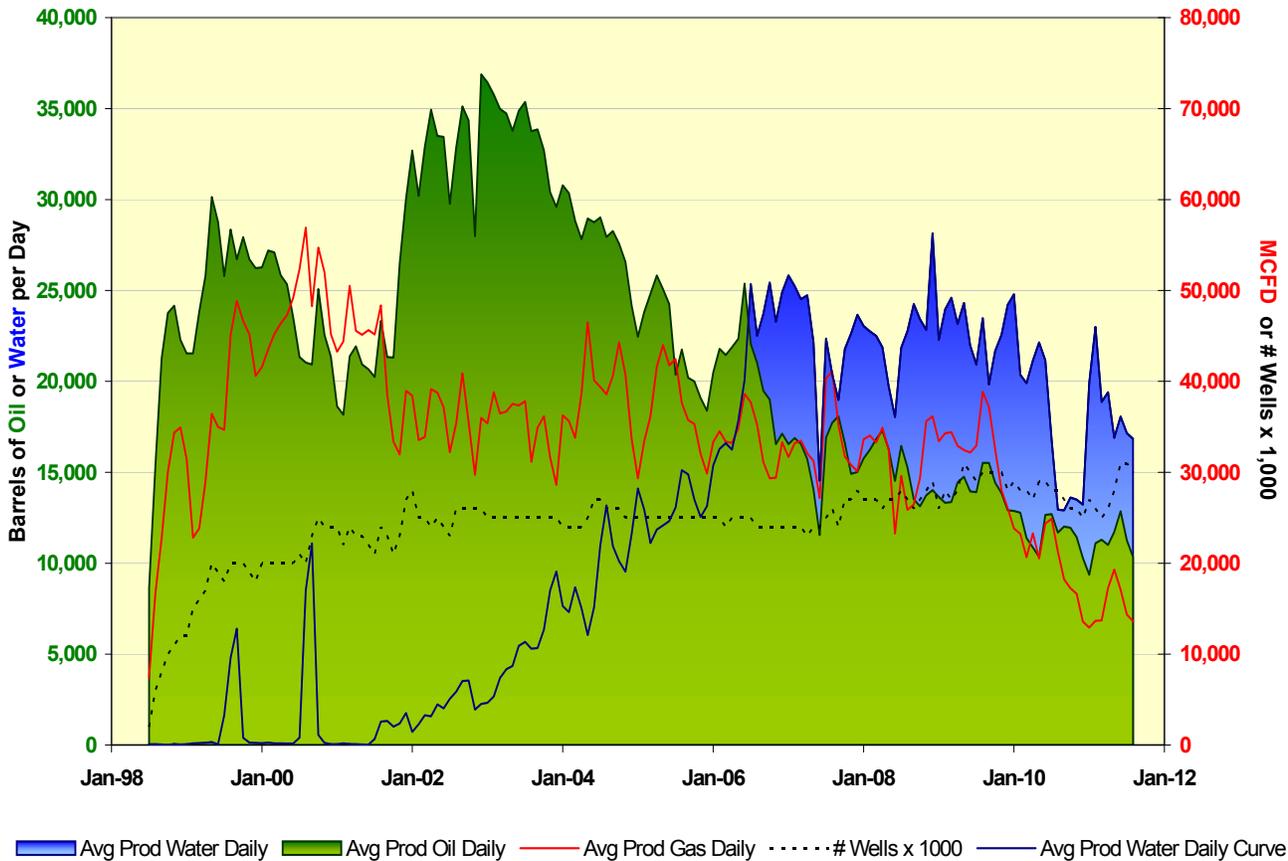


Tarn Oil Pool

Summary

Discovered in 1991 by the Bermuda No. 1 exploratory well, the Tarn Oil Pool lies within the Kuparuk River Unit ("KRU"). It is defined as the accumulation of hydrocarbons common to and correlating with the intervals between the measured depths of 4376 feet and 5990 feet in the Bermuda #1 well (KRU 36 10-7/1).¹ Development has been on 10-acre spacing mainly from 2N-Pad, supplemented from 2L-Pad.

Average Daily Production Rates

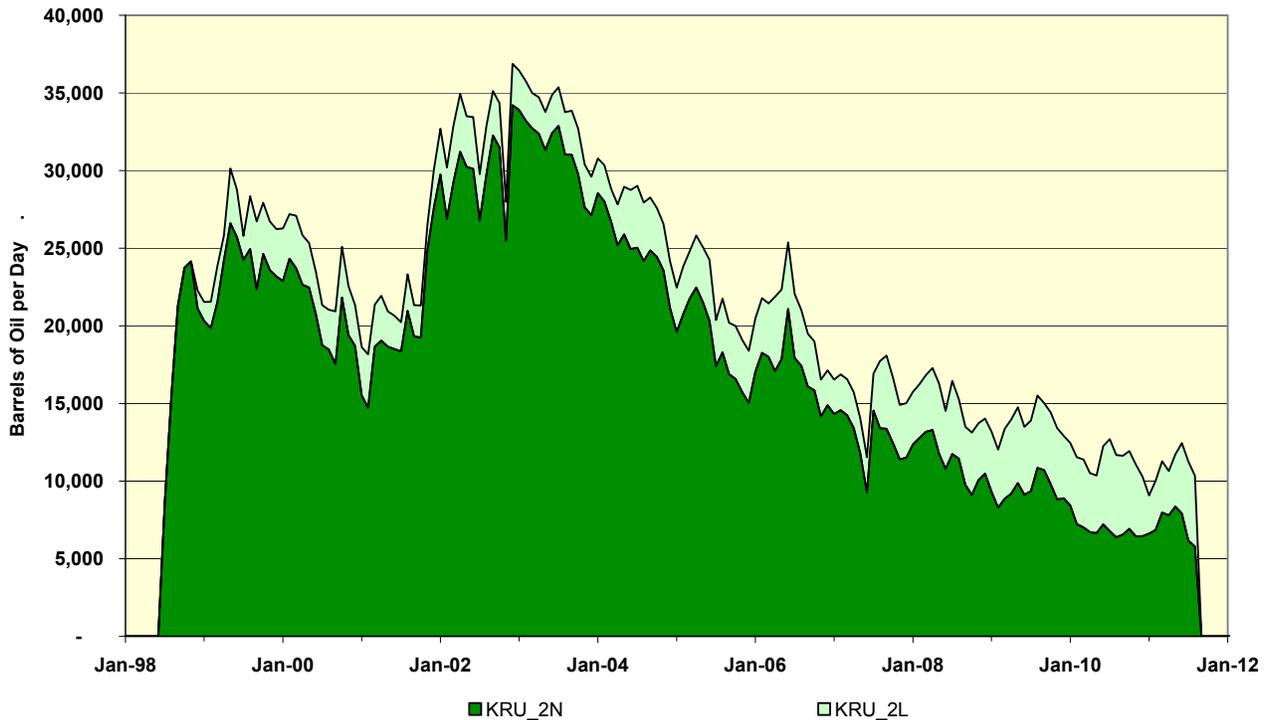


Regular production began from the pool in July 1998. Daily average production peaked in December 2002 at 36,880 barrels of oil per day ("BOPD") and then began to decline. For the first six months of 2011, oil production averaged about 11,230 BOPD with an average water cut of about 60%. Historically, production has been dominated by wells drilled from 2N-Pad; however, the gap between production from 2N-Pad and 2L-Pad appears to be narrowing.²

Geology

The Tarn oil pool is composed of five intervals of late Cretaceous-aged marine sandstone with interbedded mudstone intervals that lie within the Seabee Formation. These five intervals are informally termed, from deepest to shallowest, Iceberg, Arete, Cairn, Bermuda, and C30. They share a common depositional environment, and have similar lithologic characteristics and fluid compositions.

Average Daily Oil Production Rate by Pad



The Tarn oil pool structure appears to be a monocline, with easterly dip ranging up to four degrees. Few faults have been found. Sand and hydrocarbon distribution within the pool is complex, with variable gross sand percentages within each interval. Not all of the potential reservoir intervals in the pool have been shown to be hydrocarbon bearing, and the primary reservoir intervals are the Bermuda and Cairn. Hydrocarbon distribution is controlled by sand distribution, with up-dip stratigraphic seal along the western margin of the pool area.

The pool is composed of heterogeneous sandstone with shale laminations and interbeds. Sandstone is fine- to very fine-grained, framework grains are principally quartz, plagioclase, zeolites, and heterolithic rock fragments. Clay content is high, ranging between 15 and 25%, and occurs primarily in the heterolithic framework of the sandstone. Because of the fine-grain size and high clay content, the reservoir is susceptible to fines migration. Porosity ranges from 18 to 27%, averages 21%, and is dominantly secondary with common microporosity. Air permeability ranges from 1 to 45 md and averages 10 md. The solution gas-oil ratio is about 710 scf/stb. Original reservoir pressure is 2,350 psig.³ Reservoir temperature is about 142° F.⁴

SFD Revised October 18, 2011

¹ Alaska Oil and Gas Conservation Commission, 2003, Conservation Order No. 430a

² Alaska Oil and Gas Conservation Commission, 2011, Production Database

³ Alaska Oil and Gas Conservation Commission, 1998, Conservation Order No. 430

⁴ ConocoPhillips Alaska, Inc., 2011, Operator-supplied reservoir statistics, see Tarn Oil Pool summary pages, p. 3