H. F. ENGLAND COMPANY Quartzburg District Quartzburg Area

Operators: H. F. England Company, Prairie City, Oregon.

Location: On Dixie Creek one mile north of Prairie City, Oregon, on old Dixie Creek Placer (which see).

Area: Ground extends up Dixie Creek north for 2½ miles along the creek. Approximately 2,500,000 yards were available for dredging.

History: Dredge moved from ground on Powder River above Narrows, below Sumpter. Started work on Dixie Creek October 9, 1938. First clean-up October 17, 1938. Dredge worked continuously since that time; it moved to Trout Creek north of Burns in April 1941.

Equipment: 1-7/8 yard Northwestern dragline powered by a Murphy diesel engine. Bulldozer to level ground ahead of shovel and move big boulders. The floating washing plant was designed by H.F.England, treats 3000 yards per day and is all electrically driven. Power is furnished by a 150 k.w. Cummings diesel-electric plant.

Geology: The workable land was from 100 to 500 feet wide and extended up Dixie Creek for 2½ miles. The gravel averaged 10 feet in depth. There are only a few boulders over 2 feet in diameter. The average size is about 6 inches. All of the gravel is well rounded.

The gold generally was fine, although many pieces were 1/2 inch and larger in diameter. Most of the gold was clean and amalgamated easily. Occasional pieces were coated with oxide but always exposed a clean surface.

Very little gold lay on bedrock; it was scattered over the old surface as a result of old placer operations.

The ground is said to have averaged 20 cents per yard. The source of the gold appears to have been from the high grade pocket country from 4 to 7 miles upstream.

Description of Operation: This dredge is unique in that it places the sand and silt on top of the boulders and leaves the ground in a condition that approximates its original state. Gravel is dumped by the dragline into a 5 foot by 30 foot trommel screen with 3/8 inch holes. The trommel is horizontal and on the lower deck. Oversize is carried through the screen by a spiral and dumped about 4 feet behind the boat. Undersize goes to a sump and is pumped to 4 Bodinson-Heath rougher jigs. Tailing goes to launders on upper deck, which carry it about 8 to 20 feet beyond the end of the boat. In this way the coarse gravel discharged from the trommel acts as a dam for the fine material and a level dump is maintained.

Rougher jig concentrate goes to 4 cleaner jigs, and cleaner concentrate to a Titan amalgamator. Cleaner jig tailings and amalgamator tailings go to the sump to be returned to the circuit by the sand pump.

Informant: W. A. Hilliard (1/30/41).