

Alaska's Arctic Offshore Activity

Peterson, Robert H.¹; Craig, Jim¹; Sherwood, Kirk¹; Aleshire, Lynn¹ (1) Mineral Management Service, Anchorage, AK.

The Arctic Outer Continental Shelf (OCS) has seen a resurgence of leasing activity. Over the past 5 years industry has spent over \$2 ¼ Billion in high bids in acquiring Federal Arctic leases in the Beaufort and Chukchi Seas. The most recent published resource assessment by the Mineral Management Service (MMS) in 2006 indicates mean undiscovered technically recoverable oil and gas resources in these two areas exceed 42 Billion barrels of oil equivalent.

Industry has a long history of activity in the Arctic offshore. There has been seismic activity in these waters for over forty years though activity levels have varied widely over time. Activity peaked in the mid 1980s when more than 30,000 miles of 2D data were acquired in a single year. This was followed by a fifteen year period with little seismic activity. Recently 3D seismic data has been acquired in areas of high interest.

Since 1979 there have been thirteen Arctic sales that resulted in awarding 1,794 leases. Currently there are almost 700 active leases. The majority of the leasing occurred in two periods, the 1980s or during the past five years. During this 30 year period there have been 35 exploration wells drilled in Arctic OCS waters, 30 of these in the Beaufort Sea and 5 in the Chukchi Sea. No drilling has occurred on the leases acquired in the past five years. Two recent attempts to drill in the Beaufort and Chukchi Seas were postponed due to litigation.

Oil has been produced from the Federal/State unit at the Northstar field since 2001 and a Federal/State development at Liberty Field is continuing to move forward. Two new drilling plans for 2010 open-water season have been submitted, one in the Beaufort and one in the Chukchi. Additional plan(s) are anticipated for 2011.

Several future events will impact Arctic OCS Oil and Gas activities. A decision to build a natural gas pipeline from the North Slope will provide an outlet for OCS gas production. An oil discovery would help fill the unused capacity in the Trans Alaskan Pipeline, currently flowing at only 1/3 of its capacity. Property tax revenue from onshore infrastructure and pipeline tariffs would add significantly to North Slope and State government receipts. The challenging physical, technical and legal environment of the Arctic OCS suggests long lead times until first production from any discoveries.