medallions and so forth. Hearings were not held on these bills because of adverse reports received by Treasury which maintained its consistent, adamant position with respect to any legislation, which in its opinion, might be interpreted abroad as a departure from the policy of maintaining the then official gold content of the dollar at 1/35 of an ounce.

For years Treasury adopted an inflexible position that gold should be treated only as a monetary metal and should not be regarded as a commodity. However, the very substantial drain of gold from the United States Treasury stocks in the late Fall of 1967 and the ensuing monetary crisis which precipitated the establishment of a two-tier gold system by the London Gold Pool nations, including the United States, completely changed the situation. Since that time, as you gentlemen undoubtedly know, the Treasury of the United States will no longer buy gold from producers and the central banks of the nations that entered into the accord are prohibited from buying or selling gold to private concerns.

However, after March, 1968 when the two-tier system was established, the price of the precious metal on the market has been, for the most part, above the official rate. In the last 18 months, the rise has been steady and dramatic. As you know, the price of gold per ounce on the open market in the past few weeks has been approximately \$90. Since the Treasury was one of the architects of the two-tier system and tends to minimize the future role of gold in the monetary system, its historic opposition to the ownership of gold by private citizens seems somewhat awkward to maintain. Indeed, its position in opposition to private ownership is now hardly tenable on the basis it was previously supported.

The rather meteoric rise in the price of gold simply confirms the long asserted beliefs of the chrysophiles that the reverence for gold as a store of value held by the peoples of the world in many nations has not been dissipated, the U. S. Treasury to the contrary, notwithstanding. The rise in the price of gold is a barometer of the distrust of many peoples in the value of their paper "fiat" currencies.

Two questions, of course, must be paramount in your minds as to the effect of the passage of this legislation. What will the effect be, if any, on the price of gold? Is the legislation in the national interest?

We believe that the most important aspect of this legislation is that if enacted, ownership of gold by American citizens will have a stabilizing effect on the monetary situation. Treasury, with virtually no success, has been trying for several years to reform the international monetary system and spokesmen have repeatedly urged that gold should be eventually phased out of the international monetary system. The efforts of the Treasury to revise

international monetary system and downgrade gold have not been accepted with great acclaim by the central bankers of Europe who still tenaciously cling to the principle that gold should be an important reserve asset in any international monetary system. Their views reflect the belief of their citizens, who still regard possession of gold as a protection against the ills of inflated currencies.

Would private ownership of gold have a disturbing effect upon the sensitive monetary situation? By broadening the market, it would make the price more realistic and make it easier to select the rate at which convertibility into gold could be safely restored. What would be the effect upon the price of gold if citizens of this country were permitted to own and possess the metal? I am neither an economist nor a monetary expert, but I venture the assertion that no one can say with any degree of certainty what the effect would be. In our opinion, such action might result in an increase of a few dollars per ounce, but we doubt very much that it would result in any substantial increase in the price of gold from this factor alone for it is dictated by too many other more important considerations.

We have been informed that the Manufacturing and Jewelry Association may request the Treasury to release eight million ounces of gold from monetary stocks to be sold to the domestic trade. We believe such action would be most unwise. It may be possibly proposed as an amendment in these hearings to this bill. In any event, and the fact should not be overlooked, that for a number of decades the jewelry trade in the United States was, in effect, subsidized by the gold producers since a consumer was able to purchase gold at the monetary

price of \$35 per ounce and then could use the metal in the manufacture of jewelry on which there were no restrictions as to sale price. In view of the uncertainties in the international monetary situation, with the prospect of recurrent currency crises that may threaten the dollar, we believe that any release of Treasury gold to special interests for their own special benefits would be decidedly against the national interest. We believe further that the Treasury stock of monetary gold should be held inviolate, pending developments on reform in the international monetary situation which may well take years to accomplish.

As recently as December, 1970 Treasury itself has recognized that the force of its arguments against any legislation pertaining to gold has been weakened by changed circumstances. This is borne out by a report sent by a general counsel of the Treasury to the Chairman of the Interior and Insular Affairs Committee of the House, December, 1970 wherein counsel stated:

"It is true that one of Treasury's concerns in the past that gold subsidies tend to establish a price different from the monetary price and thereby cast doubts on the stability of the monetary price itself has lost some of its force with the establishment of the two price system of the March, 1968 communique."

Continued prohibition of private gold ownership in the United States contradicts the Treasury's position that internationally the role of gold as a monetary metal has diminished and with the passage of time will be reduced still further. For the purpose of argument, if we assume that Treasury's position is correct that gold is on its way out as a monetary metal, then there is certainly no need for Treasury to regulate it as a commodity.

And, on the other hand, if gold is retained as the common monetary unit in which currencies are defined, and convertibility into gold is re-established at rates that can be maintained, the right of the individual to own gold should be restored as it was in the days of the gold standard. So from either position, this move can be logically urged.

In conclusion, we urge this Committee to approve Senator McClure's bill, S359, providing for the private ownership of gold by citizens of the United States since we believe that the time for this discrimination against our citizens on this subject has been ended by changed circumstances. We further urge this Committee to take no action which would countenance a raid on U. S. monetary gold stocks or release gold to any special interest group.

Respectfully submitted,

Kenneth C. Kellar

Questions, answers on owning gold

New York Times News Service

On Dec. 31, Americans will be able to legally purchase gold bullion for the first time since 1933. The following are some questions and answers relating to the buying and holding of gold.

Question: When will I be able to buy gold?

Answer: Many banks and brokerage houses will begin selling it on Dec. 31. A number of commodity exchanges will begin trading in gold futures the same day.

Q. What is the minimum amount I must buy at one time?

A. It will vary, but some brokers say they will sell in minimum amounts of .5 ounces of metal. Smaller quantities, in the form of thin wafers, will be available from other sources, including banks and retail stores. Commodity exchanges will deal in much larger minimum quantities.

Q. Will I actually be able to take possession of my gold?

A. Certainly, although you may not want to. If you take delivery it will be your responsibility to store it and insure it. You may have to have it assayed, or analyzed by experts, when you want to resell it to prove that it is not counterfeit and has not been tampered with.

Q. Will my broker or banker hold it for me?

A. Yes. However, he will probably charge you for storage.

Q. What determines the price?

A. There are two price "fixings" each day in London when bullion dealers set the price on the basis of supply and demand. Some of the New York brokers have said they would base their price on the first, or morning, fixing. Commodity exchanges arrive at their own prices after competitive bidding.

Q. Will the charges for buying gold be high?

A. Probably higher than charges for many other types of investments. Most brokers and banks have not announced details yet, but you will pay a brokerage commission, plus a sales tax if it is applicable. There also will be a variety of other charges, including insurance, storage, mailing and assaying fees. Altogether you may end up paying as much as 20 per cent more than the basic current price of the gold.

Q. How many brokers and banks will sell gold?

A. Relatively few have announced their intentions, but it is widely expected that most of the big ones and many smaller ones will enter the market.

Q. Will gold be available elsewhere?

A. Certainly. It will probably be sold at department stores, jewelry stores and a

variety of other outlets in quantities ranging from a few grams to 400-ounce bars.

Q. Will I be able to buy gold bullion on margin, that is, by paying only a percentage of the purchase price, as I can in securities?

A. Banks and brokerage houses will probably charge full price for bullion.

Q. What about reselling my gold? Will there be a problem?

A. Probably not. If your broker or dealer holds it for you, you can simply telephone your order and it will be sold at the following day's price. If you took possession yourself, however, you probably will have to have it assayed first to prove that it is authentic.

Q. What if I don't want gold bullion? What other sorts of gold are available?

A. You are already able to buy gold mining stocks, gold coins and gold jewelry, and you will be able to buy gold futures contracts on Dec. 31.

Q. What exchanges will deal in futures?

A. The Commodity Exchange Inc., the New York Mercantile Exchange, the Chicago Board of Trade, the International Money Market of the Chicago Mercantile Exchange and perhaps others.

Q. How does futures trading work?

A. You buy or sell gold futures contracts, pieces of paper that in effect allow you to bet on whether the price of gold is going to rise or fall in future months.

Q. What is the minimum order?

A. It varies, but many are for 100 ounces.

Q. Can I trade futures on margin?

A. Yes. Margins vary by broker, but it appears that most will range from 10 to 15 per cent. In other words, at current prices, you could buy a contract for 100 ounces of gold worth about \$17,000 by putting up \$1,700 to \$2,500 in cash.

How Much Gold Is There In the Sample?

Sample Weight (pounds)	Sample Assay (ounces per ton)					
	10	5	4	3	2	1
1	.0050	.0025	.0020	.0015	.0010	.0005
2	.0100	.0050	.0040	.0030	.0020	.0010
3	.0150	.0075	.0060	.0045	.0030	.0015
4	.0200	.0100	.0080	.0060	.0040	.0020
5	.0250	.0125	.0100	.0075	.0050	.0025
10	.0500	.0250	.0200	.0150	.0100	.0050
15	.0750	.0375	.0300	.0225	.0150	.0075
20	.1000	.0500	.0400	.0300	.0200	.0100

To determine value of gold in the sample:- Find factor at intersection of "Sample Weight" line and "Sample Assay" column and multiply by current value of gold per ounce.

Example:- A 10 pound sample assays 1 oz/ton, with gold valued at \$160.00/ton.

Using factor .0050 x \$160.00 = 80 cents.

Note: Assay results rarely come out in even ounces and if desired the factors shown can be adjusted to reflect the exact assay reported. Generally speaking the amount of gold in the average sample is so low that this refinement is not required.

Gold rush?

Price hikes rekindle eastern Oregon gold fever

Democrat Herald - 2/19/79

LA GRANDE (AP) — With the continuing decline of the dollar pushing the price of gold to around \$250 an ounce, gold fever is heating up once again in eastern Oregon.

The soaring value of the metal, along with advanced technology, is spurring renewed interest in abandoned claims and exploration for gold and other precious metals.

While it seems unlikely that a gold rush of similar proportions to the one in the late 1800s is in the offing, a Baker mining engineer says the area has potential.

Vernon Jacobson says eastern Oregon, northern Nevada and the Salmon River country of northern Idaho are among the last of the nation's relatively unexplored mineral regions.

Several items illustrate the developing trend in eastern Oregon:

- Permission granted to Canalta Resources Ltd. of British Columbia to process tailings from the old Columbia gold mine above Bourne in the Elkhorn Mountains west of Baker.
- Announcement of a joint ore-processing venture at the old Iron Dyke mine near Homestead on the Snake River along the Idaho border.

- Interest expressed by Exxon in mineral claims in the Thief Valley area near the Union County and Baker County borders.

- Work by Johns-Mansville Corp. on some 200 copper claims in the Elkhorns during this decade.

The Columbia mine produced more than \$4 million — mostly in gold — between 1897 and 1916. The Canadian firm plans to use a leaching process to extract gold from the mountains of

spoils left in the old mine dump.

Silver King Mines Inc. of Salt Lake City, Utah, will join Texasgulf Inc. at the Iron Dyke, which produced about 35,000 ounces of gold, 257,000 ounces of silver and 14 million tons of copper between 1910 and 1934.

The discovery of the Iron Dyke in 1897 was a major factor in the construction of a railroad spur down the Snake River.

Gold fever in the 1800s spawned boom towns like Auburn and Canyon City, which became some of the largest and busiest in the Northwest. The peak year for eastern Oregon gold production was 1862 when an estimated \$20 million worth was taken out.

The areas offering lumber, cattle and farming as a means of support, after the gold was gone, lived on. Towns with only gold to offer died when the veins and placers grew faint and difficult to process.

It is doubtful that the renewed interest in mineral extraction in the area promises the birth of new boom towns. Jacobson says it is more a matter of the giant corporations seeking to diversify their operations.

The firms are interested in strategic metals such as tungsten, cobalt and silver which the United States currently imports to meet its needs. Molybdenum and zirconium also are sought.

"These tend to be associated with gold and if they can be mined with gold, it might be profitable where only one metal would not pay," Jacobson explains.

New processing technology now can remove

up to 97 percent of the precious metals from ore, Jacobson says. And since the extraction can be accomplished at the site, it often is profitable to rework the tailings from old mines.

The degree of advancement of mining technology is demonstrated clearly by the use of infrared satellite photography to pinpoint concentrations of various precious metals.

Just as the earlier epidemics of gold fever had some undesirable side effects, not everyone is pleased with the ramifications of the resurgence of mineral activities in eastern Oregon.

The nature of the latest development is unlikely to necessitate the closure by state militia of such rowdy settlements as Copperfield as ordered by Gov. Oswald West in 1912. But already some environmentalists are unhappy.

They had hoped the Elkhorns and portions of the Wallows would be added to the nation's wilderness system. But the renewed mineral activity, coupled with public concern that prospective gold fields remain open to exploration, has doused those dreams.

Based on the potential for mineral riches, the recently completed potential wilderness survey (RARE II) by the U.S. Forest Service recommended no additional wilderness area for the Elkhorns.

Numerous intangibles will dictate the degree to which the mineral development is pursued but one thing is certain: Quietly, but surely, eastern Oregon's gold belt is stirring again.

Effort required, cost of supplies cool gold fever

By STEVE ERICKSON
of The Oregonian staff

GRANTS PASS — There is no "new Oregon gold rush," although the gold is out there in the wild and its price reached \$444 an ounce at the end of September. One reason is inflation. Another is hard work.

"It takes a tremendous effort — man labor, real labor — to produce an ounce of gold," said Wes Pieren, a miner for 30 years.

And, he added, "Despite the price of gold, it's not more than equal to inflation because of the cost of supplies."

Nevertheless, gold lies alluringly in Southwestern Oregon hills and stream beds, and it is not being ignored.

"All major streams and tributaries in this part of the state carry gold," said Len Ramp, resident geologist in the Grants Pass field office of the Oregon Department of Geology and Mineral Industries. However, he says:

"The average person doesn't realize that it is hard work (getting it out), so about 90 percent of those who start to try to prospect and mine for gold don't stay with it very long.

"The returns are generally quite discouraging, especially for a person who has high expectations of getting rich quick."

Ramp said: "It seems there was more of a rush a few years ago when the price was climbing. A lot of (novice miners) found out how difficult it was. A lot

of people bought little dredges then tried to sell them. The people who made money were dealers and manufacturers of dredges."

At Erickson's Mining in Grants Pass, where would-be sourdoughs and 49ers outfit themselves for prospecting, Elaine Behrendt said: "In the last year, sales of gold-mining equipment has boomed. To me a gold rush is when people stampede to creeks and rivers, and I don't think they're doing that.

"But there's still a lot of gold left in the creeks," Mrs. Behrendt said. "I can see where they could get a little gold fever."

She said gold dredges cost \$370 or more, sluice boxes \$19 and more, and gold pans start at \$2.

"They're working on almost every creek," she added, "but whether they're taking anything out, I don't know. Most people are pretty quiet about what they have."

At Erickson's, where books such as "Gold in a Campground" and "Gold Panning with Prospector John" entice initiates, Mrs. Behrendt said, "It takes an awfully lot of money to make it profitable. I've never heard anyone say, 'I'm gonna get rich.'"

"We've had guys buy \$400 to \$500 dredges and come in and say, 'We've paid for our equipment in a couple days.' But very few.

"A lot of them (new miners) are weekenders," Mrs. Behrendt said. "They think it's fun. They're mostly serious hobbyists."

The first rich deposits of Oregon gold were found in the southwestern and northeastern parts of the state shortly after the discovery of gold in California in 1848.

The Ore Bin, a state geological publication, reported in 1973, "The gold 'rush' in Oregon never reached the great intensity of that in California (but) Oregon's gold rush quickly became a way of life for many Oregonians in the southwestern counties of Jackson, Josephine, Coos, Curry and Douglas, and the northeastern counties of Baker, Grant, Malheur, Union and Wallowa."

In April 1973, however, The Ore Bin said, "Today the gold camps have all but disappeared and the mines are idle."

All the mines aren't idle anymore. In 1954, Pieren bought the Greenback Mine ("and it's paid for, too") 20 miles north of Grants Pass and worked it periodically. He resumed mining five years ago during a surge in the price of gold.

"There's 245 acres of deeded ground and 76 acres of mining claims," he said.

Pieren, 64, said that, historically, the Greenback is the second-biggest gold producer in Oregon. The biggest, he said, is the Cornucopia Mine near Baker, "which is being operated right now."

The Greenback, sparkling at the feet of St. Paul Mountain and St. Peter Mountain, has operated intermittently since it was opened in 1897.

"At today's prices, at least \$50 million has been taken out of this mine," Pieren said. How much is left? "I think possibly twice that much."

Ore from the Greenback Mine, Pieren said, "contains 2½ ounces-plus of gold per ton. That's considered a high yield," although it can go much higher.

"You would have to reclaim \$40 (1/9-ounce) a ton to make it worthwhile opening a mine," he said. "Every hour I run this operation I'll get at least \$40 in gold, and it could go as high as a hundred."

Today's hard-rock mining method is "similar to what was used in the old days," Pieren said. "Drilling and blasting, crushing, then milling and extracting the values (gold and silver)."

In placer (hydraulic) mining, silt and rock are

washed away and the gold is caught in a Panning uses the same principle.

"Gold handling hasn't changed much," Pieren said. Nor have the motives of people who seek it seems.

"Finding it is the big thing," Pieren said. "If you find it, it don't really mean a hell of a lot."

Walgren keeps job in Senate

SPOKANE (AP) — Gordon L. Walgren, Washington state Senate majority leader, says he cannot step down to run for attorney general now because there would be a "bloody fight" for his job. "There would be so much blood poured on the floor it would have an effect on our state Senate races," he said.

However, he said he doesn't know of anything that would "cause me not to run for attorney general in 1980."

"We have a new legislative session coming in January," said the Bremerton Democrat, here to address the Spokane County Bar Association. "If I suddenly bow out, we'd have a bloody fight over who's majority leader."

He said he would make a formal announcement after the session.

The Legislature meets Jan. 14 for a maximum 60 days as a result of the voter mandate in last Tuesday's general election for annual sessions.

Of the upcoming session, Walgren said: "It could be highly political, highly chaotic, highly unproductive. It's our first annual session."

One thing, he said, it will not be a spending session because of the lid on spending approved by the voters.

The leadership in both houses remains the same. The House is still split 49-49 and has co-speakers, Democrat John Bagnariol and Republican Duane Berentson.

Charges dropped

DES MOINES, Wash. (AP) — Assault charges have been dropped against former Rep. Jack Cunningham, R-Wash., and an 18-year-old high school student with whom he fought after a Sept. 21 traffic incident.

"I'm satisfied," said the student, Mike Mangrum. "I talked to the prosecutor and we both agreed to drop the thing."

Mangrum and his 22-year-old brother, Carl, were booked into the Des Moines jail on assault charges following the traffic incident. Cunningham later was charged with assault.

Charges against the elder Mangrum were later dropped after an investigation by Des Moines police and the city prosecutor's office.

Cunningham had told police that he was attacked by the brothers following a traffic dispute. Mike Mangrum said he was the only one of the brothers involved in the fight, and that Cunningham struck first.

Cunningham, who lost his bid for re-election last year, could not be reached for comment.

Tree harvest ruled out

NESPELEM, Wash. (AP) — No permits for commercial cutting of Christmas trees on its reservation lands will be issued this year, the Business Council of the Colville Confederated Tribes said Saturday.

The council blamed reduced quality of the trees because of insect damage.

Insects such as the Douglas fir tussock moth and the spruce budworm have defoliated, deformed and reduced the vigor of fir trees over much of the reservation, the council said.

"The council also feels that the time and energy that would be involved with Christmas tree cutting should be directed toward forest development projects," it said.

Ask

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cool gold fever in Oregon

washed away and the gold is caught in a sluice box. Panning uses the same principle.

"Gold handling hasn't changed much," Pieren said.

Nor have the motives of people who seek gold, it seems.

"Finding it is the big thing," Pieren said. "After I find it, it don't really mean a hell of a lot. To me, it's

the challenge.

"No other human ever had his hands on it until you touched it," he said. "It gives you some elation, you might call it."

But although wealth is a secondary consideration to Pieren, he said, "I expect to be a millionaire from gold if I don't die. Everybody does, don't they?"

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GOLD RUSH ON AGAIN IN OREGON



By Jinx Quinlan

GOLD! GOLD! Gold! Gold! Eureka! The goldrush is on. The '79ers are hammering, panning and sluicing their separate ways up and down Oregon's creek-beds and hills.

Prospecting is no long given over completely to wheezing and grizzled solitary old-timers and their heavily laden burros eternally searching for El Dorado and the

JINX QUINLAN is a Portland writer.

Seven Cities of Cibola. There's a new breed afoot.

The '79ers come in all shapes, sizes, sexes and ages. They're chiefly amateurs equipped with a \$15 rock hammer, a \$5 plastic gold pan and a free leaflet from the U.S. Geological Survey on prospecting as a hobby. They can be seen roaring over once inaccessible terrain in 4-wheelers or working on a quiet stream not far from their picnic baskets and parked cars. They may be weekend gold seekers, but their dreams are just as fanciful as those whose lifeblood has been infected with gold fever.

The gold market is out of control. The value of gold has risen \$200 an ounce since the beginning of the year. Fast-buck speculators and anxious investors are buying the precious metal as a safeguard against accelerating inflation. In an effort to strike it rich, the '79ers have taken to the hills to rework old mines and explore new areas.

Well over half the gold extracted from Oregon came out of the Wallowa and Blue mountains in the northeast section of the state. Gold was discovered there in 1861 in the John Day and Powder rivers. The once roaring mining settlements of Sumpter, Granite, Canyon City and Baker are showing signs of renewed mining activity.

The Blue Mountain goldfield extends 100 miles from Canyon City east to the Snake River. Not only individuals but large companies are staking claims in Eastern Oregon. A

Texas firm bought and reopened the Iron Dye mine in Hell's Canyon and has located a large concentration of gold, silver and copper. Moreover a Colorado mining company has been working the Cougar Gold Mine near Sumpter for the past two years.

Oregon's other major gold district is located in the southwestern

Successful miners rely on machinery to make the grade

part of the state, stretching from Medford to Gold Beach, through the Rogue River Valley and the Siskiyou Mountains. The Applegate district in Jackson County and the Greenback district in Josephine County have been the main gold producing areas in this region. Soon after gold was found there in 1850, the Jacksonville area became the most populous part of the Oregon Territory.

Novice prospectors should keep in mind that few areas in Oregon with metal bearing deposits have been ignored by expert mineralogists. Novices should also be aware of the fact that after the initial boom periods, placer deposits have been reworked twice: first by the Chinese who gleaned the lower grade ore and tailings and again by itinerant miners and unemployed people caught in the Depression of the 1930s.

The successful gold miner today is the large-scale operator with

costly processing machinery. In some cases, the chance of finding gold is so slim that sales of jewelry pennies are common. That a gold miner seems to be working is not in itself a guarantee. Not in the gold age of the 19th century found gold selling for \$200 an ounce.

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Werner Bittner

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The successful gold miner today is the large-scale operator with

costly machinery capable of processing huge tonnages of low grade ore. Individuals have a far greater chance of finding gold at garage sales where fine old watches and jewelry are unwittingly sold for pennies. Because the watch does not work, it is considered of little value. That a timepiece might be gold seems not to enter the seller's mind. Not infrequently precious stones, gold and silver pieces have been found mixed with paste jewelry selling for 50 cents apiece.

How profitable is prospecting today in Oregon's goldfields? Well, the great majority of the '79ers are striking out altogether, although some have found a little "color." A few have managed a day's wages. Occasionally someone unearths a fine nugget.

The chances of hitting "paydirt" are infinitesimal. However, prospecting does offer an enriching family camping vacation which can be exciting, diverting and educational.

Potential prospectors are advised to do a little research and reading before running willy-nilly into the great outdoors with a gold pan and box lunch. Check with federal and state geology and mining bureaus for locations of promising areas, and ask for available maps and handbooks.

Libraries should also be consulted. Multnomah County Library has a fine map room equipped with treasure maps and more than one atlas. ■

Gold Rush '79 sparks new Quartzville interest

By LANCE ROBERTSON
Democrat-Herald Writer

The Gold Rush of '79, fueled by \$400-per-ounce prices last week, has sparked renewed interest in mining the Quartzville area of east Linn County.

Hundreds of weekend prospectors and at least one commercial mining company are searching for the "mother lode" — a thick vein of gold that can turn the hard-luck miner into a millionaire. And it doesn't matter the going price for gold dipped this week back down to the \$370-per-ounce level.

They say there's gold — lots of it — on the west face of the Cascade Range. Ask any of a hundred Linn County miners who pan and dig for gold every weekend there. Some say it's high in the hard rock. Others will tell you to dip a pan in Quartzville Creek or a number of its tributaries.

But geologists say the only reward these "weekend prospectors" are getting is the recreational value of the outdoors. There's gold in them thar hills, all right, but it'll take time and a lot of money to dig it out, say geologists.

And even then it might not pay off.

"In general, there has been more money put into those hills than there ever was taken out," said Larry Brown, a geologist for the U.S. Bureau of Mines in Albany. "The whole west face of the Cascades — from Bohemia up north into Washington — is covered with a light sprinkling of gold. . . . There is no mother lode.

"There's lots of gold up there, but there's an awful lot of rock, too, that you have to sift through to get it."

The gold is deposited in broken, scattered veins, Brown said, making mining expensive and time-consuming. Flakes of gold are scattered about in sediments of stream beds, called placer deposits. But there are no "nuggets." Only the tall tales of three-ounce nuggets and foot-deep veins keep prospectors coming back time after time.

Some, like Sweet Home's Bob Brandt, have made money. He won't say how much gold he's taken home in his 30 years of mining, but in July he collected three ounces in southern Oregon.

"It's my second life," Brandt said. "It's

just a challenge to separate that metal from Mother Earth."

Brandt said his main interest in gold mining is recreation. He used to dredge the streams for it, but prospecting has increased so much in the Quartzville area that he just pans for it now.

The area northeast of Sweet Home has been mined since the 1860s. The Albany, Lawler and Bob & Betty mines were household names then. The Albany mine, located along Dry Gulch, yielded 653 ounces between 1890 and 1893.

Before 1896, 8,557 ounces of gold were extracted from the Quartzville area. Gold brought \$20.67 an ounce then.

But since 1896, only about 200 ounces have been taken from the area, except that gathered by weekend prospectors looking more for fun than for the yellowish metal. In all of Oregon, only about 200 ounces are mined every year, according to state predictions.

"We estimate that two-thirds of all gold ever taken out of the Cascade Range came out by hand," said Jerry Gray, a state economic geologist in Albany. By hand, Gray means with pick, shovel, pan — and lots of strained back muscles.

By 1940, most gold production in Oregon had stopped because the price wasn't high enough to justify spending money looking for it. Now there are only isolated gold mines in northeastern and southern Oregon.

In recent years, as gold soared from about \$135 an ounce in 1977 to more than \$400 last week, speculators rushed to register mining claims in the Quartzville area.

Names such as the Lucky One, Last Hope, Lazy Placer, Paywell and This Is It are listed in Linn County's mining-record books, reflecting the romanticism gold continues to hold.

Last week, Gene Sapp, a former Albany man who now owns a mining company in Springfield, examined Linn County Courthouse records. He said he plans to start mining for either gold or silver in the Quartzville area.

Another company, Cominco-American Inc., has more than 100 20-acre claims near Quartzville. The Canadian-based company registered most of the claims in 1977 and

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Gray said the companies are looking for any metal — lead, silver and copper — not just gold.

Commercial mining is risky business, requiring big investments and a complicated chemical leaching process. But state geologist Gray said there's enough gold in the Quartzville area to make a venture pay off.

"It's a case of just finding it," said Gray. "I maintain that once a major company announces a find, you'll see lots of others moving into the area."

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On weekends, hundreds of prospectors roam the hills and dip their pans into the water. Occasionally you can hear the rumbling of dynamite blasting deeper into a mountain.

Both Gray and Brown agree that the Quartzville area has seen a resurgence of gold mining this year.

Most amateur prospectors collect gold by "free milling" — a process in which hard rock or stream gravel is broken or sifted from the gold. In streams, the most popular method is panning, which takes skillful hands to separate the gold from rock.

"Sluice boxes" often are used to separate the gold. In this process, water and stream gravel are poured through a flume-like box. The heavier gold then drops to the bottom, where it is extracted.

Commercial mining involves a different — and more complicated — process, Gray said. Most of the gold from "free milling" has been depleted in the Quartzville area.

Miners look below the surface for sulfides — galena, pyrite ("fool's gold") and other sulfide-based minerals. Usually, gold is trapped inside these sulfide rocks.

To get the gold out, Gray said, miners sometimes have to drill 200 feet to find the sulfides. Then the rock is crushed and placed in a flotation cell of fatty acids and other chemicals to separate the gold from the rock.

That process is expensive and requires a lot of equipment, Gray said, but if gold stays above \$350 per ounce, a mine can pay off in the Quartzville area.

He estimated the "break-even" price about \$350 per ounce because mining costs have increased 10 times since gold was \$35 per ounce eight years ago.

people

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By LANCE ROBERTSON
Democrat-Herald Writer

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Gold takes new shine in the eyes of investors

By PATRICK O'NEILL
Democrat-Herald Writer

It's the same old story: The more inaccessible it is, the more people want it.

Despite the high price of gold — or maybe because of it — people seem to be buying more gold jewelry than they were a year ago.

Gary Brown, owner of Tenbrook Jewelers, 204 W. First Ave., said his establishment has done as much business so far this year as it did during all of 1978.

"It seems like as prices go higher people automatically start taking notice of gold and there's a craving for it," Brown said. "There's been a tremendous demand for gold since it started to climb."

Across Ellsworth Street at French's Jewelers, 140 W. First Ave., manager Larry Stevens said his store is also having a gold rush.

"We've never experienced business like we've had in the last few months," Stevens said. "We've been so busy we haven't had time to sit around and figure out why it's happening."

The shop recently added a sixth goldsmith to its staff, making it the largest shop on the West Coast north of San Francisco, Stevens said.

Stevens said that as the price of gold goes up, there is more demand for custom-made gold jewelry. Labor costs become an increasingly smaller percentage of the total price of a piece of jewelry.

A Corvallis goldsmith said a lot of people who watch gold prices are deciding that if they are going to buy jewelry at all, now is the time. Toby Pomeroy, proprietor of Talisman Jewelers, Corvallis, said rising gold prices have not deterred his customers. A main interest now is speed. "There's a little more pressure from people who want their jewelry completed before the price of gold goes up again."

Investment counselors all agree on one thing, as far as gold is concerned: If you had bought a lot at \$35 an ounce, you'd be a rich man today. Gold prices went above the \$400-an-ounce mark last

week. This week they were in the \$370-\$380 range.

Willis Burck, owner of Mid-Valley Securities, 1101 S.E. Santiam Road, said the higher gold prices have brought more interest in gold-mining stocks. He said mining stock prices are not as volatile as those of the metal itself.

People who sell gold for investment purposes say the surge in prices has spurred considerable interest in the Kruggerand, a South African coin containing one troy ounce of virtually pure gold.

Burck said that when gold was selling for \$390 per ounce on the London market, one Kruggerand was selling for \$415 to \$420.

Burck said he sells Kruggerands, but not as part of his securities business.

"They are buying it because they feel that in the future our money system will be valueless," he said.

"When our money was backed by gold and silver it was worth something," Burck said. "Now it isn't backed by anything. We aren't going to come out of the next depression with the same monetary system."

Dean Kennedy, proprietor of the Jefferson Mint, a Corvallis coin dealership, said he sells two to three Kruggerands a week.

His customers represent a broad cross-section of occupations, he said. But they share one trait: "They're scared to death. They're scared of government. It's too big, too spend-thrift."

Darrell F. Jones, Lebanon district sales manager for Investors Diversified Services, said he has not noticed any change in the way people invest their money as a result of the higher gold prices.

"I've run into a lot of people who say they wish they had invested in it before the prices went up," he said. "People will have to look at gold over the long term to know whether it's a good investment. They've seen it spiral up but they haven't seen it spiral down. That's bound to come next."

Area not 'right' for gold mining

EDITOR'S NOTE: How extensive are mining operations in Central Oregon? Is there gold in "them there hills?" The Spokesman today begins a two-part series on area mining efforts.

By MEL COULTER
Special Writer

A century ago if someone yelled "gold" in Central Oregon, streets would suddenly become vacant and one could follow a trail of dust to the mountains as hoards of people began prospecting for the precious chunks of yellow rock.

Today it's a slightly different story, however. Despite attractive gold market prices which fluctuate with the dollar's value overseas, prospecting for gold in Central

Oregon remains relatively light.

Only hobby miners and pan-ners roam the Cascade foothills in pursuit of the precious metal.

Prospecting for other precious metals — silver, copper, zinc, lead, uranium and others — also remains at a virtual standstill. It's not because there isn't interest in the material, says John Gray of the Department of Geology and Mineral Industries in Albany.

But those seeking fortunes from precious metals learned a long time ago the environment is wrong in Central Oregon. The volcanic nature of the area's geology almost rules out the possibility of large, high-grade mineral deposits.

Gold mining in Central Oregon, for the most part, has been

confined to a small area northeast of Madras in the Ashwood District. And most of that activity has been in the Oregon King Mine which was first developed in 1898.

The first deposit was discovered by sheepherders who dug into a rock outcrop and found rich silver ore. J.G. Edwards, who was half owner of the Haycreek Ranch nearby, financed the first Oregon King Mine shaft in 1899.

Since that time, the mine has been opened and closed half a dozen times. According to a publication by the Department of Geology and Mineral Industries, actual production from the Oregon King Mine was recorded for the following years: 1899, 1901, 1904, 1935, 1940-1947, 1950 and 1963-1965.

"The main shaft was reopened in 1962 by Oregon King Consolidated Mines Inc. and new ore developed from the workings gave a significant boost to Oregon gold and silver production the following year," states the report.

"In 1963 the state produced 58,234 ounces of silver and 1,281 ounces of lode gold, and nearly all of it came from this one mine."

The mine's production through 1950 represented a smelting value of \$233,693 and included 7,334 dry tons of ore and concentrate.

Production dwindled in 1964 when the Oregon King Consolidated Mines began exploration drilling in lower drifts. It was closed a year later because of poor production and remains idle today.

According to the Geology and Mineral Industries report, quicksilver deposits in the nearby Horse Haven area are the second largest producers in Oregon. The Horse Haven Mine is about 30 miles east of Madras. There are also about nine other deposits in the same general area.

"It is probable that the presence of quicksilver in the district was known to the early prospectors, but until the discovery of the Horse Haven deposits in 1933 no attempts were made toward its exploration," continues the report.

All but 150 flasks produced in the area came from the Horse Haven Mine. The remainder was produced by the Axehandle Mine about six miles to the west. Production ceased in the area in 1958.

That doesn't mean the region has been stripped of all its mineral deposits and that no valuable ore is left, says Gray.

"We don't have all that much activity going on right now in Central Oregon. There has been some mercury (cinnabar) mining in the Horse Haven district but there's none currently," says Gray.

"The ore has been pretty well stripped out. But that doesn't mean there isn't more over there. You can't use negative information as if it was positive. There have been people attempting to bring the Oregon King Mine back into production, but they haven't found enough ore yet to make it profitable."

The area may be exhausted or some large gold and silver deposits may still remain, says Gray. But until someone begins exploration in the Ashwood District again, information about the deposits is insufficient to base any judgment.

They said it couldn't be done

By JIM EVANS

Of the Democrat-Herald

MORMON BASIN — In the continuing search for gold, a giant dragline is feeding the world's largest dryland gold-washing plant on a double shift in Mormon Basin in southern Baker County.

It is the beginning of a five- to 11-year run planned by the Mormon Basin Placer Co. at the historic site atop the Malheur Mountains.

After almost a year of testing, preparation and construction, the firm is retrieving gold from the basin in a four-step process.

Initially gravel is moved by bulldozer to the gigantic dragline, which feeds the dirt and gravel with a three-cubic-yard bucket into a trommel.

By hydraulic washing and screening, the trommel discards the larger rocks. The smaller materials are pumped through hydraulic lines to a Pan-American jig plant for further separation. There they go through 16 jigs, then pass over riffles that permit the gold to settle.

In the final process, the black sands, gold, and smaller gravel are taken to the refining shop about a mile away. There the gravel is sorted visually for nuggets. The gold is separated from the sand by water process and mercury amalgamation.

"The trommel is a seven-foot by 44-foot dryland washing plant which we have had built to our specifications," said Robert M. Lattig, 1705 Main St., Baker. "Basically the trommel is the same size as the Sumpter dredge, but of course has wheels instead of the boat."

Lattig is a chemical engineer originally from Payette, Idaho. He and his partner, Ray Ingles of California, own the placer company.

"We will be on a two-shift work schedule from now until freezing weather closes us for the winter," Lattig said. "We will have four men operating each 10-hour shift, with another eight men working in the shop, preparation, maintenance and clean-up. All employees are residents of Baker County."

The plant can handle about 300 cubic yards of material per hour. It should produce about one ounce of gold per 100 yards of material, according to the tests run.

"We are conscious of the environment," Lattig said. "This is a beautiful basin. When we are through with it, it should be better."

Rocks are being leveled as the machine progresses, he said. Thousands of tons of topsoil have been stockpiled and will be

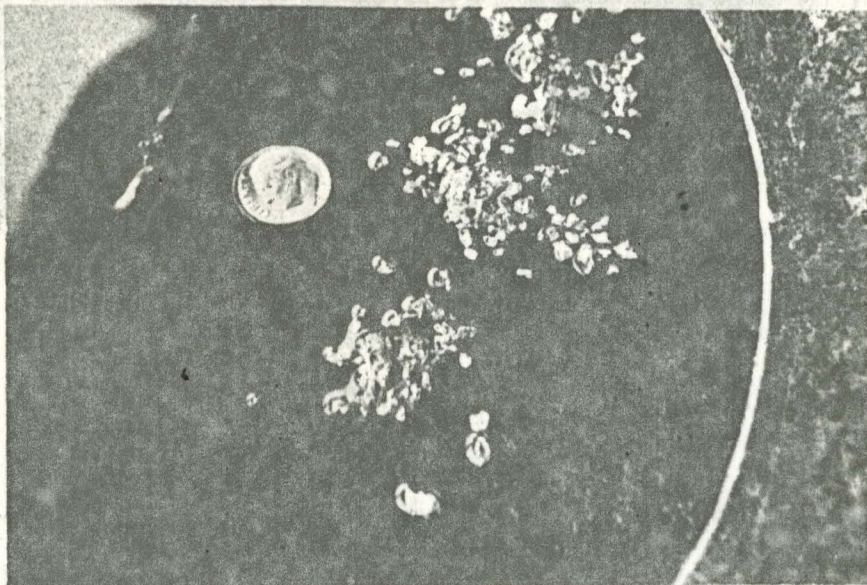
redistributed over the surface. All water is being conserved in settling ponds and reused in the washing process.

Lattig paid tribute to Calvin Suksdorf of 3790 Baker St. in Baker. Suksdorf and his father formerly owned the placer lands, having entered into a lease-purchase plan in 1940.

"Cal is my superintendent of the works," Lattig said. "Because of his years of experience and the information he has, he has contributed enormously to the economics of the project."

As a puff of black smoke from the dragline signaled the start of the long run, Suksdorf was asked about his feelings.

"I guess I feel vindicated," he said. "I am glad to see it going. I have been told often enough that it could never succeed."



Gold! What it is all about? More than an ounce of gold (above) was worth more than \$400 today. Gold closed Monday in New York at

\$403.20 per troy ounce. Pieces of unique design or size command even greater prices for jewelry making.



A giant dragline fed gravel into the world's largest dryland trommel as the Mormon Basin Placer Company began its gold

placer operation last week. At right, the trommel discarded the heavier gravel. The mountain of topsoil in the background will be

redistributed when placering is completed. (Photos by Jim Evans)



Jim "Andy" Anderson of Pine diesel-powered lights into last

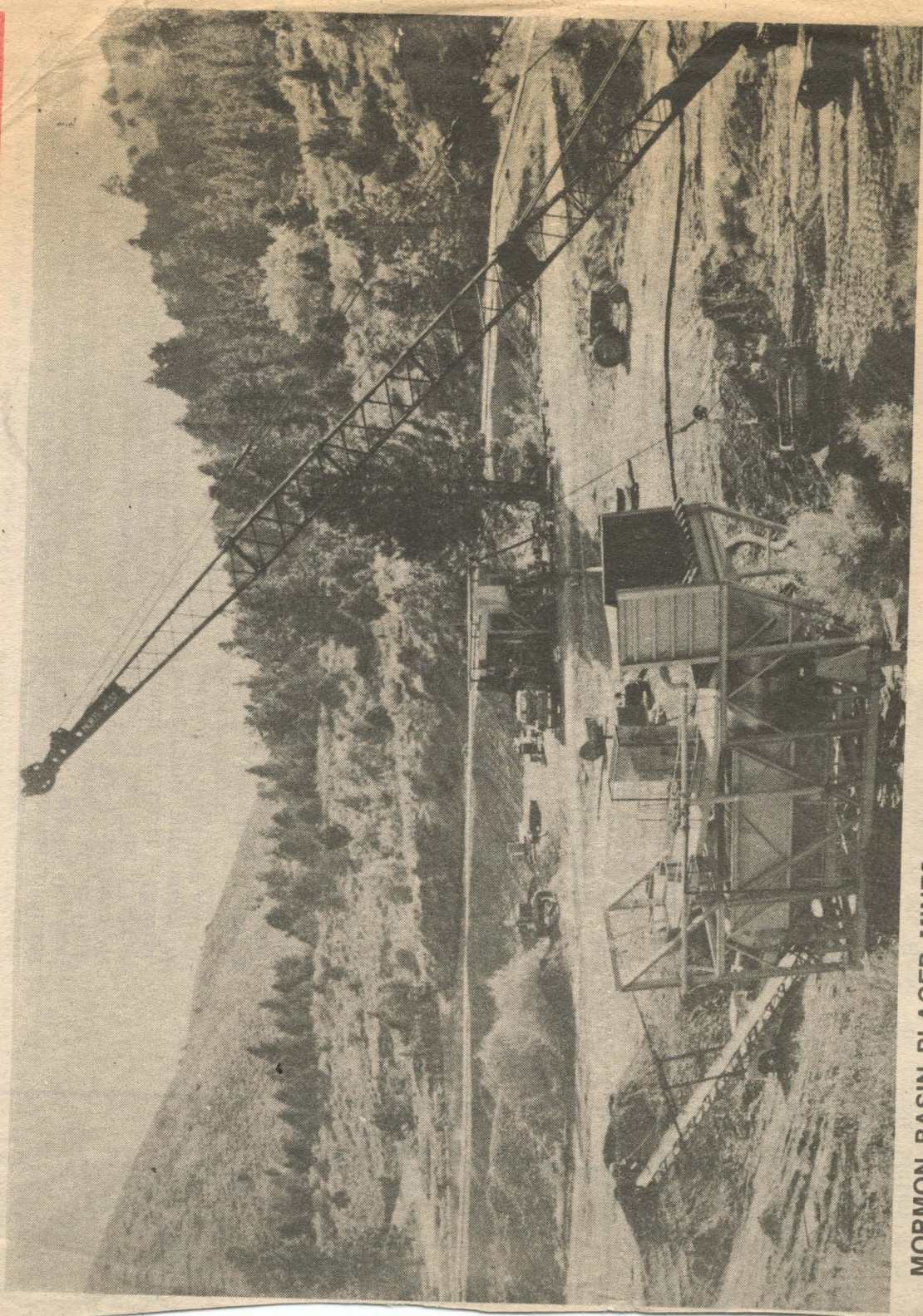
The Record-Courier

(USPS 457-720)

RAVIER, BAKER COUNTY, OREGON, THURSDAY, OCTOBER 11, 1979

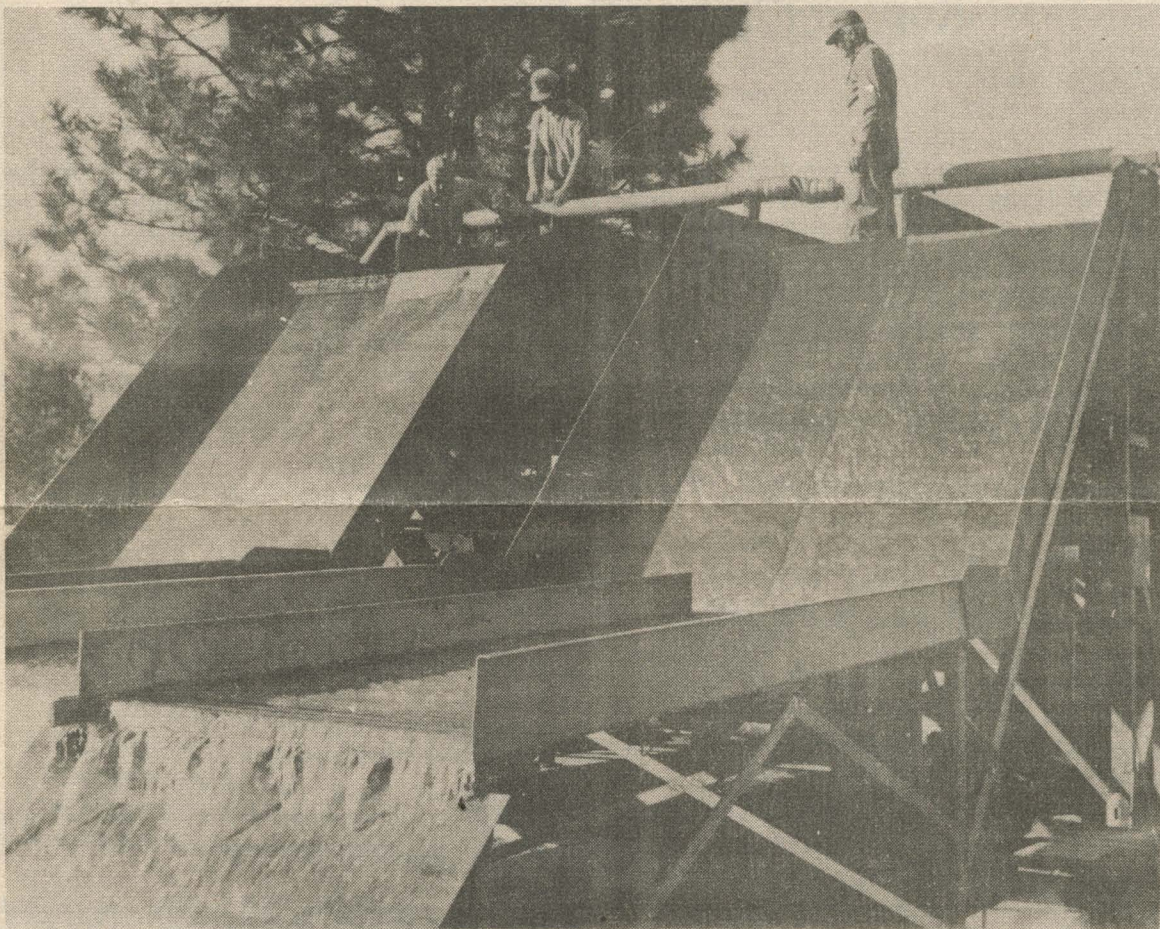
VOLUME LXXVIII NO. 41

15¢
TWENTY PAGES
THREE SECTIONS



MORMON BASIN PLACER MINES—Getting into operation this week using huge dragline shovel, a custom-built 44-foot high trommel and new gold recovery plant utilizing Pan-American jigs with 200-yards per hour capacity. See story on inside page.

Mormon Basin Placer Puts Big Machines Into Gold Production



Large washing plant fed by hydraulic pressure line conveying gravels from trommel washing plant.

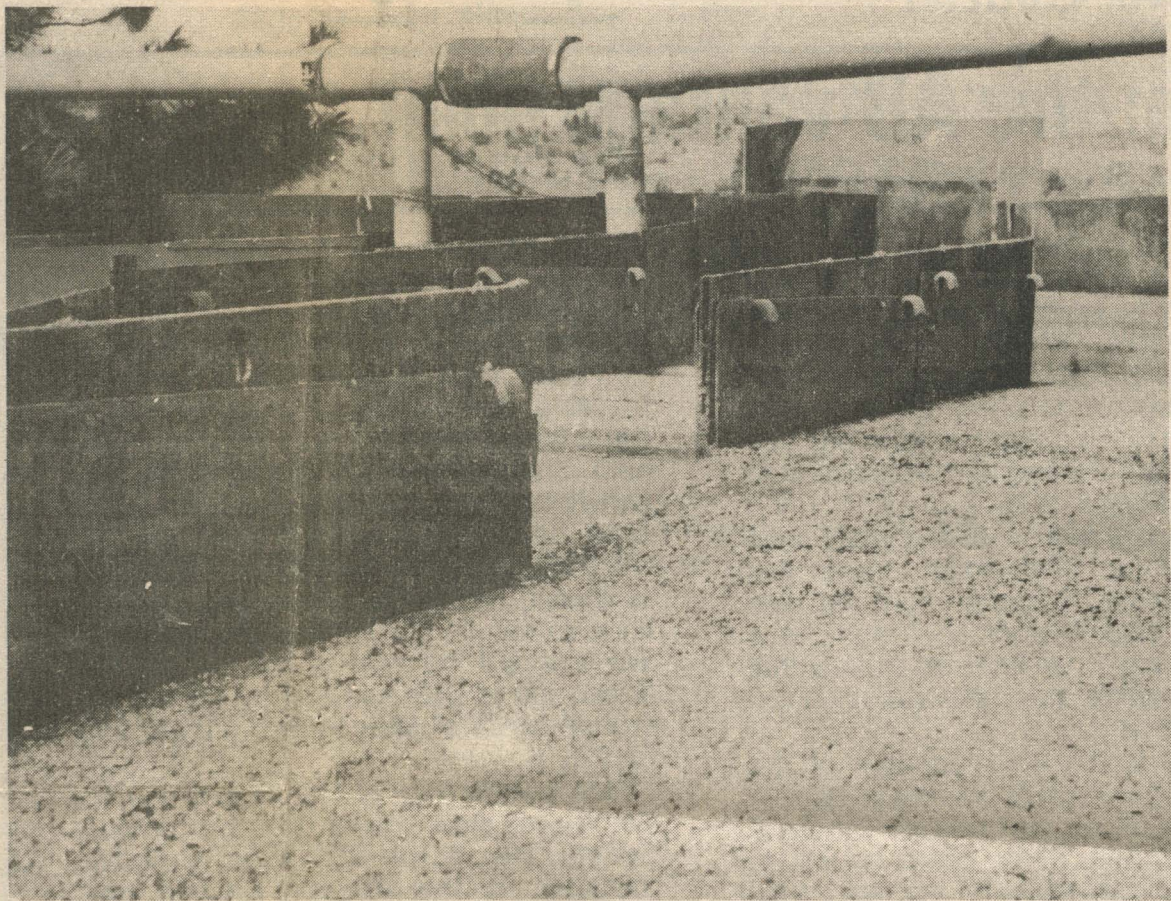
Mel Lattig, general manager of Mormon Basin Placer mines, after a year of production with much smaller equipment, said that with the new machines going into production this week the company could have from five and one-half to eleven years operation, depending on its shifts and seasons.

Acquired is the NW95 3 1/2-yard dragline, the custom-built 390 yard-capacity huge trommel or washing plant, and the 200-yard per hour capacity Pan American jig.

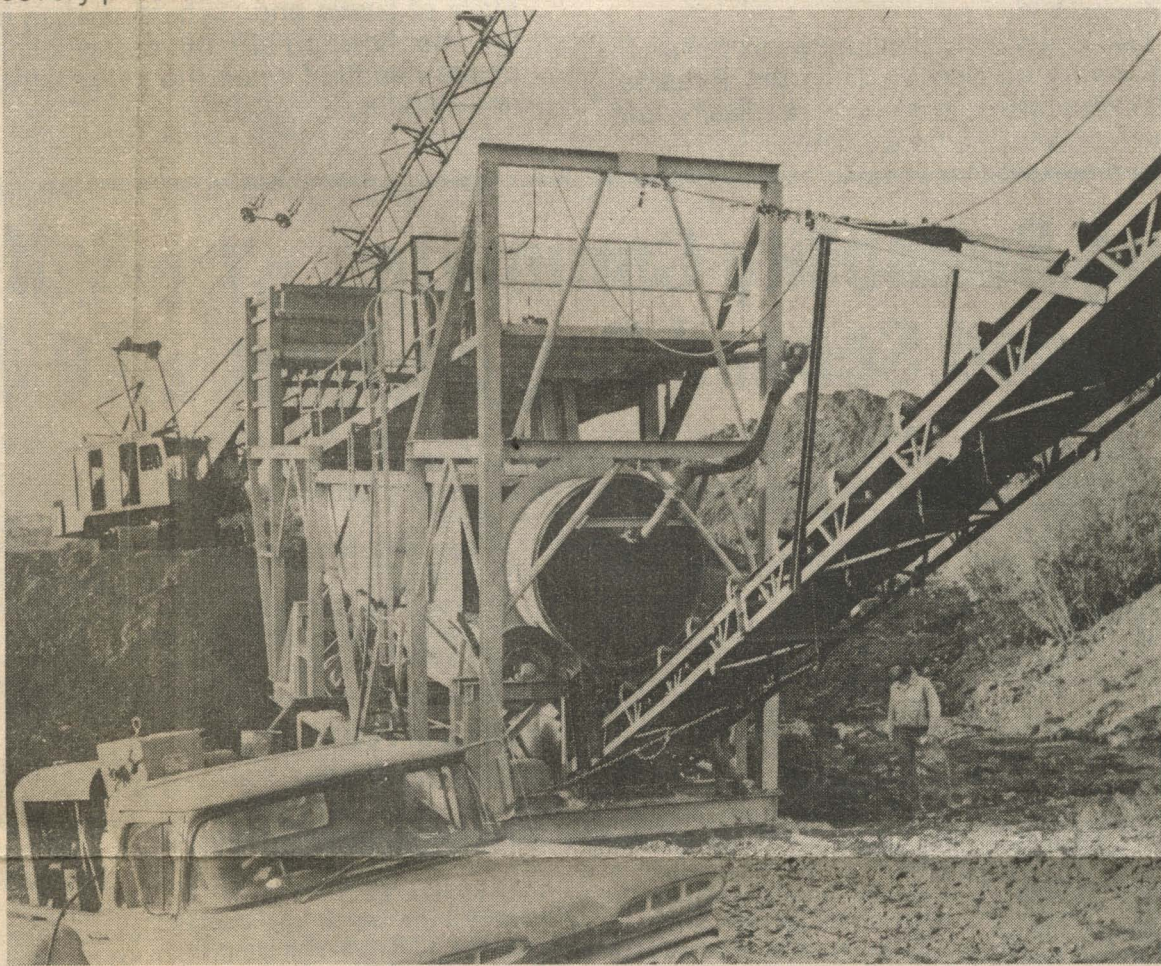
The company operates the placer operation and will have two shifts of four men each with another eight men in the shop,

preparation, maintenance and cleanup, etc. All the crew are from Baker, most of them commuting, daily and weekends.

Values are such that a pan will yield colors and grains in the ground and the company said certain streaks and underlying strata are very rich as placer ground goes.



All gravels go over these jig units—16 of them, followed by conventional riffles in gold-recovery process.



Recycle water storage pond draws water from discharge settling area below recover machine. Huge soil stripping piles will provide land reclamation material.

5018



AP Laserphoto

The old Iron Dyke mine along the Snake River on the Oregon-Idaho state line is going back into operation. Ore is expected to contain gold, copper and silver.

New Life for Old Mine

Economics Revive Metal Mine Near Oxbow

By GARY MIDDLETON
The Baker Democrat-Herald

OXBOW (AP) — The geological forces that created the deepest gorge in North America also exposed rich deposits of minerals along the slopes of that fissure.

The minerals are magnets that over the years have drawn men into Hells Canyon, on the Snake River separating northern Oregon from central Idaho.

As the 1800s faded into the present century, dozens of mines already had been sunk into the reddish-brown slopes of the gorge, tapping the mile-deep canyon's gold, silver and copper treasures.

Towns sprang up around the mines. Towns like Homestead and Copperfield that survive in name and memory only. Mining companies even constructed a railroad from Huntington down the canyon to bring out the ore.

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UP A CREEK — Ed Kangas and his wife Lois (in wetsuit) dredge the rocky bottom of the Sixes River in their search for gold dust and nuggets. The team from Sacramento, Calif., hasn't hit paydirt, but

STEVE NEHL/Oregon Journal

they're not discouraged. Prospecting is on the rise, as more and more people take to the hills along the Coast Range in search of the precious yellow stuff.

Prospectors hunt pot of gold in S. Oregon Coast Range

By JAMIE DUNCAN
Journal Staff Writer

SIXES RIVER — "I've been prospecting for about 30 years," says the sturdy, stocky man of 75, his blue overalls soaked nearly to the waist by the waters of this river that plies its way through a sunlit gorge in the Coast Range, inland from Cape Blanco.

"And I'll be here maybe the rest of my life . . . someplace in Oregon, anyhow," continues Ben Peck, resting on a tuft of long river grass.

Underneath the bill of his yellow cap, his eyes scan the steep, wooded banks upstream. The day is hot and he is tired.

Deerflies perch on his broad nose, but mosquitoes don't bother him.

"I eat too much garlic," he says and grins a gap-toothed grin.

Ben Peck is a gold miner, not a rare thing these days on the Sixes River. Unlike a lode miner, who works mineral veins in the ground, Peck is a placer miner, panning gold out of the loose substance of river beds.

The sound of small dredges like his echoes up and down the gorge and nearly everyone seems to have a tin or plastic pan close at hand. Pans are cheap at \$2 or \$3 a crack, but dredges are another matter. The small ones cost from \$500 to \$1,000.

But there are lots of them. It isn't a modern "gold rush" by any means, but in the last few years more and more people have taken to the hills here and in other spots in the southern Coast Range, looking for the precious yellow metal, lately valued near \$300 an ounce.

"Our recorded production of gold hasn't increased that much," comments Jerry Gray of the Oregon Department of Geolo-

gy and Mineral Industries. "But in the last three or four years the pace of mining claims has certainly gone up."

Ben Peck operates the Goldie Lou Placer claim. Other claims, proclaimed by homemade signs on posts or tree trunks, are scattered up the riverside. A few colonies of tents and trailers have sprouted under the trees above the river bank, where serious "prospectors" like Peck like to live near their claims.

There are also "snipers" — people without claims operating in the free part of the river along Sixes River Park. Kids splash in the water by one dredge and young adults wade in shorts near their's.

There is Dick Ranger, 60, of Coos Bay, once an engineer on a sea-going tug, working a bend of the Sixes River and cheerfully finding nothing.

"The theory," he expounds, "is that the current is slower on the inside of a bend in the river. Any heavy metals, like gold or silver, will drop to the bottom."

His dredge, a roaring affair of tubes, hoses, engine and filter, sucks up a bigger stone that clogs the main hose. Ranger's white mustache bristles in mock anger: "You dirty . . ."

Downstream of Ranger, 69-year-old John Oster regales those who stop by with hair-raising tales from his past — like the time a sleepy rattlesnake curled up next to him in his bedroll. He has known success in mining. He shows a few bright nuggets of gold he has gleaned from the river.

"I'd tell you where the good places are I know about," he says, "if you promise not to publish 'em."

Ed and Lois Kangas, a couple from Sacramento, Calif., have been at the gold-mining trade for only nine hours and so

far they have found nothing. But they are undaunted.

"We're not in it for the money," says Lois, clad in a rubber wetsuit. "We're retired. We're in it for fun. We've got to do something to keep from getting fat."

That said, she adjusts her mask and snorkel, grabs the dredge hose, and plunges into the deep channel they have dug. Occasionally she chucks rocks the size of ostrich eggs to her side, hardly minding the effort.

The sand and gravel sucked up by the hose flows up into the dredge and out along a washboard-like assembly that keeps the finer stuff and lets the water and gravel through.

Her husband Ed scoops what is left into the pan and sifts it using river water, watching for that yellow gleam.

No environmental damage is done by these machines, according to Gray: "All's you're doing is helping the current move the gravel downstream. In that sense, you're not really damaging the river."

To get a claim, Gray says, a prospective prospector must first pass the "prudent man test" — establish a reasonable expectation of getting something from mining a certain area.

Then he or she takes a specimen of whatever precious mineral is to be mined down to the county clerk and recorder to file a claim.

A copy of the filing notice and a map of the claim must be sent to the Bureau of Land Management.

Finally, the miner must do "\$100 worth of assessment" on the claim each year.

But don't expect to get rich. At best, says Ben Peck, "You could make a living. If you worked every day, eight hours a day."

Modern prospectors attracted to old mines

By GARY MIDDLETON

OXBOW (AP) — The gold, copper and silver deposits that lured turn-of-the-century prospectors to Snake River's Hells Canyon are attracting miners again.

Soaring metal prices, new discoveries and modern technology have transformed many diggings in the deepest gorge in North America from abandoned ventures to profitable ones.

The minerals are magnets that over the years have drawn men into Hells Canyon, which straddles the river separating Northeastern Oregon from central Idaho.

About 80 years ago dozens of mines were sunk into the reddish-brown slopes of the gorge, tapping the mile-deep canyon's mineral treasures.

Communities sprang up around the mines — towns like Homestead and Copperfield that survive in name and memory only. Mining companies constructed a railroad down the canyon to bring out the ore.

But, as happened in the rest of the West, the economics of operating the Hells Canyon mines changed during the first half of the 1900s. One by one, the mines were abandoned. The railroad fell into disuse. Many towns were deserted.

Now, new mining techniques, fresh ore discoveries and, above all, soaring world metals prices, have breathed new life into many of the old diggings.

Most prominent among the mine rejuvenations is that at the Iron Dyke works. Located about four miles north of Oxbow on the Oregon side of the canyon, the mine is a beehive of activity these days.

Today, the old Iron Dyke mill is a pile of weathered lumber and rusting boilers, stampers, and tin roofing along the road to the upper level drifts.

But old buildings are coming down. New bunkhouses, shops and offices are going up. Tunnels are being reopened.

The man in charge of the Iron Dyke operation is Arne Widman, a Baker native who went away to school to get a degree in mining engineering. He has worked mines in Nevada and Montana, and now has returned near home to renovate a part of Baker County history.

Pushing back his muddy hardhat, Widman explains the business connections that revived the old mine.

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Red Ledge, was purchased recently by Texas Gulf Sulfur, a large corporation involved in mineral extraction, for about \$1.5 million. The company entered into agreement with a much smaller mining firm, Silver King Mining, to operate the mine. Texas Gulf Sulfur will pay two-thirds of the cost of putting Iron Dyke into operation, and will receive two-thirds of the proceeds until its original investment is recovered. The companies then will share equally in the mine's profits.

And profits there should be, based on initial mine tests, Widman said.

"Our first ore body looks real good," he said, observing that the company is focusing on a large ore concentration that the early miners missed. The body was discovered by test drilling west of the old diggings.

"The old-timers mined above it and to the east," he added.

The mine will be producing ore again for the first time in more than 40 years.

The Iron Dyke was discovered in 1897, according to publications of the Oregon State Department of Geology and Mineral Industries.

A test milling of the newly discovered ore body sample has produced about 3 percent to 3.5 percent copper, one-third ounce per ton of gold and about a half-ounce of silver, according to Widman.

He estimates the new ore body alone at 350,000 tons, enough to keep the mine operating 5 to 10 years.

Widman explains that ore will be trucked to Silver King's Copper Cliff Mine mill near Cuprum, about 22 miles downriver on the Idaho side. The mine will ship about 300 tons of ore a day to the floatation mill during the warmer months.

The mill will reduce the ore to a concentrate, which will be shipped in turn to a smelter in Washington.

To get the mine ready for production, Silver King is doing extensive rehabilitation and modernization work to the property. And Widman is putting together a work force of miners.

"You have to train miners around here now. There are not many experienced ones left anymore," he said. "Mining has become a lot more complicated than people think. It's almost all mechanized, and you have to know how to operate the equipment. There's a lot more to it than a pick and a shovel."

5018 Oxbow Mine Going Into Operation

By GARY MIDDLETON

The Baker Democrat-Herald

OXBOW, Ore. (AP) — The geological forces that created the deepest gorge in North America also exposed rich deposits of minerals along the slopes of that fissure.

The minerals are magnets that over the years have drawn men into Hells Canyon, on the Snake River separating northern Oregon from central Idaho.

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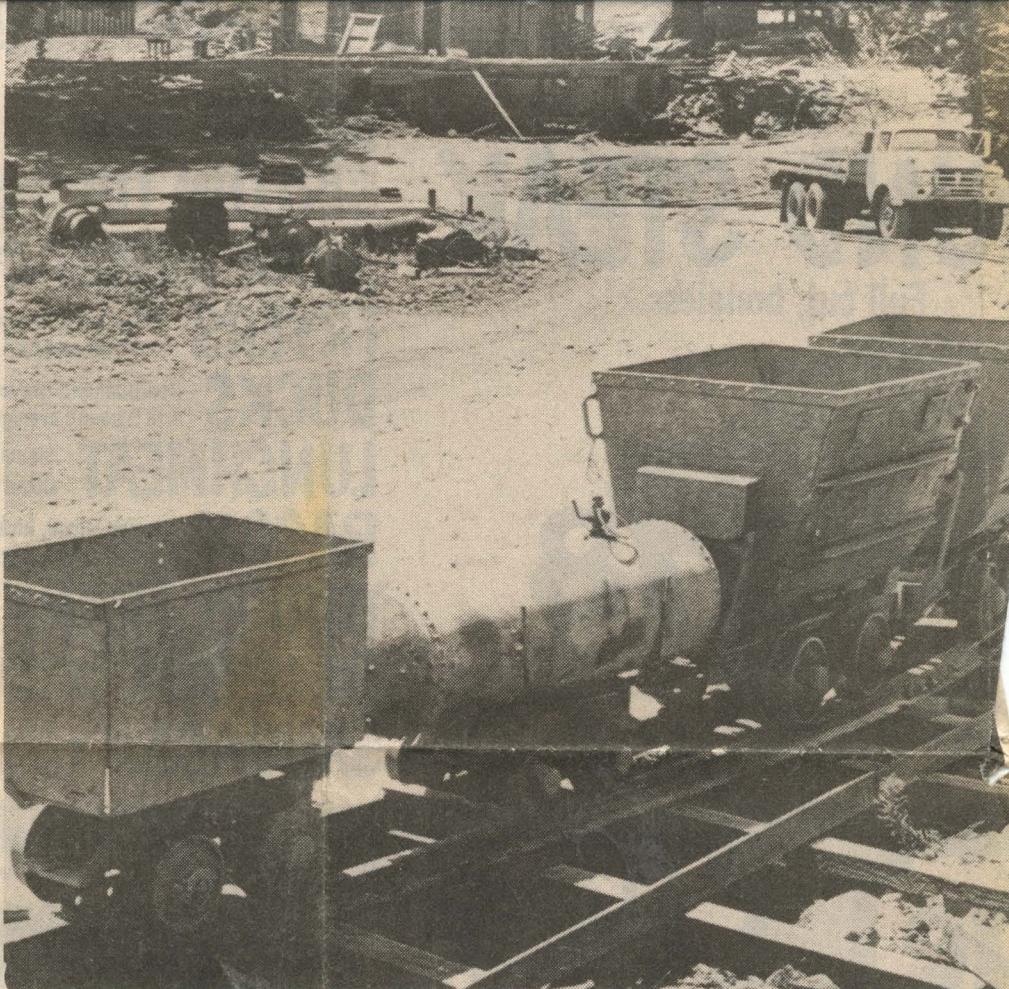
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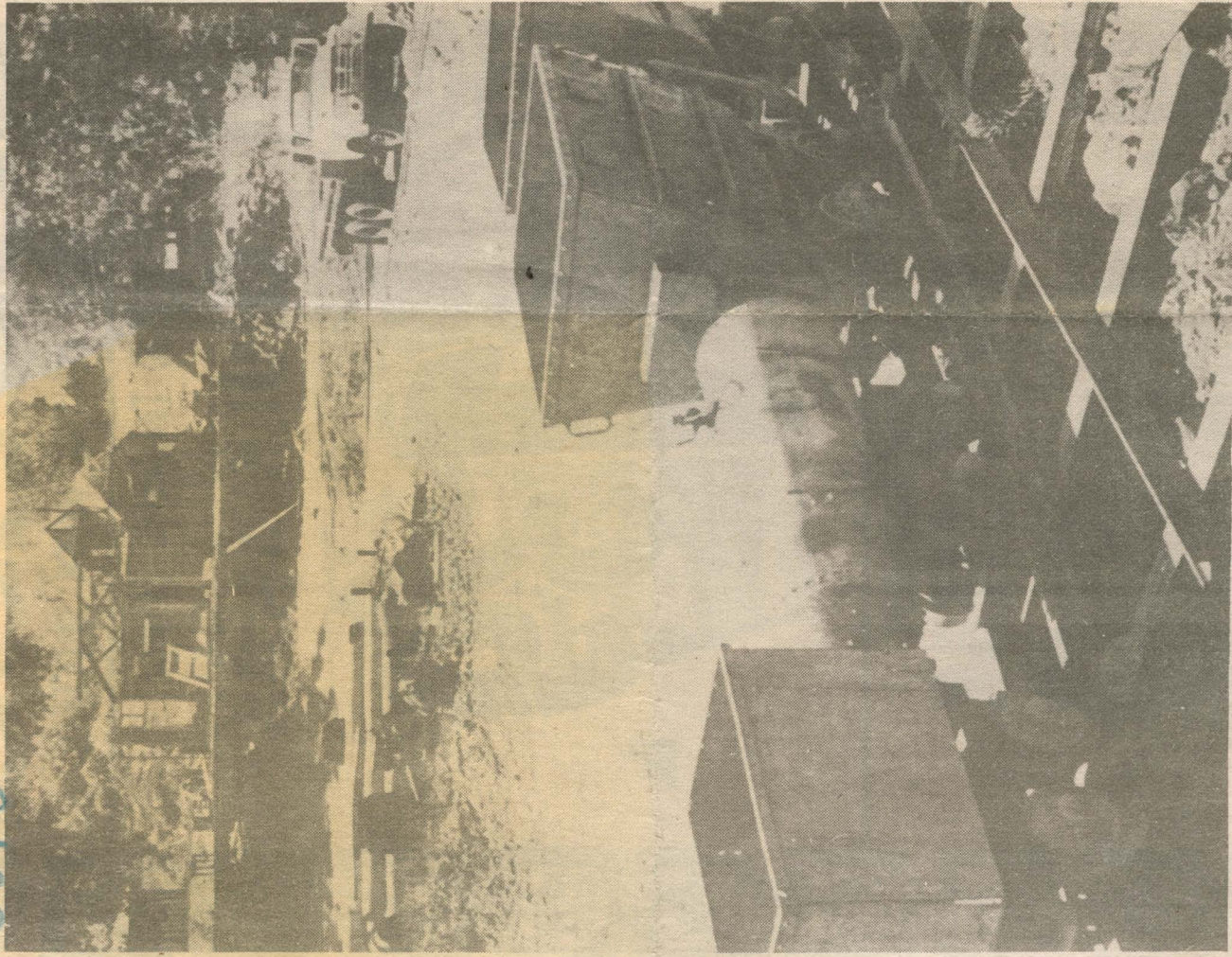
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New life breathed into ancient mineral-laden Oxbow



New life coming

OXBOW, Ore. — The old Iron Dyke mine along the Snake River on the Oregon-Idaho state line is going back into operation. Ore is expected to contain gold, copper and silver.

AP Laserphoto

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Mine revived

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Rehabilitation

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AP Laserphoto

Gold prices spur Alaska rush, but some call it 'bush l

ANCHORAGE, Alaska (AP) — Alaska is a gold-proud state where the nugget is as much a symbol as the Northern Lights and your next door neighbor may spend his summers working on a claim.

But even with today's skyrocketing prices, Alaska's gold production has dwindled to a trickle. This year's estimated output is only about one-tenth of the amount mined in 1941.

J.P. Tangen, president of the Alaska Mining Association, said the price increase has only "given miners an opportunity to sell off some of the gold they have accumulated in the past several years at a reasonable profit for a change."

There is no denying there has been an upswing in production since the lean years of Alaska's "gold depression."

Mining experts estimate gold production in the early 1970s had dropped to barely 10,000 to 12,000 ounces per year. This year, Dr. Ernest Wolff of the University of Alaska's Mineral Industry Research Lab said production could be as high as 100,000 ounces, worth roughly \$40 million at today's prices.

"I'd say 20 percent of the miners out there struck it rich," Wolff said. "Another 40 percent are making a real good living."

Some Alaskans look hopefully at the increase for signs of a new gold rush. But others rate it as strictly bush league — a far cry from the days when 20,000 miners and adventurers swarmed Nome's beaches at the turn of the century, and fortunes were made in a matter of days.

"There is a tremendous interest in gold in Alaska as there is anywhere else," said

Tuckey Hayes, who has been involved in gold mining for the past six years. "The expertise of the large mining companies is not present due to the federal lands situation. They're reluctant to make large investments."

As for smaller operations, Hayes said the price increase has put some miners back to work and made their work more profitable "but there are mines that are every day." He said this frequently happens because miners can't get financing for their operations.

There are only 300 to 400 heavy equipment operations in Alaska, many run by families or individuals with a handful of partners.

Alaska gold operations never recovered from government-set gold prices during World War II, when the government declared gold mining a non-essential industry. Tangen said this shut many mines down.

Tangen said gold mining has always been more difficult in Alaska due to sparse population, lack of roads and railroads, and the distances miners must travel to their claims. Tangen said in most cases mining simply ceased to be profitable.

Wolff estimates gold production has gone up ten times since the oil price was set at \$35 an ounce in the 1930s.

Federal land withdrawals have further complicated things. When Congress failed to pass a bill setting aside Alaska park wilderness areas last year, President Carter and Interior Secretary Cecil Andrus froze 110 million acres to protect wilderness areas.



AP Laserphoto

A sluice box, right, and other equipment clutter a claim on Resurrection Creek near Anchorage.

Gold speculation: A war of nerves

NEW YORK (AP) — Arab money has forced the price of gold up, and American threats have knocked it part way down. Now anxious traders are waiting for the next round in the war of nerves.

The price of gold shot up from \$281 to \$444 a troy ounce in eight weeks before going on a roller-coaster ride this week. In a matter of hours Tuesday, bullion prices swung from \$444 to \$405, back to \$438 and down again to \$414.

Turbulence continued Wednesday. Gold prices dropped as low as \$390 before recovering to \$393.50 for a troy ounce, which is about 10 percent

There is little doubt among traders that gold's stunning rise has been caused by Middle East oil money, which has been pouring into bullion exchanges.

Speculators, sniffing the chance to ride the wave to profits, jumped aboard, adding to the upward momentum.

"I'm amazed at the number of people who wouldn't buy gold at \$150 who call up now and want to be told to buy it at \$400," said Morton Rom, a gold analyst at Mocatta Metals, one of the world's major bullion trading houses.



COLUMBUS DAY

Friday-Saturday-Sunday
Discount

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Wolff estimates gold production costs have gone up ten times since the official price was set at \$35 an ounce in the 1930s.

Federal land withdrawals have further complicated things. When Congress failed to pass a bill setting aside Alaska park and wilderness areas last year, President Carter and Interior Secretary Cecil Andrus froze 110 million acres to protect wilderness areas.

Tangen said some of the land had already been slated for a strict ban against mining, but prospecting was to be allowed on 40 million acres involved.

"The numbers are not nearly so important as where the land is," Tangen said. "New withdrawals have significantly more sting than the original proposal since most of the 40 million acres included vast mineral supplies."

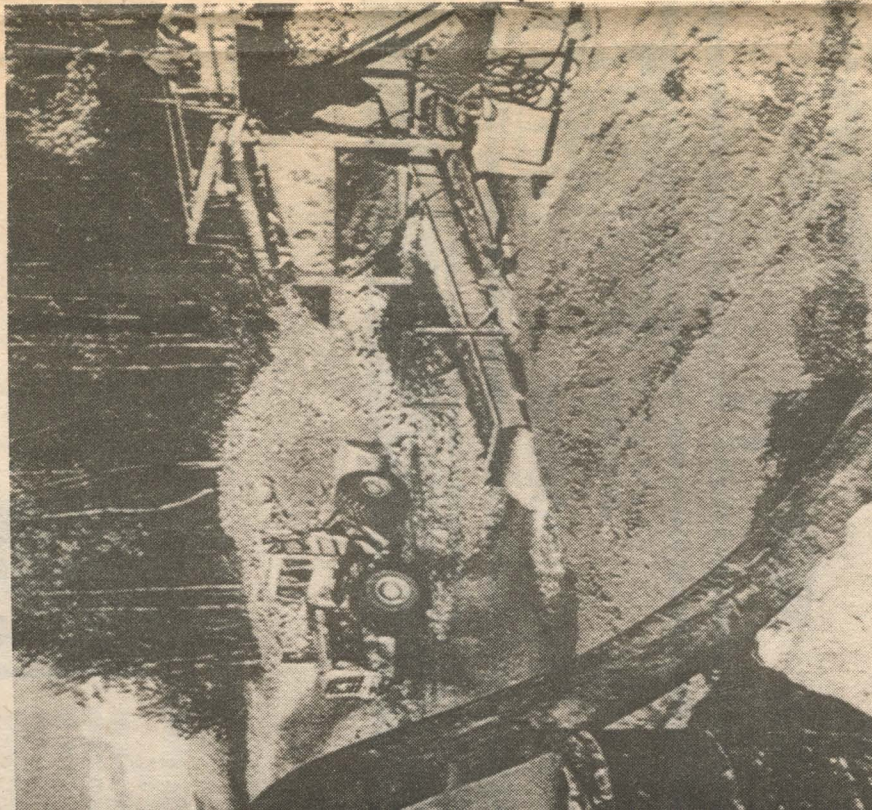
Miners complain that only large corporations can afford to pay for environmental impact studies and reclamation plans now required for claims within federal wilderness areas — and they may wind up losing everything they have invested in their claims over the years.

Dredging operations take place only during the summer when streams and rivers thaw. Many miners work at other jobs during the winter, putting money into their summer mining the way others would make payments to a pension plan or savings account. For some, mining is their major occupation, supplemented by trapping in the winter.

There is no estimate on the number of newcomers mining in Alaska this year, but they have a tough job cut out for them.

"A lot of knowledge which existed in the 1940s was essentially lost," said Alaska Mining Association executive director, Chuck Hawley. "A lot of people who are fairly new coming in will make mistakes for a year or so before they figure out how to do it."

And he added that some may not last the year.



AP Laserphoto

ment clutter a claim on Resurrection Creek near Anchorage.

A war of nerves

There is little doubt among traders that gold's stunning rise has been caused by Middle East oil money, which has been pouring into bullion exchanges.

Speculators, sniffing the chance to ride the wave to profits, jumped aboard, adding to the upward momentum.

"I'm amazed at the number of people who wouldn't buy gold at \$150 who call up now and want to be told to buy it at \$400," said Morton

COLUMBUS DAY

Friday, Oct. 12



DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

news - 570 DJC 9/5/79

People start prospecting as price of gold climbs

SACRAMENTO — California's picturesque Gold Rush Country these days is accommodating hard-working prospectors who can earn about \$20,000 a year.

That is if they can find a space.

California recently ran out of licenses to permit river dredging for the precious metal which is zooming in price on the world markets.

Gold in rivers

"There's still gold in the rivers. There's a lot of it. But there's nothing easy about it. Most of the places you can drive to have been worked out. Some people take weeks to pack in," says Charles Barker, 28, of Chico.

In Nevada, mining companies are readying a sophisticated drive for the precious metal. Arizonans have taken to the hills and claims in gold-rich Alaska are soaring.

Dealers stop short of calling it a latter-day gold rush, but the high price of gold has rekindled an interest in the precious metal rarely seen since the nation's gold mines were shut down in the manpower crunch of World War II.

The price of gold, for decades set at \$35 an ounce, closed in Zurich at \$287.625 an ounce Friday after breaking the \$300 mark a few days earlier.

Big money

Lured by the temptation of big money, scattered mines are reopening — although the costs are high for reconstruction, maintenance and safety — and would-be prospectors are scouring Western rivers for gold as never before.

Gold-hungry prospectors who flocked to the West more than a century ago barely skimmed the surface, today's experts say. Modern-day mining and dredging techniques can search out gold the covered-wagon ilk couldn't begin to tap.

Other part-time, weekend prospectors don't always sell their gold, which in nugget form can bring prices several times higher than the \$287.63 rate.

"People are storing it up like chipmunks for when the economy goes bad," said Pat Barksdale, who works at a gold dealing shop in Chico. "Gold is international money. It's got a language of its own."

The 1930s were big gold-producing years for Alaska. But the peak year for the state, then a territory, was 1941 — when it produced \$26 million worth of gold at \$35 per ounce.

Picking up

"Gold has been sort of a thing with Alaskans for years," said Ona McBridge, who works in the Anchorage office of the state Division of Mines. "But it is picking up in the last few years."

Alaska, with a tenth of the production of 1941, now reports 75,000 active mining claims, 21,000 of them staked in 1978, although not all of them are for gold.

Nevada's gold production last year was about 238,000 ounces, worth \$45.1 million. But at today's prices the value would be about \$71.5 million.

Finds spur new Australian gold rush

SYDNEY, Australia (AP) — World record prices for gold have sent thousands of Australians flocking to abandoned gold fields in scenes reminiscent of the gold rush days of the last century.

Equipped with the latest in metal detectors that cost about \$600 each, the new "fossickers" — as Australians call prospectors — have converged on old workings in western Australia and New South Wales spurred on by a spate of recent discoveries of giant nuggets.

The price of gold hit \$340 an ounce this week, and has maintained a generally upward trend in recent months — up \$40 in the last month alone — amid concern over inflation and the U.S. dollar.

In New South Wales, near the western town of Hill End where the gold rushes started in 1854, two prospectors using a metal detector last week unearthed a 13.4-pound nugget worth \$113,000.

In western Australia, three nuggets worth more than \$28,000 were discovered north of Cue, 434 miles from Perth.

The \$113,000 nugget was found by farmers Peter Culverson and Don Peters, and the Geological and Mining Museum in Sydney said the nugget contained about \$55,000 worth of gold. But as a specimen it was worth about \$113,000.

Prospectors have to obtain a \$2 licence before they can begin exploring.

The lure of gold has attracted people from all walks of life.

Former bank official Colin Besant has been fossicking full-time since April and found \$11,000 worth of gold. The old field's clay and gravel was full of gold, but few people knew how to work a metal detector or where to look for it there, he said.

This has not deterred fossickers from Perth making the 806-mile round trip to Cue "in anything on four wheels that will do the distance," said Constable Terry Hollier.

"Every day we see more arrive. They stop at the caravan park, grab their equipment and start digging the first bit of dirt they see," he said.

Hellier said Cue's population of 320 persons "has just about trebled."

Hellier estimates that 50 prospectors have hit pay dirt, including one Perth lawyer who has dug out more than \$30,000 worth of nuggets.



AP Laserphoto

Peters, left, and Culverson hold giant nugget.



The Sunday Oregonian

IN WESTERN OREGON

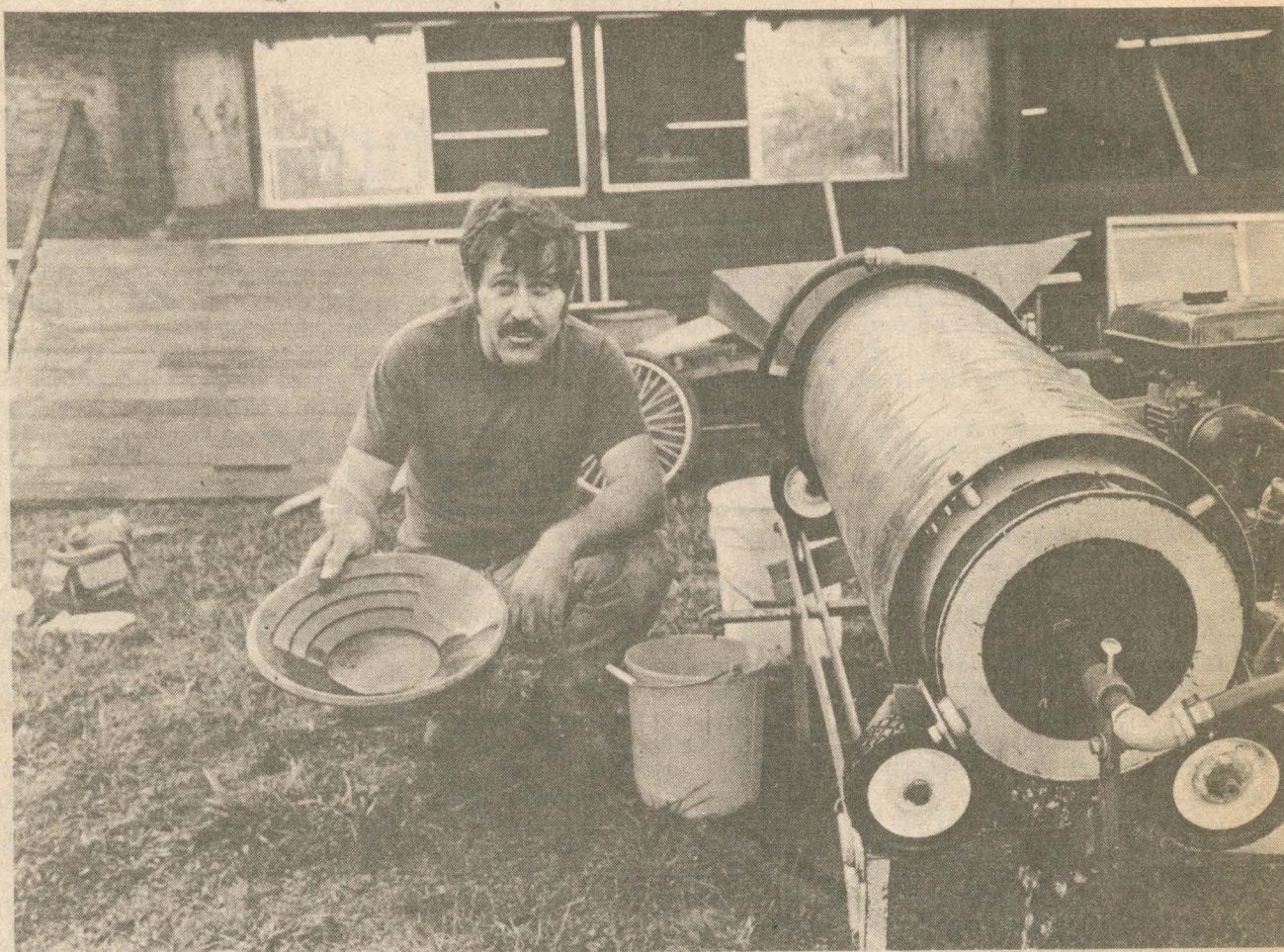


Photo by PEGGY SAND

DANDY DOODLEBUG — Dave Bosanco, an Independence welder, demonstrates Dixie Doodlebug, a porta-

ble washing plant that has become much in demand as price of gold hovers around \$400 an ounce.

As gold fever rages *Sluicing doodlebug hot item*

By PEGGY SAND
Correspondent, The Oregonian

INDEPENDENCE — Gold fever is running wild in the West once again, and Dave Bosanco is cashing in on it.

Several years ago the Independence welder bought the manufacturing rights to the "Dead Horse" gold-finding machine, despite skepticism from his wife, Carol.

But Bosanco had Midas foresight, and with the price of gold hovering around \$400 an ounce, his Dixie Doodlebug may prove a bonanza.

He has refined and improved the patented machine developed by inventor Gene Katter and now markets it for \$2,395. The gasoline-powered doodlebugs have been shipped to Alaska and Latin America.

In placer mining terms, a machine called a doodlebug is a portable washing plant. It is actually a sophisticated, automated sluice box, since it is used to extract gold and silver from coarse

that were considered too poor a few years back.

One problem with selling the doodlebug, Bosanco said, is that he gets very little feedback.

"Prospectors keep to themselves and don't bother to call or write," he said. "They aren't too anxious to advertise when they've hit a rich claim."

However, he said, he would hear if they were not satisfied with the machine. Most of his doodlebugs are sold through word-of-mouth advertising.

For many Westerners, prospecting

is a weekend hobby, but he said more people are turning to it full time.

He said his enterprise has introduced him to a whole passel of prospectors with the "glazed-eye look." One retired couple is selling their home to travel and prospect.

"It doesn't take much gold to make an ounce. Maybe a tablespoon. Once they get the bug, they've had it," Mrs. Bosanco said.

As for Bosanco, does he have gold fever? No, he said. He's too busy turning out Dixie Doodlebugs.

By MARILYN E. FORBES
Associate Editor

Oregon is experiencing a miniature gold rush.

Mining for precious metals in the state is growing as modern-day prospectors head to the hills and streams to look for the glittering metal.

And they're finding it. Some discover nuggets, but most find fine flakes or dust. Regardless of the form, at around \$370 per ounce, treasure seekers are finding their free-time philandering to be quite profitable.

"We're getting a lot of phone calls from people who want to go prospecting," says Herbert Schlicker, staff geologist at the Portland office of the Oregon Department of Geology and Mineral Resources.

Valve pushes search

Schlicker notes that mining for nickel, copper, gold and silver are also on the rise in the state because of escalating values for the metals.

Interest in opening up old mines has sparked so much interest in fact, the U.S. Bureau of Mines in Spokane is conducting evaluations of gold reserves in wild scenic areas of Oregon, reports Schlicker.

In areas of the state where gold has been mined before, the local geologists and county clerks are being kept busy.

"I'm seeing a lot of new faces coming through here," says Ruth Paulat from the state geology field office in Grants Pass.

Paulat tells the Daily Journal of Commerce that she has seen "some nice nuggets" that were found by rookie prospectors.

Tempers claim

"It's mostly fine flakes though," she adds.

A plethora of retired people are checking with the geology office to get directions to promising areas where they can pan for gold in the Grants Pass area, Paulat says.

A county clerk in Josephine County who declined to have her name used says she is swamped.

"There's a tremendous mining boom in Josephine County. I'm shocked to see so many people coming in filing mining claims," she says.

From her experience watching people come into her office, she says she figures some people are mining for a hobby while others are making a living off their new enterprise.

"If gold went up to \$500 to \$600 per ounce it would increase the interest in mining in this area," he says.

"As it is the increase in labor and materials costs since the metal was sold for \$35 per ounce is astronomical," Brooks says there is little future in mining while this price "is so low."

He predicts that major mining companies will move in to the area if the price stabilizes at over \$500.

Already the W.A. Bowes Mining Co. from Steamboat Springs, Colo. is operating near Granite where they have been excavating for several years.

A joint venture between Texas Gulf Mining Co. and Silver King Mines of Nevada is preparing to begin full scale production at the Iron Dike Mine where gold and copper was plentiful from 1915 to 1928 when 25,000 ounces of gold, one million pounds of copper and thousands of ounces of silver were once gleaned.

DJC

9-24-79

Applegate gold rush

At \$400 an ounce, folks are heading for the river

By TERRIE CLAFLIN
Mail Tribune Staff Writer

Gold has taken on a new luster lately.

The beautiful metal that once was the magical, mystical treasure of kings, pirates and fairy tale geese is becoming a symbol of cold, real, spendable cash.

Last week gold stunned the money markets by reaching a selling price of \$400 an ounce. Americans, fatigued from inflation and troubled by dwindling bank accounts, are beginning to resemble Walt Disney's Uncle Scrooge — watching the latest reports with dollar signs in their eyes. How to cash in on the big bonanza?

You can forget Fort Knox and jog on by the local jewelry store. Or if you're into gambling and having some fun, you can find gold on the Applegate River.

Gold mining is becoming a new type of water sport above the construction site of the Applegate Dam. About 4.6 miles of the river have been purchased by the government for Applegate Lake and opened to the public for recreational purposes.

Those purposes include dredging or panning for gold.

There's no question it's up there. The U.S. Army Corps of Engineers, which oversees the dam project, has reported removing about \$85,000 worth of gold from gravel at the dam site alone. That's with fancy equipment and a team of geologists on hand.

But ask any small-time miner a little farther upstream and he'll tell you it doesn't take much investment to mine for gold and that given enough time, you'll probably make a profit.

Fred Nickel is one such miner. He and a friend, Kathy Manning, are running a "dredge" on the river this week.

Nickel, 47, and from Tigard, learned how to mine in a geology class he took at Portland Community College last spring. The class's grand finale was a trip to the Applegate River in June to try out new skills.

Nickel's luck didn't hold out in June — the motor on his dredge froze — so he's returned this

of gold from the yard of gravel he processed his first day. At current prices, that's about \$100 a day.

John Kaiser of with the U.S. Forest Service says reports from miners along the river indicate that most people recover only about 33 cents per yard.

"The gold out there is relatively limited," Kaiser says. "It's not every place."

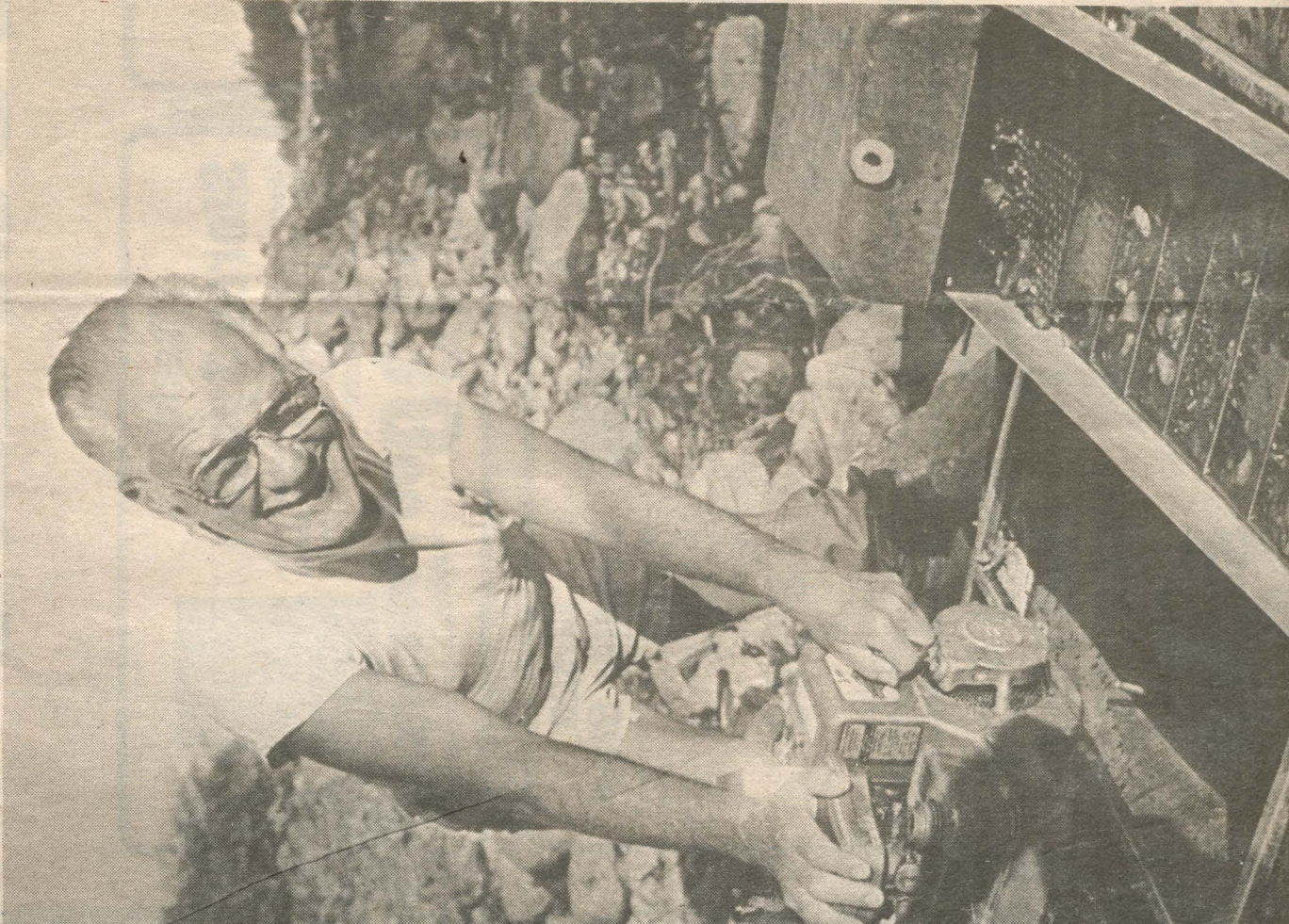
Mike Reese, who sells dredging equipment at his dive shop in Phoenix, says he believes part of the reason for such low reports is that many weekend miners are not aware they're mining places that have been mined before.

Another factor is that most "weekend warriors," as Reese calls them, are just out to get away and have a good time. He says most don't make enough to pay for their equipment.

"They can be a Forty-Niner for a few days," Reese says. "At least when they go out for mining as a recreational sport, the letdown of not finding gold is not so bad."

Reese says purchases of dredges and mining equipment at his shop doubled in the first eight months of this year and may triple if good weather continues. His rental dredges are usually reserved each weekend.

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More serious miners who are determined to make a living off the river file claims at the County Courthouse. Claims are not allowed on the 4.6-mile stretch of government land, but can be made above the lake area.

To qualify, you must record the claim with the county and file affidavits showing you improved the mining quality of the land with at least \$100 in work or materials each year.

If the affidavits aren't filed, the claim is declared invalid. If they are, then the mineral rights to the land are yours forever.

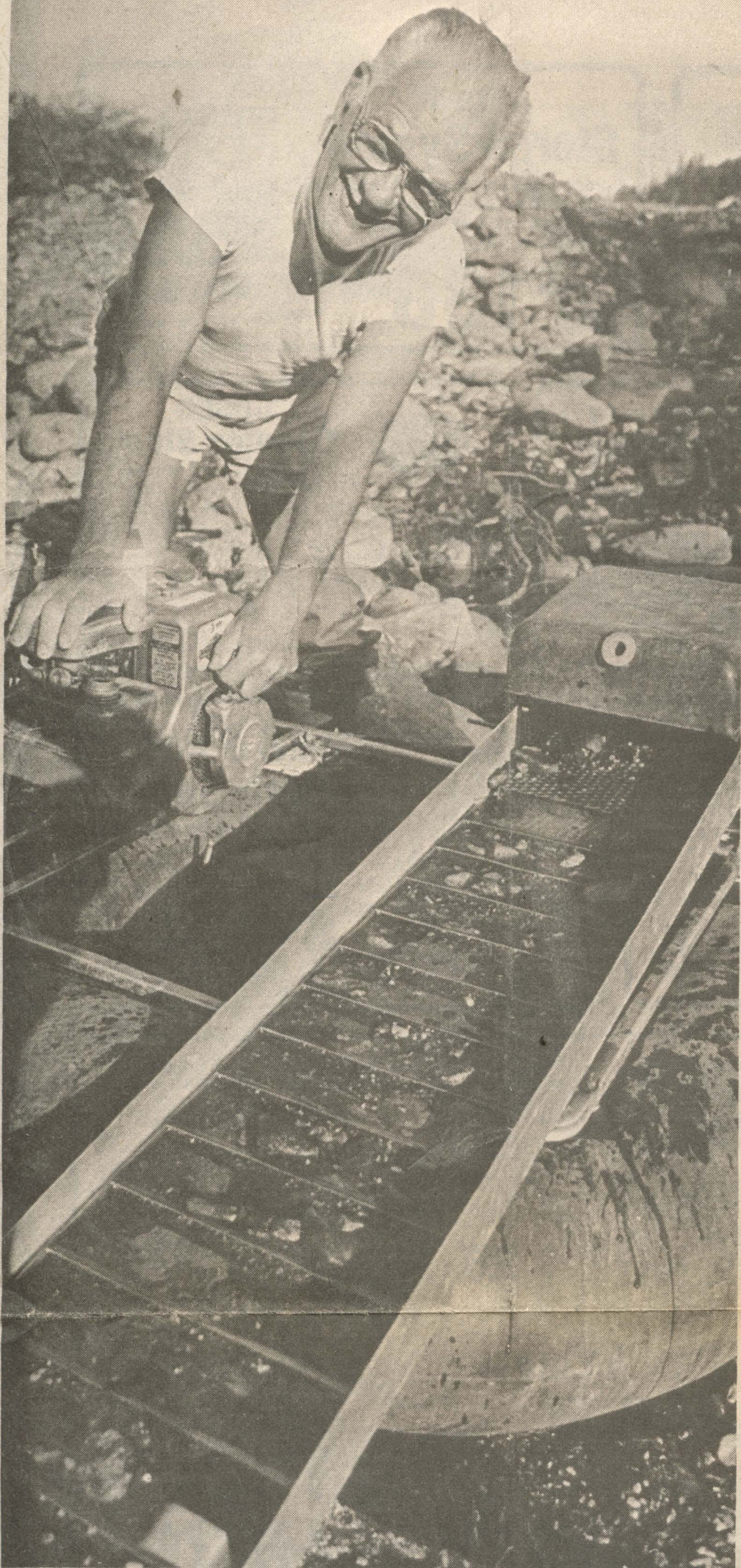
The claims of a maximum of 20 acres do not denote ownership of the land and do not prevent the government from harvesting surface resources, such as timber, or from securing rights to fish or hunt game.

Most everyone involved in Applegate gold mining says there's been a tremendous surge in public interest. But is it a gold rush?

"Yes," says Reese. "This is the first year I don't personally remember the people I've sold to."

"Yes," agrees Nickel. The public is finally aware that gold is more valuable than paper money and is doing something about it, he says.





MT photos by Lynne Ryder

Ford Smith of Grants Pass ... Dredge and sluice box are paying off.

At \$400 an ounce are heading for

By TERRIE CLAFLIN
Mail Tribune Staff Writer

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Nickel's luck didn't hold out in June — the motor on his dredge froze — so he's returned this month to try again.

He's using a unit he purchased in Portland for about \$1,500. Dredges sell for anywhere from \$350 to \$3,145, depending on the size of gravel and the optional equipment the miner wishes to use.

The dredge consists of a small motor mounted on an inner tube or plastic raft, a long suction hose and a sluice box which captures the gold from the vacuumed material.

Nickel says one of the most important things about mining is choosing your spot. Gold is 19 times heavier than an equal amount of water, so you can expect to find it in the deepest parts of the river, he says.

You can tell if the spot has been mined before by the sizes of rocks in the material overlaying the bedrock.

If the rocks aren't uniform, it's a good sign they haven't been processed through a dredge, Nickel says. The disadvantage to such spots is that it's usually hard to get equipment into them and scuba gear is required because of the depth.

When you've chosen the spot, you begin sucking up the material until you reach bedrock that is so large and hard it's evident it's been there for thousands of years.

The material goes through the sluice box. The heaviest things, like gold, settle in the ridges of the box.

At the end of the day you pan the material left in the box, keeping a sharp eye for slivers or nuggets of gold.

News. - 556

Many Laws Face Weekend Miners

Weekend or "fairweather" miners should know certain things about mining laws and regulations in order to stay out of trouble and out of jail, a former chief of the Idaho Bureau of Minerals said at the University of Idaho Thursday. Trespass is the most common problem facing such miners, said Art Zierold.

"The thing I want to emphasize," Zierold said, "is that very little of Idaho is still open to miners without meeting some kind of requirements."

The requirements may involve permission from private landowners, permits from state or federal agencies or regulations about how the mining is carried out, Zierold said.

To avoid trespass on private land or previously staked claims "which could result in getting run off or going to court," Zierold said recreational miners should first determine the legal location of the property they intend to prospect. Maps published by a variety of sources can be used for this purpose, he said, and then the miner should check with the county assessor's office or with the Bureau of Land Management's state office on ownership.

"I'm not just talking about gold, either. In north Idaho, for example, many people go out on weekends searching for garnets. In many cases, the same laws apply," Zierold added.

Since gold, however, is "associated with all the state's streams and rivers in some quantities, problems usually concern those panning, sluicing or running suction dredges to find gold," he said.

To check ownership of streams and rivers, Zierold suggested, miners should contact the Idaho Bureau of Navigable Waters in the Department of Lands. Ownership of waterways can be confusing and follows no set pattern, he said.

Federal agencies control some 761 million acres of Idaho lands, he noted, and some of those lands have been withdrawn from any kind of mineral prospecting or mining. To check on areas, miners should contact local Forest Service offices or the state Bureau of Land Management office.

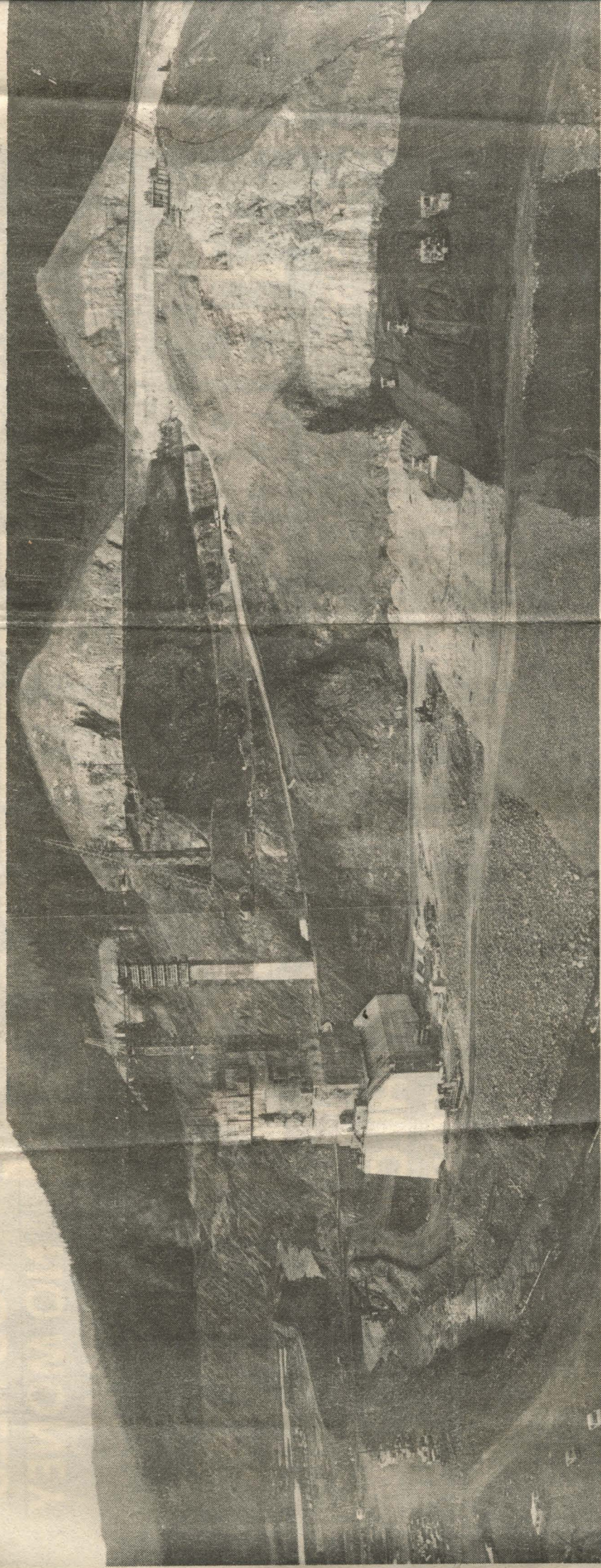
If the miner finds that the federal land in question is open for prospecting, information on previous claims can be checked at the county recorder's office or through the BLM state office, he said.

"If you want to cover your you-know-what, you should take these steps," Zierold said, "but it also depends on the degree of risk you want to take."

Indian reservations in Idaho also contain some areas with "promising potential" for gold discoveries, Zierold said, and miners should check ownership and restrictions with the appropriate tribal authorities.

Once ownership is established, other state and federal laws also govern mining operations, Zierold said. All mining operations are under the jurisdiction of Idaho laws and may fall under federal statutes, he added.

To find what laws do apply to a small miner, Zierold suggested contacting the Idaho Department of Land's Boise office or a regional office closest to the mining operation. For applicable federal regulations, BLM or Forest Service offices are likely sources of information, Zierold added.



At dam site, you say? Yep, there's gold in that mined gravel!

A composite, made from three separate photos supplied by the U.S. Army Corps of Engineers, shows the construction site of the Applegate Dam in Jackson County. It's the site where, the corps has reported, some \$285,000 worth of gold has been extracted within the past year from the gravel mined

to build the rock-fill dam. The photos, taken last December, show the Applegate River, the reservoir's intake tower, at left center, and the actual dam site where heavy equipment is compacting a layer of impermeable clay that will form the base of the dam. Gravel from which the gold was extracted lies

on either side of the dark-colored gravel. The photos were taken last December, and the corps expects to complete the dam by the spring of 1981. The Peter Kiewit Sons' Co. was awarded the contract to build the southern



...there's gold in that mined gravel!

The photos supplied by the U.S. Army Construction site of the Applegate Dam in Oregon have reported, some \$285,000 in the past year from the gravel mined

to build the rock-fill dam. The photos, taken last December, show the Applegate River, the reservoir's intake tower, at left center, and the actual dam site where heavy equipment is compacting a layer of impermeable clay that will form the base of the dam. Gravel from which the gold was extracted lies

on either side of the dark-colored clay. The \$91.6-million project is ahead of schedule, and the corps expects to start filling the reservoir this fall or in the spring of 1981. The Peter Kiewit construction company of Omaha, Neb., has the contract to build the southern Oregon dam.

In valley, many catch the gold fever

APPLEGATE VALLEY
(AP) — Gold fever.

Eldon Lockett's got it. He quit his job as a log hauler in Idaho last year to devote full time to it.

Ward Rock's father had it. Ward used to share the ailment, helping his dad try to trace fingers of "color" back to a pocket of gold that forever eluded them.

Tom White's afraid of catching it. "I'd love to go after gold. . . but the moment I hit something, I'd have the fever."

White, a construction worker at the Applegate Dam, says prospecting is a lot like fishing: "I can fish all day and not catch anything and I'm fine. But the moment something grabs my hook, I've gotta catch everything in the lake."

Gold fever is rampant throughout Applegate Valley as well as many other parts of Oregon and the West.

With the price of gold hovering around \$400 an ounce, visions of wealth dance in many heads.

On the mile-long stretch of the Applegate River above the dam site, additional interest has been generated by news that contractors dredging gravel for the dam have extracted \$85,000 of gold and expect to top \$1 million before the project's complete.

Vincent Steinkamp, area engineer for the U.S. Army Corps of Engineers, says the figures are misleading.

Only about one-hundredth of an ounce of gold per cubic yard has been recovered, he says. That works out to about 45 cents, not a profitable return, he says.

But that doesn't deter Lockett, his brother and cousin, and hundreds of other fever-struck prospectors who jam the river every weekend the weather's de-



AP Laserphoto

Wearing a wet suit, Lockett sifts for gold.

cent.

"You can make a living on it if you want to live simply," says Lockett, scouring his sluice box for any signs of color. "But you won't be able

to buy a house or raise children."

While Lockett harvests the gold, his cousin, Mike Conklin of Corvallis, dons scuba gear and feeds the dredge.



GETTING DIRTY

Weekend panners dig gold

As long as there is gold in the hills, there will be prospectors trying to find it.

This would account for 22 Portland Community College students recently spending a cold, wet weekend high in the Cascade Mountains prospecting for gold.

The students are enrolled in Prospecting, a community services course offered this fall through PCC. The class had its first weekend field trip 26 miles northeast of Sweet Home, in the Quartzville Mining District.

The student prospectors brought their families, pets, picks, shovels, sledge hammers, chisels, tents, rain gear, gold pouches and enthusiasm along with them.

The rainy weekend was spent studying rock formations, collecting interesting mineral samples, climbing rugged terrain, exploring abandoned mine shafts and panning the Santiam River for gold.

Now it's a hobby

Though prospecting and hard-rock mining operations in Quartzville are undertaken only as hobbies in 1979, the rock formations, mineral deposits and river beds make the area a natural learning environment, says instructor Dick Walker, Beaverton.

"The people who take this course have one thing in common - a love for the out-of-doors. It's not uncommon, in nicer weather, to see five and six year-olds standing in the river, panning for gold with frying pans," he said.

"I have had 70 and 80 year-old students too. If nothing else, they can collect the gold on the moss covered rocks, around the river," said Walker.

Larry Gillett, an appliance repairman, has been a prospector for four weeks. "I found gold yesterday and I'm sure I will find

more today. No need to ask me where - I'm no more likely to tell you where I found the gold than where I catch the biggest fish," said Gillett.

"I guess I'm out here, in the mountains, in the rain, looking for gold because it is so much fun to find. The first time I went prospecting I couldn't believe how easy the gold was to spot in the river bed. But getting the gold from the river into your pocket isn't easy! After working my rear end off that whole day, I had found enough gold dust to almost cover the top of my little finger. Doesn't sound like much, but I'm really proud of it," said Donna Elliott, a welder when she's not prospecting.

Solid reward

"Prospecting for gold is a search for something tangible. After a lot of hard work, the prospector has something he can feel in his hand, look at and admire. It is having something concrete to show for a day's labor.

"And besides, prospecting gives people a rare chance to get dirty. In our hyper-sophisticated society getting dirty once in awhile fulfills something people today are sadly missing," said Walker.

Bob Kroupa, industrial illustration instructor at PCC, has been prospecting every other weekend for eight years with his wife Diana, their children and their three-legged cat.

"We all love it. It gets us outside and gives us an opportunity to enjoy the woods while pursuing a hobby that involves the whole family," said Diana.

"It's exciting to find gold - probably more because it is hard work than because of its value. We keep the gold we find."

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Harold Reed, left, remembered what Novus Webb has recorded in a map of Jacksonville's Depression era Gold Rush.

MT photos by Bert Fox

Digging up the Rush of '30

Novus Webb mapped Jacksonville's mines

By **TERRIE CLAFLIN**
Mail Tribune Staff Writer

JACKSONVILLE — The 1930 Jacksonville gold rush.

The words sound so magical, so festive, spinning visions of good-timing prospectors, wild west saloons and nuggets drawn from well-worn pockets and rivaling the size of walnuts.

But look at the date again.

The 1930 rush came 80 years after the initial discovery of gold in Jackson Creek. By then, the boom had died and the mining camp had matured into a thriving town — the county seat, in fact — of more traditional pursuits. The men had taken respectable, dependable jobs like logging, shopkeeping and banking.

But when the Great Depression hit in 1929, the money from those jobs wasn't worth much and the businesses often deteriorated to the point that jobs disappeared.

But from the history of the town, the men of Jacksonville knew they could make money and they knew they didn't have to take it from another man's pocket. They simply took their shovels into their back yards and started digging.

You wouldn't know it now, but by the mid-1930s, back yard miners had sunk more than 50 shafts beneath the city of Jacksonville. Tunnels wove undetected beneath streets, houses, churches and stores.

More than \$250,000 worth of gold passed through the Godward Mercantile Co. store — "Where the miners bring their gold and where gold brings the bargains" — at \$30 an ounce before the second gold rush melted into the rich economy of World War II.

Since that era died, the 1930 gold rush has remained buried, in the tunnels that still exist beneath the small town and in the minds of the men who lived through it. It was almost forgotten. Almost.

In 1975, Novus Webb moved to Jacksonville and found the favorite part of his day to be his daily walk through town. He got to know some of the old-timers and began hearing legends about Jacksonville's Depression era gold rush.

had been," Webb recalls, squinting his pale blue eyes. "So I set out to look for 'em.'"

Webb's wife, Helen, worked at the Jacksonville Museum, so with research and a few first- and second-hand stories, Webb set out on his own to find the mines.

Four years later, Webb's work has been published in a pamphlet issued by the Southern Oregon Historical Society. Titled "Backyard Mining in Jacksonville," the paper documents the sites of 45 Depression Day mines, the names of the miners who worked them and the amount of gold discovered.

"One thing I did learn about miners," Webb says with a grin, "they don't tell you how much they make."

Mining talk is a lot like fishing. Every time you tell a fish story, it keeps getting bigger.

They also keep low profiles.

"Hard work?" said one ex-miner who still lives in Jacksonville but protects his name like he does his tally sheet. "Yes and no," he says, rubbing a very muscular arm. "Once in a while a rock would fall on your head, but you didn't think of getting scared."

"It did get pretty wet, though. A lot of times there'd be water running down your back, but it was cool in the summer time."

He finally says he got about \$2.50 a day. The biggest nugget he found was about half an ounce. He says he sold it for \$10.

Almost everyone who's lived through the second rush agrees that miners didn't get rich. They made a living and, considering the times, that was more than many people could claim.

Mrs. Thelma Roberson, who was married to the late miner John McIntyre, recalls her husband's work in the "mine-holes." Four are located on her Fifth-

The fourth has filled with water. She now uses it for a well.

She lifts her fruit-stained hands to help tell about working this particular mine and the night someone robbed their sluice box.

Although many Jacksonville men mined full time, Mrs. Roberson says her husband, John, was a logger by trade.

"We only mined for grub money when times got tough," she says.

By far the most interesting source for Webb's research is Harold Reed. Reed ran a bar and card game room known as Marble Corner at the Oregon Street and California Street intersection during the second rush.

Even though Reed says he never mined — "Never got the bug" — he says he did learn a lot about mining and pocketed a few nuggets over the counter. In fact, he used two one-ounce nuggets as the down payment for his home on Oregon Street.

Reed says most of the miners would meet at Marble Corner on Saturday afternoons to talk about the week's work over a soda pop or near beer. The country was under Prohibition until 1933. After that time, Reed says, he sold a real beer for 10 cents or a bottle for 15 cents.

"You know, mining talk is a lot like fishing," Reed says, recalling those Saturday afternoons. "Every time you tell a fish story, it keeps getting bigger. Well, after three or four rounds of drinks, things usually got pretty interesting."

Tall tales abounded, Reed says, including one of a nugget worth \$500. Using the standards of that day, it would have weighed about 16 ounces. Reed swears he did see one that weight more than three ounces and sold for \$90.

He echoes Webb's feelings that miners don't talk about their earnings. He says talk around the bar usually centered on whether today's finds were better than yesterday's, or what size gold the miners were finding.

But he says one usually could tell who made the most that week by who bought the most rounds.



Harold Reed

in every day and bought 10 cents worth of hamburger. One day he came in and ordered two T-bone steaks.

"That would take anybody's breath away in those days," says Reed. "He said, 'I hit it today,' and I guess he had. He said, 'Me and Mama is a gonna eat tonight.'"

About the only signs of Depression Day mining left in Jacksonville are the occasional cave-ins over the tunnels. The last one occurred about 1972. It was less than spectacular, but a reminder nonetheless.

"I remember the time," Reed says, a phrase that has become a classic in his research, "that a bread wagon was swallowed up by a cave-in on Main Street."

It's cold, but it's gold — and diver Huson digs it

**GET READY! Huson maneuvers
dredging equipment into place.**

Nov 5-11

1979



Can a treasure-hunting deep-sea diver from Florida strike it rich in the icy waters of southern Oregon? Can 29-year-old Tom Huson of Grants Pass find the gold his predecessors left behind?

"Sometimes you go without, for a long time," admitted the boyish blue-eyed miner, puffing on a cigarette. "But then something happens, you get a little more money, and one day you hit it. You find that pocket of gold or silver and you're rich!"

Huson has been diving professionally for the last 15 years. He started diving in the American River, California, continuing in the Navy, and later opened up his own salvage company in Los Angeles.

The intolerable water and pollution in Los Angeles drove Huson to Florida to search for Spanish galleons.

Huson and a crew of four dug through sand and silt and brought cannons, anchors, coins, gold discs and artifacts up from the bottom.

Then he studied how the people lived. He recorded shipboard life, traced the travels of the Spanish, Dutch, English and French.

The galleons are marked on maps, but Huson had to travel to Seville, Spain, to research the exact locations because "the map makers of the 1500's and 1600's, weren't too good. They drew the maps according to what they saw. They didn't have any navigation back then."

Huson left Florida six months ago for the promise of gold-laden creeks and rivers in southern Oregon.

He met "Lucky" Wroe and a second partner and began mining claims on the Illinois, Applegate and Rogue until mud from winter rains forced him and his two partners to mine smaller, clearer mountain creeks.

The hardy miner doesn't mind winter mining but he does take precautions to guard against the cold. He sticks to a high-protein, low carbohydrate diet and doesn't drink when he's working.

"If you're not in excellent shape you can't adapt to this kind of work.

"The person who's not in vibrantly good health is affected in many ways. He tends to get colder faster and loses a great deal of energy trying to keep his body warm."

The ill-prepared are highly susceptible to hypothermia. That's a condition in which fingers and feet get numb, and a person even loses all sensation.

Then he'll get dizzy and black out. If he stays in the water he'll die.

Successful mining depends on research. Huson speculated that if someone bought a dredge, stuck it in the river and started sucking up rocks "they probably wouldn't find anything."

"You have to know the right areas," said Huson. "You have to understand geology, the changes in the water levels, where the river was and where it is now.

"You have to know the history of the area. What areas were mined, how much they took out, if they quit and why they quit."

The stories of gold left behind by the white miners of the 1900s lured Huson to Oregon, where he researched the history and localities of old gold mines.

"The money-hungry white miners were only concerned with instant fortune," said Huson. "They didn't care about spending months mining the small stuff. But the Chinese coolie laborers would follow the white man, go through what the white man had left and still bring out more gold. They had more patience than the white man and consequently many of them got rich."

Huson ventures into the icy winter waters because he's "a soldier of fortune."

"A lot of people work all day to support their wife and kids, and hate their jobs," said Huson. "The reason I do this kind of work is because I don't like working for someone else for \$2.90 or \$4.00 an hour. I don't want to sit back on my porch when I'm 90 and say 'I wish I'd done that.' I wanna say I did it, and I know what it's like!

"Most people take a two week vacation every year and try to live their whole life in those two weeks. Then they go back to their hum-drum jobs, and their ulcers and dream about what other people do. Well, I'm going to do the things other people dream about."

The work is exciting, but it has its ups and downs.

When miners do hit that pocket of gold, they celebrate. They drink champagne and eat steak dinners. When the money runs low, however, they keep "plugging away at it."

Huson wouldn't reveal how much money he's made gold mining, but he's seen enough to whet his appetite and keep him coming back.

The boyish 29-year-old loves mining but admits it doesn't leave much time for socializing.

"It's very hard to be married and do this kind of work," said Huson. "You travel an awful lot, and it's hard to find a girl or woman who wants to put up with it.

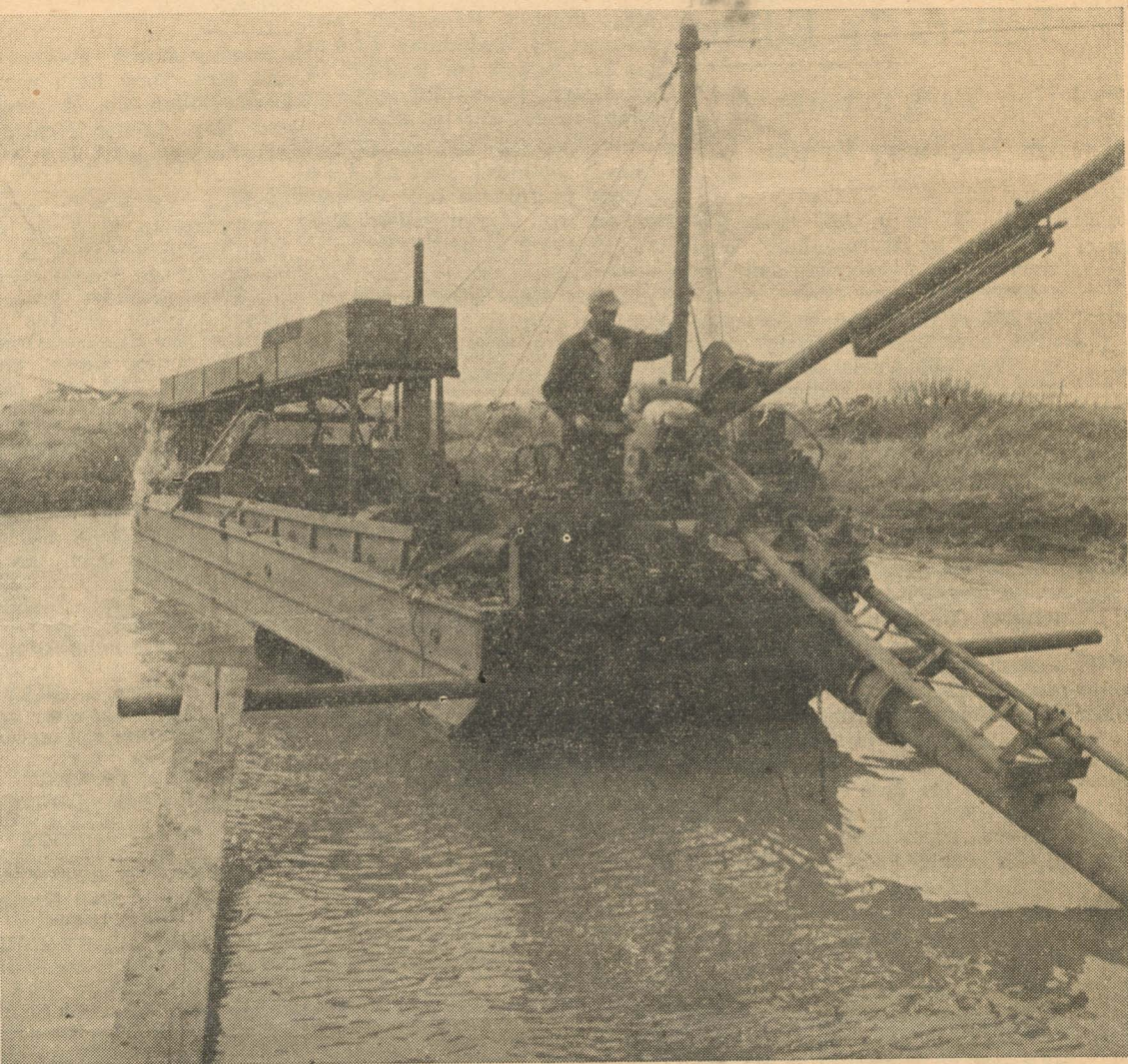
"When you get off at the end of the day, you're in no shape to party at night."

Huson has pushed dating aside for now, to pursue his dreams.

"Diving is my whole life. It's what I love to do, it's what I'm best at and I have fun at it." And there's another bonus: "I never get ulcers."

So. Oregon Weekly
March May 5-11 1979

Beach Mining Begins



Sand and water spurt from this dredge which was operating last week behind Don Alcorn's house in Gold Beach. The dredge, a converted DUKW, has a capacity of 100 yards per hour. Paul Lettell and Glenn Robinson of Covina, California, are the owners of the dredge. They are experimentally mining the beach sand for gold, platinum, chrome and other metals.

NO.232(1974)
NOVEMBER 29,1974

"Reliable Reporting"

NO.232(1974)
NOVEMBER 29,1974

WESTERN CANADIAN INVESTMENTS

TAPIN COPPER MINES LTD.

DIAMOND DRILL HOLE NO.1 - ASSAY RESULTS

Footage	Width	Oz.Gold /t	Oz.Silver/t	Sample type	Recovery
55- 59ft.	4 ft.	0.194	0.23	Sludge	
59- 62	3	0.110	0.05	Core	50%
62- 67	5	0.454	0.03	Core	30%
67- 70	3	0.138	0.33	Core	10%
70- 73	3	1.751	0.31	Sludge	
73- 74	1	3.713	0.08	Core	33%
74- 80	6	Not assayed			
80- 86	6	Trace			
86- 88	2	2.272	0.30	Core	60%
88- 91	3	6.940	1.04	Core	17%
91- 96	5	6.77	0.96	Core	90%
96-101	5	10.962	1.79	Core	90%
101-103	3	6.376	1.04	Core	90%
103-106	3	4.917	1.49	Core	90%
106-108	2	8.476	1.88	Core	90%
108-115	7	2.322	0.67	Core	100%
115-116	1	17.771	4.74	Core	90%
115-123	8	6.580	1.32	Sludge	
123-125	2	9.797	2.15	Core	30%
125-129	4	0.084	0.04	Sludge	
125-129	4	23.20	5.08	Core	30%
129-133	4	13.974	3.85	Sludge	
133-138	5	0.011	0.02	Sludge	
138-140	2	0.325	0.11	Sludge	
140-147		0.116	0.04	Core	60%
<u>Additional Check Sludge Samples</u>					
110-115	15	13.457	3.74		
115-123	8	6.580	1.32		

Tapin Copper Mines Ltd. recently reported that the No.1 diamond drill hole on its Bonanza gold property, located 50 miles west of Baker City, Oregon, averaged 70 feet of 1.97 oz. gold per ton. The 70 feet is core length and an estimated true width of 50 feet. The details of the assays are provided in the table to the left as supplied by W.G.Timmins & Associates Ltd. consultant to Tapin Copper Mines Ltd. He notes that the average value was after eliminating any assays in excess of 8.0 oz. gold per ton.

The detail of the results were reported in conjunction with the treasury offering on an agency basis by Canam Investment Corp. and Midland Doherty Ltd. of 300,000 shares of Tapin at a minimum of \$1.60 per share. The offering was made on the floor of the Vancouver Stock Exchange at 11:00 a.m. and was all sold at \$2.25 per share to provide

the company with \$675,000, gross before commission. The trading for the day totalled 823,350 shares with the closing price \$2.85 to \$2.90 with the last trade \$2.85. Trading in the shares of Tapin was suspended from the opening until 11:00 a.m. to provide time to match orders and clear the way for the treasury offering. Tapin shares are out of primary distribution.

DIAMOND DRILL HOLE NO.02 ASSAY RESULTS

Footage	Width	Oz.Gold/t	Oz.Silver/t	Sample Type	Recovery
70- 74	4 ft.	4.333	0.63	Core	75%
74- 80	6	7.379	1.33	Core	85%
80- 84	4	38.341*	4.88	Core	20%
84- 89	5	10.495	1.6	Core	50%
89- 95	6	19.600*	4.02	Core	67%
95- 99	4	16.582*	2.83	Core	88%
99-101	2	7.837	1.28	Core	50%
101-105	4	5.375	1.26	Core	88%

Mr.Timmins as consultant reported that the No.1 hole was drilled at -45° at a point 400 feet south of the northern extremity of the 1,400 foot long B conductor. No.2 hole was drilled at -58° about 400 ft. grid east of No.1. No.3 hole has just been completed grid east of

No.2 hole, the distance east has not been reported. The No.4 hole is now collared in overburden at an undisclosed location.

About the assay results in No.2 hole Mr.Timmins states, "Weighted average assays, taking into consideration some losses of core, and cutting the high values obtained on sample numbers 0408, 0410, 0411 to one ounce per ton, (See asterisk in table above) gives an average value of 3.16 oz. gold per ton and 0.48 oz. silver per ton, a ratio of approximately 6:1 gold to silver."

The electromagnetic survey of the property located some ten anomalous areas on the property each of which justifies substantial drill testing as a result of the results obtained in the drilling of the No.1 and No.2 drill holes.

Of the 5,000,000 shares authorized there are 2,696,594 shares issued including 650,000

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Cornucopia Mine
Cornucopia District
Baker County.

Attention : Dole

CONFIDENTIAL



State of Oregon
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
Baker Field Office
2033 First Street,
Baker, Oregon.
April 16, 1965

CONFIDENTIAL

Dear Hollis:

You will recall the copies of the correspondence you sent me a couple months ago pertaining to the Cornucopia potential, specifically, Andy Anderson's letter to Zoldoc, U.S.B.M., Spokane.

Bannister of the USBM just completed spending two full days here going over a whole string of mines and such data as Howard and I could give. On this Cornucopia matter, he stated they were at considerable loss to reconcile Andy's information with other data secured from other highly placed sources.

The conflicting data is that during the last two years of operation Al Quine had a special operational contract. During this period he had all miners mining at all possible places where good ore was available but he did no new development work of any kind anywhere. As a result all developed ore became suddenly depleted. It was this situation plus the increasing costs being brought on by the impending war that caused the shut down of operations.

Since Andy's sojourn at the mine took place mostly during this period, his impressions concerning the ever growing struggle to keep the bin full and the resultant depletion of developed ore are real, and correct. There is reason to doubt, however, that he knew Quine had the operational contract as such and that he was fully cognizant that the cessation of development work reflected Quine's mining policy rather than company desire or geologic circumstances.

Another supposed fact that few people know about and that certain of the former company officials are even yet quite bitter about, is that in 1941, and a year after the mine had been closed down, Quine tried to purchase the property for the company he was then working for. At least, such is the story as given to the USBM along with the flat statement that there is a substantial amount of potential ore-bearing land remaining to be explored, which tracts would have been opened up as a matter of course by the development policy in effect prior to the time that Quine contracted the operations.

I have labelled this letter as confidential because of the nature of the hear-say reports cited there-in. However, since you have the Anderson-Zoldac correspondence in our Cornucopia file, I figure it is proper to include this side of the story too. At any rate, it makes interesting subject matter to contemplate about and I can see where-in the USBM is in a quandry as to how to reconcile the two reports.

Sincerely



STATE DEPARTMENT OF GEOLOGY
AND MINERAL INDUSTRIES

BAKER FIELD OFFICE
2033 FIRST STREET
BAKER, OREGON 97814

November 26, 1968

RECEIVED
NOV 29 1968
STATE DEPT. OF GEOLOGY
& MINERAL IND.

Mr. Hollis M. Dole
State Dept. of Geology and Mineral Industries
1069 State Office Bldg.
Portland, Oregon

Dear Hollis: -- (Reasonably confidential)

The Albany USBM's Gary Kingston phoned last week concerning a reported 46,568 ounces of silver bars shipped Air-freight from the Baker airport early this month. Forty-six thousand ounces translates into nearly two tons and approximately one hundred thousand dollars.

This report originated from the Bureau's Denver office and additional data relating to the same event was that the shipment was made by a Mr. ~~Norwin~~ Twittle of the Universal Oil and Mining Company, Salt Lake City. Also that it originated from the Silver Queen mine in eastern Oregon and more specifically from 10 tons of concentrate that had been milled from 100 tons of ore.

All Kingston wanted from us was to know where the mine was. And needless to say, after his call I wanted to know too. Thus began a sleuthing job of major proportions with the following results.

No silver bars whatsoever were knowingly shipped from the Baker airport by either Air West or the local taxi service. However, about the 4th or 5th of the month an unidentified man did contact both Air West and the local REA offices about shipping silver. At the Air West office he actually lugged in two 50 (estimated) pound crates as far as the scales, but ended up lugging them back to his car when he learned that he had to sign a special affidavit concerning the shipment. Reportedly he was quite obnoxious and in blunt, straightforward language told Air West to go to Hell, that he wasn't filling out and signing any form. He left indicating he would take his stuff to Boise.

Now on the local field level I do know that Doc Smith was running around town early this summer with a small silver bar (7 to 10 ounces as I recall) which he had recovered from some samples of ore reportedly given him by Mr. Sirrine who has for several years been working seasonally on the old Green patent on Pedro Mountain with a small two to four man crew. Hence this was

the only Oregon property which I could think of from which any silver could possibly have originated. Even so, we have had no vestige of a rumor concerning any milling whatsoever, or even talk about the possibility of erecting a mill ---- and we do have contact with individuals who are generally informed concerning prospect activities in and around Morman Basin.

Additional local inquiry concerning this point resulted in no new information from anyone about any possible milling. However, it did serve to disclose that Sirrine has located a second group of claims in the Pedro area independent of the Green group --- that these are known as the Silver Queen claims --- that recently he leased the Green group to one of Jim Jackson's former Buffalo Mine crew members who is currently working at Bourne for Omega, and that he has very recently leased the other group to "some outfit from Salt Lake City".

Sirrine himself is reportedly in Nevada at the present time and the Court House has no record of any lease or title change in connection with the Silver Queen group. Nevertheless, the reported recent leasing to "some outfit from Salt Lake City" does tie in with the Bureau of Mine's report about the shipment being made by the Universal Oil and Mining Company of Salt Lake. Therefore, since we can generate no inkling of a rumor concerning any milling operation of any kind, let alone one capable of handling a 100 tons of ore, the story about a Baker County source for the silver brings thoughts to mind about the possibility of illicit silver such as melted down coin or even ore or concentrates swiped from Coeur d'Alene or somewhere else.

A recent call from Kingston has disclosed confirmation by the Bureau that the shipment was indeed made -- not from Baker as originally reported, or from Boise, but instead on United from Salt Lake. This is supposedly first hand information because according to Kingston, United balked about accepting the shipment and called the USBM in Salt Lake who sent a man to the airport to confer on the matter. Who the shipper was, and to whom he shipped the silver, was not disclosed and I doubt that Gary had this particular information; however he did say that their Salt Lake man talked with the shipper and that the shipper still maintained that the silver originated from a mine in Baker County but that it was concentrated by a secret process which he wouldn't discuss.

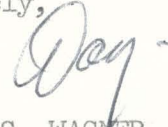
A Baker County origin still smells like a blind to me but it will be interesting to discretely check further into this matter, which, needless to say I will do as time and circumstances permit. Unfortunately Sirrine is exceedingly difficult to contact as he is customarily on the go and has no definite schedule or permanent base of operations other than on the Green property -- and he has never been there on any of the several occasions when I have visited the property. And the ranch through whose fields and private road one must traverse to get to the property has no phone. At any rate it will be nice to believe that this

- 3 -

reported milling operation is indeed true as we could well use a \$100,000's of new production to good advantage on our yearly production records. And that such an amount of silver was involved in the shipment is supposedly confirmed.

Interesting development ----- no?

Sincerely,

A handwritten signature in dark ink, appearing to read "Wagner", written over the typed name.

NORMAN S. WAGNER

NSW/aw

WHAT ARE WE GOING TO DO ABOUT IT?

"SEWARD'S FOLLY" was turned into one of the greatest assets of The United States by the discovery and exploitation of it's mineral wealth. Transcontinental railroads built to replace the cumbersome stage coach and dangerous pony express, even a large share in winning the Civil War by the North was done by the discovery of Gold in California. Millions in new wealth were created by the treasure delivered from Grass Valley, The Comstock, and other famous mines of The West.

Today we have a vast storehouse of treasure awaiting out action, waiting for us to unlock and deliver to the awaiting world. The simple unlocking of this storehouse given us by old Mother Nature can and will remake The West once more a beehive of activity, drive the wolf from our door, bring peace and plenty to a hungry and worried nation.

True, this cannot be done overnight, as would the Genii of Aladdin's Lamp, but by intelligent co-operative work in the development of the natural resources which we have in such generous amounts all around us. By the mining, processing and marketing of the minerals native to our own country, which we are now importing by the millions of tons, from foreign countries, where the ore is produced by peon labor working for the magnificent sum of 4 to 70 cents per day.

PRESENT MINERAL RESOURCES IN WASHINGTON AND OREGON

The State of Washington produced in 1937:

36,310 oz. of gold, value-----	\$1,270,850
126,304 oz of silver, value-----	97,696
128,000 lbs of copper, value-----	15,488
5,660,000 lbs of lead, value-----	333,940
8,232,000 lbs of zinc, value-----	535,080
63 tons tungsten concentrates, value-----	47,636
2,018,036 tons of coal, value-----	6,404,174
142,578,000 cu ft of natural gas, value-----	99,803
4,107,432 bbls of cement, value-----	8,830,798
2,027,420 tons of stone, value-----	1,909,604
9,376,644 tons of sand & gravel, value-----	6,818,154
65,272 tons of lime, value-----	647,692
28,787 tons of fire clay, value-----	46,161

In a miscellaneous classification appears small amounts of manganese and molybdenum ores, but the sales were too small to be separately tabulated.

These facts were taken from a table appearing on page 7 of NORTHWEST MINING MAGAZINE (Spokane) for Nov. 3, 1938. The Jan. 8 issue of THE OREGON JOURNAL (Portland) carries a feature map showing the locations of various mineral deposits in Oregon. This map indicates that the mineral resources of Oregon are approximately the same as those of Washington given above. However, this map discloses considerable resources which have not been developed to the point where they would show in a tabulation such as that given above for Washington. There are a number of extensive lead-zinc deposits in Oregon which are as extensive as those in Washington, but have not as yet been developed to the producing stage. In addition, Oregon has developed to a greater extent the quick-silver industry. There are extensive deposits of Chromite, Borax, Asbestos, Salt, Pumice, and Marble.

There are also present large quantities of high grade iron

As will be noted from the table quoted, most of the value represented by mining activity comes from gold, silver, lead and zinc. The only commercial smelter of large size is located at Tacoma, Washington, but there are smelters in adjoining states which at present are treating large amounts of these values mined in Oregon and Washington. There is a large plant for the treatment of Cinnabar in the Horseheaven district of Oregon. There are a number of small dredges, and stamp mills for the recovery of free milling gold.

THE DIFFICULTIES FACING THE SMALL MINER AND OPERATOR

The existing smelter setup was originally designed for handling only one kind of ore. Usually the smelter had its origin in the development of some particular mining property, and gradually expanded into the custom smelting field as other suitable ores appeared for market. In many cases, these additional ores were much different in composition than the ores which the smelter was designed to handle. Thus an unfortunate situation arose, for which nobody in particular was to blame, wherein many small operators found it extremely difficult or impossible to market their ores, because of the discounts necessary on account of the complex nature of their ores. In addition, many of these small deposits are found in rugged country, and unless the ore is very rich indeed, it does not pay to transport it to the smelter for treatment, yet the size of the deposit does not warrant the construction of an expensive smelting plant on the spot.

In addition, the small operator is faced with the difficult situation of securing adequate technical supervision of his operation. He lacks means of determining just which of his ores it will pay him to ship, as he has available no means of making assays before shipment. He is likely to fall prey to anybody with a plausible tale regarding methods of self treatment of his ores.

One frequently sees developments which are all out of proportion to the amount of ore available. A prospector locates a deposit with great promise, secures capital and builds an expensive reduction plant, which hasn't time to pay out on itself before the ore is all used up. This is an undesirable situation which can only be remedied by working out a desirable ratio between ore value present on the prospect, and needed capital for development.

As we look at the social situation in The West, it seems that we have reached a state of serious overpopulation. Everywhere stalks the specter of Unemployment. But we have an inconceivable amount of undeveloped resources of every kind. When we compare all aspects of this region to other much more highly populated areas of the country, we find we have all and much more in the way of resources than they have. There is no valid reason why we could not support and support well many times the population we now have. In fact it would seem that the only limitation on the size of the population would be the ability to raise sufficient food on the agricultural lands for domestic consumption.

It can be readily seen that profound changes will have to take place in our entire social structure before this can come to pass. And all of this will necessarily take time to develop. The things we are doing now are just the beginning, but they will form the foundation for an industrial development to take care of a greatly increased population in this area. Mining and Industry form the basis of the new activities most necessary at this time.

We wish to emphasize at this point the tremendous social value of any large industrial enterprise to the community in which it is located. On page 4 of the Oct. 15, 1938 issue of The Mining Journal (Phoenix) is a discussion by Mr. Dixon Fagerberg Jr., which calls attention to the criticism which is often levelled at "Big Business" due to the common method of publishing financial statements. Mr. Fagerberg says:

"There are various ways in which the challenge can be met. One way is to answer the charges and in turn make counter-charges, but this, operating by itself, unquestionably tends to create further confusion and lack of confidence on the part of the general public. A more constructive way is to show concretely who are the beneficiaries of business activity".

Accordingly, we shall make every effort in this article to show how the community as a whole will be tremendously benefitted in increased payrolls, and community prestige.

NEED FOR THE MINOR METALS

In NORTHWEST MINING (Spokane) we find an article by Dr. John W. Finch, Director of The U.S. Bureau of Mines. Let us quote a portion:

"Alarming deficiencies in the domestic supply of such basic raw materials as bauxite, manganese ore, chromite, tungsten ore or concentrates, vanadium concentrates, mercury, antimony and a number of others furnish a challenge to American technical ability and ingenuity to devise means or processes that will supply the need for these materials from our domestic resources."

Speaking on the "Prospects for Minor Metals and Non-Metallic Minerals," Dr. Finch stresses the keen interest being displayed in these minerals at the present time and calls attention to the extending application of them in industry.

"While the minor metals do not bulk as large in tonnage and value as copper, lead, zinc, iron, gold and silver", he stated, "nevertheless they are essential factors in our industrial economy. Recognizing this, the War Department has acquired stocks for use in emergency of several so-called strategic commodities including the minor metals. Some of the minor metals are of relatively recent importance and in a sense are modern metals associated with speed, reduced weight and durability under adverse conditions. Their extending application in industry is a result of the better understanding of metals and alloys designed for specific purposes.

"A feature of their production is the higher price they bring in the market. Compare the prices of iron, copper, lead, and zinc for example. With those of Aluminum, magnesium, molybdenum, tungsten, and vanadium. An added attraction for their producers is the excess of demand over domestic production. For many of these essential commodities American industry is dependent on foreign sources for a good share of it's requirements.

"The ferro-alloying metals, as the name signifies, are used extensively in ferrous metallurgy; consequently their market pattern follows in general the vagaries of the parent industry, but the extremes are not so pronounced. As a result of more exacting demands for performance under a given set of conditions, custom-made steels are becoming more important and the trend of American alloy steel production is steadily upwards. The utility of such steels is dependent upon the addition of one or more ferro-alloying metals, including chromium, manganese, molybdenum, nickel, tungsten and vanadium.

present year has been felt in these industries but curtailment has been ~~felt in these industries~~ less pronounced than for some of the other metals.

"Light-weight metals and alloys find extensive use in the manufacture of both commercial and military aircraft. The bulk of the metal used in the fabrication of an airplane consists of aluminum, magnesium or alloys thereof. And in this connection it should be noted that a large part of our airplane production is made on the West Coast--perhaps as much as 75% in value. With recent advances in the treatment of magnesium alloys for corrosion resistance, there has been a greater demand for sheets, castings, and extruded products as construction materials. Continued research is broadening the field of application of aluminum and its alloys.

"Spurred by the need for processes that will enable domestic raw materials to supply the demand for minor metals, the Bureau of Mines has been conducting an extensive program of ore testing and metallurgical research. The ore testing studies have been continued to the point where many of the minor metal ores from various districts may be successfully beneficiated.

"Of particular importance in the western part of The United States is the possibility of establishing electrometallurgical industries at points adjacent to adequate mineral supply and within easy reach of power developed by the various large river-control projects. The bureau's approach to this problem has been based on the idea that the development of new materials for whose production the West has natural advantages would be of more value than an attempt to produce materials that are now made elsewhere, usually in ample quantities, by well-known methods.

"An important objective of the program is to determine the possibility of producing deficiency metals, essential to armament and munitions, from domestic ores; and wherever possible to promote the production of these metals for peace-time uses and thus make them available in an emergency. The program includes such problems as the recovery of manganese, Chromium, nickel, antimony, magnesium and boron from well-known, readily accessible mineral deposits.

PRODUCE ELECTROLYTIC MANGANESE

"Excellent progress has been made, a method has been developed, and several hundred pounds of high-purity electrolytic manganese have been produced from ores containing from 16 to 40% of manganese. This electrolytic manganese, in contrast with the so-called pure manganese of commerce, which sells for about 40¢ per pound and contains amounts of aluminum and silicon that make it unsuited as a base metal for the preparation of alloys in the true sense, is an almost ideal material for an alloy base; and it is estimated that its cost will approximate 6 or 7 cents per pound. It has a silver color; it is permanent in air; and although brittle when pure, forms ductile alloys with relatively small additions of other metals. Its alloys with silver have been found to have exceptionally good properties for electrical contact material. Preliminary experiments indicate that it may replace nickel and copper in such alloys as those of the monel, nickel-silver, and stainless steel types.

MAGNESIUM RESEARCH PROGRESSES

"Work is going forward, as our facilities permit, on the other objectives of the program, which, of course, could be accelerated with additional funds. It now seems probable that our

"The laboratory phase of our investigation on the production of high-purity magnesium from magnesite is well in hand; and here again we are hopeful of overcoming the practical difficulties that have been encountered and of demonstrating the utility of a process that should make this valuable metal available in a high state of purity at a moderate cost.

"A start has also been made on investigations relating to the recovery of nickel from domestic ores, the development of methods for the production of boron and its alloys, and of the treatment of antimony ores and alunite.

NONMETALLICS ALSO IMPORTANT

"The importance of nonmetallic minerals is rarely appreciated by the layman and seldom by the metal miner. However, in terms of aggregate value of products and number of men employed, they run neck-and-neck with metal mining, sometimes ahead. In volume of production they normally approach half a billion tons a year, or considerably more than double the ore output of all metal mines and more than ten times the annual tonnage of pig iron and non-ferrous metals. Bigness alone is a faulty yardstick of national importance but from the standpoint of utility and general industrial and military significance, supplies of nonmetallic minerals are quite as essential as supplies of metals.

"Most industrial minerals were produced in greater quantities in 1937 than in any previous year since 1930. Only a few, however, made all-time records and the group as a whole has by no means regained the ground lost since 1929. If account be taken of the 7,000,000 increase in population that occurred in the United States in this interim, the 1937 figures are even less encouraging.

In conclusion, Dr. Finch stressed the growing importance of industrial minerals as by-products of metal mining enterprises.

Mr. J. Carson Adkerson, president of The American Manganese Producers Association in a letter to us states:

"Manganese is the No. 1 strategic mineral. The manganese industry may be retarded by Government regulations or lack of domestic outlet for the ore, but nothing can stop its ultimate development when we have such an abundance of reserves within our own borders. The ores occur in nature as low grade. It must be recognized that all manganese ores are low grade to start with. They must be treated by hand or machinery to concentrate the grade. Even Russian ores require from 2½ to 3 tons of low grade ore to make 1 ton of high grade concentrate suitable for the market. The same applies to domestic ores. (See U.S. Bureau of Mines report on Russian Manganese as recorded by Hon. A. Willis Robertson in the Congressional Record of June 16, 1938).

"The nation cannot afford to remain dependent upon a source of manganese supply 4000 miles away. Even a Government stockpile will not assure the country adequate security as no one can foretell how long an emergency may last. Domestic mines cannot, in a short period of time ordinarily allowed in an emergency, be developed and produce sufficient to meet the national demands. It requires time to carry forward development work underground and ~~xxx~~ install plants. For adequate national defense there must be a healthy nucleus of a manganese industry within The United States.

"Further development of the Manganese industry will not only furnish a solution of the manganese problem for our national defense, but will bring employment and happiness to thousands of homes in

DEVELOPING A PLAN

There are those who would solve all our problems by application of one magic formula, usually dealing with pensions for this or that group of citizens. Then there are the radicals and reformers of one breed or another, each of which has its own pet scheme to turn the world upside down overnight. History has amply shown that Evolution is more superior than Revolution in all matters dealing with social change. Naturally, this does not mean that we should seek the perfect formula and then plan to never change it. We perhaps shall never find the perfect formula. But should ever work toward the adaptation of existing conditions to changed factors in society. When a plan or goal has been decided upon, let us set our feet upon the way.

The fact has been mentioned that existing smelting plants in this region were organized from the standpoint of a single type of ore, and that all subsequent expansion was made more or less in view of that type of ore. It is becoming evident that additional smelting plants of one kind or another will have to be built soon. It is to be hoped that any new construction will be on a plan designed from the first to handle complex ores, leaving the more simple ones to be handled by the existing smelters designed for handling them.

The practice of Mining and Industry calls for both collective and individual action. The American Tradition calls for as much freedom of individual enterprise as can be secured without too great a sacrifice. Accordingly, in the plans now being made to start Northwest mining and industry, provision is being made to separate the work into two classes, segregating as much as possible those activities requiring collective action and those in which a great deal of individual action is permissible. It has been thought proper to allow the individual to prospect and develop his mine as his individual property. Simple means of ore treatment are being developed whereby the prospector and miner may develop at small cost a means of delivering a partially refined product from his property, and upon delivery he receives a final settlement in cash for this partially refined product. In this way he is permitted a wide latitude of individual action. However, the final refining and marketing of the products is a matter in which collective action is highly desirable. It is therefore planned to locate large central custom reduction plants at strategic points to receive the partially refined products from the individual miners. Each of these custom plants will require the gathering together of a large amount of capital, and a large force of highly trained technical labor.

The first definite move in opening up this territory would be the installation of a custom electrolytic plant in some centrally located position to treat the oxides purchased from the mine owners in the surrounding territory. A plant of this nature would cost approximately \$100,000 and would do a gross monthly business of about \$65,000, of which \$22,500 would be paid to the small miners for their product (oxides from the fuming furnace); \$15,000 to some 40 employees; \$3,000 to the power companies; \$7,500 for various chemicals and supplies; leaving \$17,000 for owners' profits and taxes.

This plant would actually be creating \$65,000 of new wealth each and every month it operated, and when one sees that in excess of 80% of this amount would be spent in the immediate territory to aid in developing and stabilizing the industry one wonders what we are waiting for. Why not get started?

Now let us visit the small miner. For an investment of some \$10,000 to \$15,000 he can place himself in a position to secure half of the \$22,500 paid out by the custom electrolytic plant each month for oxides. He in turn would pay out half of this amount for labor and supplies, using the balance for mine depletion and profits, thereby adding his share to the upbuilding of his home territory. This large amount of money expended will naturally cause an increase in other lines such as building, trucking, and general supplies.

In view of the above statements and facts it behooves us to take immediate stock not only of our mineral resources but of ourselves. And in this manner find what if any stumbling block lies in the way of proceeding on a plan as outlined, exchange our wishbone for a backbone, discard our neutral or negative outlook on life--become positive, make definite plans for procedure--then carry them through. It is up to us, the leaders in the mining industry, to get together on a sound basis, commercialize our assets. Never in the history of the world were there so many factors necessary for the profitable mining and processing of the minor metals available as there are today.

It may be well to discuss what might be termed the "Colonial" principle of modern business. This principle explains the anxiety of certain nations in Europe to expand their colonial empires. The same principle applies to a limited degree in the way the older industrial regions of the United States regard the "outlying provinces" of the mid- and far West.

The essential conditions for the maintenance of a "colonial" system, are the interconnection of one or more highly cultured and technically proficient regions with one or more undeveloped and culturally backward regions capable of supplying raw materials in large quantities, and willing to accept in exchange any amount of manufactured goods the cultured regions care to give. The cultured regions always see to it that they do not give any more than they absolutely have to in order to keep the masses reasonably quiet. Indirectly, the cultured regions also do what they can to prevent the spread of culture into the backward regions, for obvious reasons.

We feel that the time has come when we wish to develop our own resources to the fullest degree economically wise, but to retain and foster all of the intersectional trade which remains desirable for any reason.

The Shannon Research Association

Lon Shannon

Lon Shannon

*Copies to
Mr. Walker
Mr. McGraw
Mr. Thomson
Mr. Hill.*