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G. B. Morgan
State Geologist
Cheyenne, Wyoming.

THE ROCK CREEK OIL FIELD.

The Rock Creek oil field is located in Carbon County in T. 20 N., R. 78 W., and in T. 19 N., R. 78 W., about eight miles southwest of Rock River, Wyoming. Certain areas in the west part of T. 19 N., R. 77 W. and the southwest part of T. 20 N., R. 77 W. are also being prospected, but so far no oil has been discovered except in the two townships first named. The area so far known to be oil producing is confined to portions of Sections 26, 27, 34, and 35, in T. 20 N., R. 78 W., and portions of Sections 2, 11, 14, in T. 19 N., R. 78 W. On the other hand it is almost certain that all or portions of the following sections will prove to be oil bearing:

Secs. 25 and 36, T. 20 N., R. 78 W.
Secs. 1, 12, 13, 23, and 24, T. 19 N., R. 78 W.

In addition wells are being drilled east, northeast, and west of the above described lands, and it is probable that at least some of them will bring in oil, although at much greater depth.

The structure in this field is that of an elongated and rather narrow dome, the major axis bearing almost north and south from the NE $\frac{1}{4}$ Section 23, T. 19 N., R. 78 W. to about the west quarter corner of Sec. 26, T. 20 N., R. 78 W. The dips of the rim rocks surrounding the field are very steep. On the east side of the axis the dips average about 16 degrees and on the west side about 30 degrees.

In addition to the principal structure where oil has been discovered, there appear to be two small anticlines, or "fingers", extending or radiating in a northeasterly direction from the north end of the proven field. These structures parallel Rock Creek and lie mostly in flat valley lands or in gravel terraces, so that it is very difficult to determine their extent and as to whether or not they are closed. However, it will not be a great while until the drill will settle that question.

The Rock Creek field proper is also located to a large extent on flat, bottom lands and terrace deposits and is traversed in a northeasterly direction by Rock Creek. The escarpment surrounding this field exposes the Mesaverde formation, including the Teapot sandstone overlain by the Lewis shale. The underlying formation, which is the Steele, or Pierre, shale, is eroded in the field to the extent of 1,000 feet or more of strata. The following is a generalized section of the formations at the apex of the dome from the surface to the producing sand:

Group	Formation	Description	Thickness in ft.
Quaternary		Soil and gravel	0 to 20
Montana	Steele shale	Dark brown and black shale containing a thin sand at about 1200 ft., with a showing of oil	20 to 1400
Colorado	Niobrara	Light and gray calcareous shales and shells	1400 to 1600
"	Benton	Brown and black shales containing several thin seams of bentonite, also thin oil sands in the Frontier at about 1800, 1900, and 2200 ft. "Muddy Sand", producing sand, 2570 to 2600 ft.	1600 to 2600

The discovery well, located in the SE $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 35, T. 20 N., R. 78 W., is making between 500 and 600 barrels per day. The well in the NE $\frac{1}{4}$ of SW $\frac{1}{4}$ of this section is producing from five to ten barrels per day from one of the Frontier sands at a depth of about 1770 feet; another well near the northwest corner came in recently and is flowing at the rate of 400 to 450 barrels per day. There are five other wells drilling in this section with one about ready to come in. Section 34 of this township contains one flowing well in the northeast quarter, another one drilling and a location for a third. The flowing well makes about 75 barrels daily, but at the present time it is being deepened in an attempt to increase production. On the SE $\frac{1}{4}$ the Trapshooter well is down to a depth of 3340 feet, and another is 2470 feet deep, both near the sand. Work is about to be resumed on the well in the SW $\frac{1}{4}$ Sec. 26, which is near the sand at a depth of about 2900 feet. All of the above operations are being carried on by the Ohio Oil Company. There are two wells being drilled in the SW $\frac{1}{4}$ Sec. 36 of this township by the Producers and Refiners Corporation; one is down 2000 feet and the other 2860 feet and good progress is being made. Three wells are being drilled in Sec. 2, T. 19 N., R. 78 W., in which there is no production as yet. In Section 11 a well in the northeast quarter is producing about 300 barrels, and another is being drilled in the southeast quarter. A 200 barrel well in the NE $\frac{1}{4}$ Sec. 14 completes the list of producers in this field, all of them belonging to the Ohio Oil Company. Other wells are being put down in Secs. 10, 14, and 24, this township. To the northeast of the producing area two wells are going down in Section 24 and one in Section 25, T. 20 N., R. 78 W., and one in Section 18, T. 20 N., R. 77 W. One well in SE $\frac{1}{4}$ of Sec. 24 has reached a depth of 3017 feet. The wells in Secs. 24 and 25 belong to the Inland Oil Company and the one in Section 18 is being drilled by The Laramie Red Desert Oil Company.

Taken altogether, the Rock Creek field looks very promising and will probably prove to contain a very long but rather narrow producing area. As yet no dry holes or water wells have been brought in in this field. Development has not progressed far enough to predict the extent of the producing area and it is not known how thick the sand is, nor whether or not there are other producing sands below the one which has been tapped. The Rock Creek structure is so situated as to have a fairly large area for oil drainage and for that reason alone a long life and large production per acre may be safely predicted for the field. Other elements, of course, enter into this proposition, such as the thickness and saturation of the sand and the possibility of lower pay sands. At the present time the producing wells are holding up better than the average in other fields, which fact is an indication of strong reserves.