Arctic Encounters

BREAKING GROUND – OIL AND GAS DEVELOPMENT IN THE ARCTIC

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MEETING AMERICA’S ENERGY NEEDS
**THE NEXT GENERATION OF OIL AND GAS DEVELOPMENT**

- Approximately 75% of the global arctic resource potential is offshore
- Over 80% of US Arctic offshore conventional undiscovered potential
- Estimated 23-27 billion barrels of oil (bbo)
  - Trans-Alaska Pipeline- 38 years- 17 bbo
- Estimated 104-132 trillion cubic feet of gas (tcf)

<table>
<thead>
<tr>
<th>RESOURCE POTENTIAL</th>
<th>STATE LAND</th>
<th>FEDERAL LAND</th>
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</thead>
<tbody>
<tr>
<td><strong>Cook Inlet</strong></td>
<td>599 mbo and 19 tcf gas</td>
<td><strong>Offshore Arctic</strong></td>
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<tr>
<td><strong>Onshore North Slope</strong></td>
<td>5 bbo and 35 tcf gas</td>
<td>27 bbo and 132 tcf gas</td>
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<tr>
<td>Conventional:</td>
<td>896 mbo and 53 tcf gas</td>
<td><strong>NPR-A</strong></td>
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<tr>
<td>Heavy/Viscous:</td>
<td>24-33 bbo</td>
<td>10 bbo and 3.5 tcf gas</td>
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<tr>
<td>Unconventional:</td>
<td>2 bbo and 12 tcf gas</td>
<td><strong>ANWR</strong></td>
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</tbody>
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mbo – million barrels of oil  bbo – billion barrels of oil  tcf – trillion cubic feet
ARCTIC OCS
ARCTIC NATIONAL WILDLIFE REFUGE
ALASKA’S NORTH SLOPE
BARRIERS TO DEVELOPMENT

• Access
  • OCS leasing
  • OCSLA 12(a) withdrawals
  • ANWR 1002

• Regulatory
  • Endangered Species Act
  • Federal Mitigation
  • Arctic Offshore Rules

• Litigation
OTHER REGULATORY & ACCESS ISSUES IN ALASKA

- ANWR CCP
- NPRA Management Plan
- EPA Small Remote Incinerators
- EPA Watershed Assessment
- Temporary Drill Rig Air Permitting
- Anti-Degradation Regulations
- Hydraulic Fracturing Regulations
- NOAA Acoustic Criteria
- FWS NWR Rulemaking
- Beaufort & Chukchi Sea ITR’s
- ARRT Authorization Plan
- APDES & NPDES General Permits
ENDANGERED SPECIES ACT IN ALASKA

[Images of a walrus, a seal, and polar bears with cubs.]
POLAR BEAR CRITICAL HABITAT

- Dec. 7, 2010 (75 FR 76086)
- 187,000 square miles
  - Sea ice habitat
  - Terrestrial denning habitat
  - Barrier Island habitat

- Service admits **no conservation benefit**
  - ESA and MMPA adequately protective
  - FWS will not use to regulate GHG emissions

- Service recognized O&G activities are not a threat
HISTORY OF ARCTIC OCS DRILLING

➢ Not a new basin

➢ 440 exploration wells
  ➢ 35 in Alaska’s OCS

➢ In 1964: first platform and hydrocarbon production in Cook Inlet

➢ Arctic offshore exploration in Beaufort and Chukchi Seas began in 1969
  ➢ Gravel islands in shallow water
  ➢ Experience, technology: deeper water, floating rigs