

25. P. S. KISTLER, Seaboard Oil Company, Casper, Wyoming  
Whistle Creek, Park County, Wyoming

The Whistle Creek field is located about a mile west of the Garland oil and gas field in the northern Big Horn Basin area, Park County, Wyoming. The discovery well, Seaboard Oil Company's Unit No. 25-16, located in the NE, NW, SW, Sec. 16, T. 56 N., R. 98 W., was completed on November 6, 1951. It found that almost all permeable zones below the Mesaverde, productive elsewhere in the basin, had oil or gas shows; but only the Tensleep and a thin sand in the Morrison gave commercial drill-stem tests. The well was completed in the Tensleep at a total depth of 5,825 with a 30-foot penetration of the producing formation. The initial production was 417 B/D.

A second well is currently being drilled to test the Madison. The two wells to date have proved an oil column of 52 feet in the Morrison (33 gravity oil) and 184 feet in the Tensleep (28 gravity oil). The Tensleep sand section is 143 feet thick with about 100 feet effective.

Detailed mapping in the outcropping beds of the Upper Cretaceous age suggested the possibility of closure on the west flank of the Garland anticline. The subsurface was detailed by seismograph prior to drilling.

Two new locations have been made; one a normal 40 acre stepout due south of the discovery well and the other of wildcat class about  $3\frac{1}{2}$  miles southeast in NE, SE, SW, Sec. 35, T. 56 N., R. 98 W.

The Whistle Creek feature is unitized with 5,360 acres included in the unit. The interests are: Seaboard Oil Company, 72%, C. H. Murphy, 24%, Amerada Oil Corporation, 4%. Seaboard Oil Company is the operator.

26. R. G. BERRY, Jr., Stanolind Oil and Gas Company, Casper, Wyoming  
Geology and Development of the Bonanza Pool, Big Horn County, Wyoming

The Bonanza pool, a Tensleep sand discovery of late 1950, is located on the east flank of the Big Horn basin northeast of Worland, Wyoming. The discovery well, drilled by the Bonanza Oil Company, attracted considerable attention due to the high gravity of the oil at relative shallow depth and to the thick pay section. As of December 5, 1951, the pool had twenty flowing wells, which have defined an area of approximately 595 productive acres. Productive closure is 210 feet.

The structure is a northwest-southeast-trending asymmetric fold with a steep mountainward flank. The fact that little to no surface closure is present in Upper Cretaceous shales accounts for the late testing of this long long-known surface structure. The Tensleep sand is found at depths of approximately 2,700 feet. The sand has a gross thickness of 230 feet.

27. E. C. EATON, British-American Oil Producing Company, Casper, Wyoming  
Horne Bros. Unit Discovery, Medicine Bow Area, Carbon County, Wyoming

The Horne Brothers discovery well is located  $3\frac{1}{2}$  miles northeast of the Big Medicine Bow field, and 45 miles northwest of the town of Laramie.

Surface reconnaissance originally led British-American to acquire acreage on this prospect in 1944. A seismic survey was conducted during the summers of 1948 and 1950. A unit area consisting of 2,280 acres was approved October 11, 1951, by the Department of Interior with British-American holding 78% as operator and Union Pacific Railroad holding 22% in all formations through the Sundance.

Structurally, on the surface this is a southwest plunging nose with some indication of cross-faulting. The subsurface structure is little different, the nosing and faulting being confirmed. The fault is believed to be a comparatively low angle thrust, upthrown on the southwest.

The discovery, located in the NW, SW, NW, Sec. 16, T. 21 N., 78 W., commenced drilling September 11 in the Mesaverde formation, and completed November 10, 1951, at the total depth of 6,656 in Chugwater. The producing formation is the basal sands of the Morrison, encountered at 5,179 feet. Two sand bodies, 6,179-6,199 and 6,225-6,230, indicate approximately twenty-two feet of effective sand. The well was put on production December 15, 1951, flowing initially 50 barrels of 35 gravity oil per hour through open casing.

28. R. W. MALLORY, Stanolind Oil and Gas Company, Casper, Wyoming  
North Fork Oil Pool, Johnson County, Wyoming

The Stanolind No. 1 Government-Maine, Sec. 19, T. 44 N., R. 81 W., opened a new Tensleep pool late in 1951. The North Fork area is 23 miles northwest of the nearest Tensleep field and is the northernmost Tensleep production on the west side of the Powder River basin. Discovery of a narrow, southeast plunging anticline was made by surface reconnaissance work. Later seismograph mapping showed a closed anticline, faulted on the southwest side, at depth. The field has not been delineated but based on seismograph data and the pay section encountered in the discovery well, it appears that a reserve of several million barrels is present.