

# State Department of Geology and Mineral Industries

702 Woodlark Building  
Portland, Oregon

W.E. Pantle Gold Dredge

Jacksonville

Jackson

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So far this operation has been marked by one breakdown after another. I do not believe it is due to incompetency but to old equipment and just plain hard luck. A new dragline and a new 2½ yard bucket is on order and delivery is expected within the next few months--he hopes. By the time this comes all the "bugs" should be worked out and production ought to be running smoothly.

Mr. Pantle is a young man with considerable experience in placer mining. He was formerly with the PANOB Gold Dredging Co. at Lincoln, California. His operation and plant there is described, with drawings, in USEM I.C. #7013. His present plant is essentially the same as that illustrated except it has six instead of four Ainlay bowls and the plant has tracks on the front instead of wheels as shown.

Crew consists of a shovel man, a machine man, a ground man and himself. Payroll is "around \$1,000 per month" at present.

All in all it looks like an efficient plant and I see no reason why it shouldn't be a successful operation.

CONFIDENTIAL



Report by H. M. Dole  
Date of visit January 17, 1947

W. E. Pantle Gold Dredging Co.

Jacksonville Mining Dist.  
Jackson County

Operator:

W. E. Pantle Box 161, Medford, Oregon  
and leased from C. Wendt, Schafer, & Heuner.  
Heuner

Area:

60 acres leased; 15 acres tested. All on deeded land.

Location:

One mile east of Jacksonville or four miles west of Medford in  
Sec. 28, T37S, R2W.

History:

The Jackson Mining Company (E.B. Skeels, owner-operator) of Auburn, California operated a dry-land dredge here in 1941. The operation was closed down in February, 1942 when diggin<sup>g</sup> equipment was requisitioned for construction of Camp White<sup>+</sup>. The Pantle Gold Dredging Co. started operation in December 1946.

Topography:

The property is located on the west side of Bear Creek Valley on the valley floor at an elevation of approximately 1450 feet.

Geology:

As mapped by Wells (Recon. Geology of Medford Quad.)<sup>+</sup> The property is in Quaternary Alluvium of the Bear Creek Valley. The foothills, approximately <sup>50. 50.</sup>  $\frac{1}{2}$  to 1 mile to the south and east, are of conglomerate and sandstone of the Chico Formation. Behind the foothills rise mountains predominantly of metavolcanics and metasediments intruded by granite<sup>ic</sup> stocks.

*P* Depth to bed rock has averaged approximately 25' with overburden averaging  $12\frac{1}{2}$ ' to 15'. Bedrock is a well cemented and indurated conglomerate probably representing the Chico.



## Geology (con't)

The material mined is loosely consolidated and is easily dug. It is fairly well sorted. Boulders are few and are seldom over 30" in diameter. Average size of pebbles is 6" and all show a fair degree of rounding. The matrix is an arenaceous clay which offers no problem in recovering the values.

The gold is dull in color and fairly well rounded--few sharp corners are seen. Particles are of flake size; no nuggets have been recovered and little "flour" gold is present. Fineness is unknown.

The source of the gold is probably due to reconcentration of values derived from auriferous gravel channels that are found near the base of the Chico. The original values probably represent concentrations from the erosion of the gold bearing quartz veins cutting the meta-volcanics and metasediments.

The extent of the values and shape of the deposit is unknown and can only be ascertained by testing. To date 15 acres have been tested. The deposit would be classified as a "flat type."

The water table at the present is approximately 20' below the surface.

## Mining:

Stripping and mining is done with a Bucyrus-Eyrie dragline, Model 37-B, which has a 60' boom and a  $1\frac{1}{2}$  cubic yard bucket. The material is dug dry; the overburden is overcast into the pit previously worked and the gravel is fed to the hopper of a movable dry land washing plant. The gravels are washed <sup>from the hopper</sup> into the trommel by a series of nozzels mounted on a movable <sup>bar</sup> ~~bar~~ and operated by the "machine man." The trommel consists of a 5' blank section, 18' of screen perforated with <sup>S.O.</sup>  $\frac{1}{4}$ " conical holes, and another 5' blank section. The undersize is distributed to <sup>SIX</sup> 36" Ainalay bowls revolving at 100 revolution<sup>s</sup> per minute. The tails from the bowls go to a sump where they are discharged by a Wilfley 6" sandpump thru a sand line to the pit previously dug. The over size from the trommel goes to a <sup>60</sup> 6' ~~6~~ stacker which discharges



into the pit being worked.

# The washing plant is mounted on 5' caterpillar treads at the front and rear and is moved by an Allis Chalmers HD14 caterpillar when necessary.

# Power for the operation is supplied from a 15 KW. GE generator powered by a G. M. diesel. This last is "surplus property".

# Water is pumped from a pond several hundred feet away through a 6" hose. Water pressure at trommel mouth is 45 pounds. Power is supplied by a 55 <sup>hp</sup> G. M. diesel.

# The washing plant was constructed by Judson-Pacific in 1941 after a design by Mr. Pantle. When the ground has been mined it will be resoled by the operating company.

References:

DOGAMI Geologic Map Series No. 2

U. S. Bureau of Mines Information Circular No. 7013.

Report on Jackson Mining Co. by Ray Treasher



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