

# State Department of Geology and Mineral Industries

702 Woodlark Building  
Portland, Oregon

BURNS "OIL FIELD"

HARNEY COUNTY

Three oil wells are in the process of being drilled in the vicinity of Burns and they will be treated separately as follows:

## Fay No. 1

Owners or Lessee: Harney County Development Company comprised of the following: Charles McCart, Paul F. Peterson, Charles Backus, Otto Gasch, and Dr. O.T. Atwood, General Manager.

Location: This well is located approximately 8 to 10 miles by highway toward Lawen and Crane. The well lies to the right of the road, 1 3/4 miles over a rough road. It is plainly visible from the main road. There was no operation at the time visited.

Equipment: There had been a fire and the boiler and boiler house had been replaced with a much better building and equipment than formerly. They installed a relatively new return flue boiler which is hooked to a 12 x 12 steam engine. They have a standard cable tool rig. Drilling started with a 20-inch hole which was soon reduced to 16 inches, then to 12 inches, and they are now down to 8 inches.

Geology: The geology, as outlined by Piper, Robinson, and Park (Water Supply Paper 841) is quite visible around the rim of the huge basin. Out in the basin the lake beds are covered by quite recent alluvium, in this place probably from the Silvies River. Thus all one

sees is an alluvial plain for miles. No structure is apparent and it is not easily deduced how an oil structure was originally located (if one does exist). Most of the igneous series outlined by Piper et al will eventually be encountered at depth.

State Drilling Company

Owner or Lessee: George Mefford. This well was located by Mr. Clark with the aid of Arthur Hawkins.

Location: The well is 22 miles by gravel road toward Crane and then 6 miles northward over sagebrush land.

Equipment: The well has a rather low derrick, and an old cable tool rig.

They were having especial trouble getting up steam. Their boiler is direct flue and it leaks. It is installed quite a distance from the engine; the steam is piped beneath the surface of the ground to an upright 12 x 10 engine which operates the machinery. At present the power set-up seems to be inadequate. They were firing with fuel oil which, under the present arrangement, is quite expensive and inefficient.

Geology: The well has penetrated limy sands and shales of the lake bed series. Mr. Mefford prefers that the depth be kept confidential. He showed us samples of the sediment that had an oil-like film. The oil originated supposedly from the sediments.

No oil structure was apparent nor was there any good way except seismic that one could be determined. The igneous hills to the east are a good example of the type of rock to be encountered at depth.

United Drilling Company

Owner or Lessee: United Drilling Company, of which Mr. Crank of Klamath Falls is president. J. H. Dawson and J. E. Zuber are helping to promote the well.

Location: The well is plainly visible from the State Drilling Company well and perhaps 2 miles generally eastward.

Equipment: The rig employed is a rotary that was originally used to drill a well near Lakeview. It was purchased very reasonably and moved to its present site last year. A depth of 632 feet was drilled last fall. They have twin return flue boilers that supply twin 14 x 14 engines. They have a light rotary rig mounted in a 120-foot wooded derrick capable of drilling about 6000 feet.

Geology: The geologic picture for this well is similar to that of the others discussed. It is located on a relatively flat alluvial plain with no sign of underground structure. Igneous formations crop out all around the basin and the same formations may be expected at depth.

R. S. Mason  
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