State Department of Geology and Mineral Industries

702 Woodlark Building
Portland 5, Oregon

POWDER RIVER PLACERS BAKER & SUMPTER DISTRICTS BAKER COUNTY
(Including the Carpenter & Vertex Mining Co. claims)

Operator:

Vertex Mining Company, Inc., 9206 N. Commando Ave., Portland 3, Oregon.

Field Address: Baker, % Sumpter Stage.

This company was incorporated in the State of Oregon in August 1946 and includes the following officials:

President: Mr. T. M. Beall, 9127 West Anna Ave., Portland, Oregon

Vice President: Mr. V. E. Moffett, Baker, % Sumpter Stage, Oregon

Secretary: Mr. W. J. Shannon, 9206 N. Commando Ave., Portland, Oregon

General Mgr: Mr. Martin Zoucha, Baker, % Sumpter Stage, Oregon

Owners:

Vertex Mining Company and Mr. & Mrs. Carpenter--addresses: Baker, % Sumpter Stage, Oregon.

Area & Location:

Claims held by this company embrace 100 acres as follows:

Leased:
River Side Placers, 40 acres--owned by Mr. & Mrs. Carpenter.

Purchased:
Mountain Home Placer, 20 acres--previous owner: Mr. & Mrs. Ralph Renfro.

Claimed for Company by officials:
Vertex Placer, 20 acres--by Martin Zoncha.
Last Chance Placer, 20 acres--by Walter Zoncha.

Location---T. 10 S, R. 38 E, Sections 24 and 25
T. 10 S, R. 39 E, Sections 19 and 30

This covers an east west stretch of Powder River in both the Baker and Sumpter Districts about 18 miles from Baker on the Baker to Sumpter highway.

History:

During 1938, according to Dogami Bulletin 14-A, England and Hilliard made a dragline setup on the river in the lower end of Sumpter Valley, which opens up a short distance upstream from the claims under discussion here. The plant was moved to another property in Grant County after but a few weeks of operation so that the amount of ground worked was small accordingly. Another operation was attempted by Messers. Hatley and Fermer during 1939 at a site a few hundred yards downstream from the present claims, but this operation was likewise short-lived and not extensive. No data is available concerning the values revealed by either operation.

Development:

The Vertex Mining Company is in the process of assembling their plant. The only work done on the property itself so far consists of the diverting of the river in a channel of about 400 in length.

Geology:

These claims occur on the Powder River between the lower end of Sumpter Valley and what is known as the "narrows". The gravels to be had consist of normal river fill material. No prospect drilling or pitting has been done, but depth to bedrock is believed to be between 10 to 12 feet. As indicated by the geologic maps of Baker and Sumpter quadrangles, the bedrock will probably be found to be a metagabbro, although argillite may be encountered in places also.

That the river gravel here is gold bearing is assured in view of the known production of these gravels on up the river in the Sumpter Valley, and in the gravels of some of the tributary streams there, but the value per yard of the gravel on these claims remains to be determined, as does also physical characteristics of the gold and the nature of associated sands.

Equipment:

The plant being installed is designed to save heavy sands and fine gold and it contains two recently developed and patented units, one, an amalgamator, and the other, a classifier. The classifier is essentially a sheetiron sluice with narrow transverse slits cut the full length of the bottom at about 4 inch intervals. These slits are fitted with a saw-like strip of iron, mechanically operated, to prevent clogging. The sluice bottom level covers a cone shaped tank. Provisions have been made to maintain a moderate and constant suction in these cones so that the fine sands passing over the sluice are drawn through the transverse slits into the cone.

In operation, trommel fines are passed over this classifier. The fine gold and sands removed by the classifier are pumped to a Pan American jig which discharges to the amalgamator. The material which passes over the classifier discharges through conventional riffles for the recovery of coarser gold.

The installation currently being made consists of two classifiers hooked up in tandem. The whole recovery unit is mounted on skids and is equipped with a conveyor for tailings disposal. The trommel is 20" by 6' with 3/4" perforations. Digging is to be done by a 5/8 yard dragline.

The recovery unit as such was developed and patented by Messrs. J. C. and W. J. Shannon. The initial unit constructed was reportedly given substantial field tests in Colorado during the years 1939, 1940 and 1941. The plant being set up here is the second built. Accessory equipment includes a dozer and trucks, etc.

Report by:

M. S. Wagner

Date of Exam:

July 2, 1947

Date Report:

July 3, 1947

References:

Baker and Sumpter Geologic maps, Dogami Bulletin 14-A, and unpublished Dogami report entitled Baker Development Co., by N. S. Wagner, March 6, 1945.

Informant:

J. C. Shannon

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Powder River Placers
(Including the Carpenter & Vertex Mining Co. claims)

NAME

OLD NAMES

PRINCIPAL ORE: Au

MINOR MINERALS

T	R	S
10 S	38 E	24 & 25
10 S	39 E	19 & 30

PUBLISHED REFERENCES

Baker ..... COUNTY

Baker & Sumpter ..... AREA

..... ELEVATION

MISCELLANEOUS RECORDS

..... ROAD OR HIGHWAY

18 miles to Baker ..... DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S) Vertex Mining Co. ..... Address % Sumpter Stage, Baker, Oregon .....

Mr. & Mrs. Carpenter ..... " " " " " .....

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OPERATOR Vertex Mining Co. ..... 9206 N Commando Ave., Portland 3, Oregon .....

Name of claims	Area	Pat.	Unpat.
River Side Placers	40 acres		
Mountain Home Placer	20 "		
Vertex Placer	20 "		
Last Chance Placer	20 "		

Name of claims	Area	Pat.	Unpat.

EQUIPMENT ON PROPERTY

MI-21

DEPARTMENTAL RECORDS on file in	P'land	G.P.	Baker
REPORTS			
Powder River Placers by N.S.W. 7/3/47	x	x	x
" " " (Confidential) N.S.W. 7/3/47	x	x	x
SHIPMENT AND ASSAY RECORDS			
MAPS			

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The classifier mentioned in the green paper edition of this report is rather interesting. According to Shannon, care must be taken to maintain an even flow of gravel (as against a pulsating or intermittant one) and also the density of the water-sand mixture in the cone below must be checked frequently and corrected when necessary for best results.

Shannon of course reports very extra excellent results from the Colorado testing and possesses a big docket full of bank, mint and smelter receipts covering the sale of substantial amounts of gold. Unfortunately data concerning the yardage and head assays of much of the material handled is lacking so that the receipts have lessened significance accordingly. However, Shannon claims to have worked on the tails of several different going placer operations, and to have made very good recovery of fine gold. He claims that the classifying and jig combination yield a very clean sand concentrate as compared to common placer concentrates, and that the machine is sensitive to slight differences in gravity.

More important than the foregoing, perhaps, is Shannons claim to intimate past association with Fahrenwald. Shannon claims they worked together for years, that Fahrenwald is currently in Canada, but is coming down for a grand inspection of the plant when he returns in a month or two.

In many ways the classifier looks to be a halfway practical and sensible gadget, and one that might well be worth playing with, but other aspects of this company's operation are open to question. Just why they assume the expense of diverting the river when the whole valley is composed of nothing but river bed material, is a question I never could get an answer on. Further, the complete lack prospect testing speaks for itself.

CONFIDENTIAL

Patents for the classifier and amalgamator have been issued in the U. S., Mexico, and Canada.

Report by:

N. S. Wagner, July 3, 1947

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