

BEAVER CREEK, BEAVER CREEK OIL

Reference List

Alaska Oil and Gas Conservation Commission, 1988, Beaver Creek Field, Sterling Gas Pool, Beluga Gas Pool, Beaver Creek Oil Pool, Conservation Order No. 237

Alaska Oil and Gas Conservation Commission, 2004, Production Database

Jones, D.L., 1986, Beaver Creek Area, State of Alaska - Proposed Field and Pool Regulations and Classification, in Alaska Oil and Gas Conservation Commission Conservation Order No. 237, p. 8 - 19.

Beaver Creek Oil Pool

Summary

The Beaver Creek Oil Pool was discovered in 1972 by the Beaver Creek Unit No. 4 well and developed with four wells drilled between 1972 to 1981. Regular production began in January 1973, and peaked at 2,188 barrels of oil per day during July 1973. At the end of 2004, the production from the pool averaged 186 barrels of oil and 23 barrels of water per day. Production from the pool has been dominated by Beaver Creek Unit No. 4, which has produced a total of 4,455,577 barrels of oil. The other major producer is Beaver Creek Unit No. 5RD, which has produced 1,206,737 barrels of oil. Beaver Creek Unit No. 5 and No. 6 have been minor producers.¹

Geology

The Beaver Creek oil pool is the accumulation of oil that is common to, and correlates with, the accumulation present in the Beaver Creek Unit No. 4 well between the measured depths of 14,518 feet and 15,874 feet.² This oil pool comprises reservoir sandstone and conglomeratic sandstone assigned to the Tyonek G-Zone and the Hemlock Formation. These sediments are fluvial in origin, and were deposited as valley-fill and or within floodplains. The Beaver Creek Oil Pool accumulation lies at the crest of a nearly circular anticline, which is slightly elongate in a north-south direction. The accumulation is bound by to the east by a north-south trending fault, and by dip closure to the north, west, and south. The crest of the anticline lies approximately 14,500 feet below sea level. Pressure transient analysis of DST data indicates the Hemlock has an effective permeability of 0.5 md, and the G-Zone has an effective permeability of about 75 md. Oil gravity in the G-Zone is approximately 34 to 35 degrees API, and viscosity is approximately 0.7 centipoise.³

SFD

Revised September 1, 2005

¹ Alaska Oil and Gas Conservation Commission, 2004, Production Database

² Alaska Oil and Gas Conservation Commission, 1988, Beaver Creek Field, Sterling Gas Pool, Beluga Gas Pool, Beaver Creek Oil Pool, Conservation Order No. 237

³ Jones, D.L., 1986, Beaver Creek Area, State of Alaska - Proposed Field and Pool Regulations and Classification, in Conservation Order 237 File, p. 8 - 19.