Alaska Oil and Gas Conservation Commission (AOGCC)

333 W. 7th Ave., Ste. 100
Anchorage, AK 99501
(907)279-1433
www.aogcc.alaska.gov

Alpine Oil Field Photo taken by Lou Grimaldi

Daniel T. Seamount – Geology Commissioner, Chair
Cathy P. Foerster - Engineering Commissioner
John K. Norman – Public Member Commissioner
Alaska Oil and Gas Conservation Commission

• AOGCC Mission
• Charts and Statistics
  1. Historical O & G Activity
  2. Drilling Permits (the Plan)
  3. Drilled Wells and Well Work (the Actual Work)
• The Future
Alaska Oil & Gas Conservation Commission (AOGCC)

Quasi-judicial State regulatory agency

– Oversight for underground oil & gas operations
  • Private and public lands in Alaska
  • Exercises police power of the State

• Regulate drilling and production for oil, gas & geothermal resources
AOGCC Mission

• Prevent waste of energy resources (Oil, Gas, Geothermal)

• Promote greater ultimate energy resource recovery

• Protect underground fresh water from damage caused by oil, gas, and geothermal operations

• Protect human safety

• Protect correlative rights
AOGCC Jurisdiction

- Oil and gas resource development
- Geothermal resource development
- Underground storage of natural gas
- Metering accuracy for custody transfer
Types of AOGCC Permits/Decisions

• Drilling- 2300+ last 10 years

• Wellwork- 4000+ last 10 years

• Underground Injection (EOR, Waste disposal, Gas Storage)- 46 last 10 years

• Conservation Orders (mainly Pool Rules)- 192 major orders plus 100’s more modifications over last 10 years

• Special development considerations (dispute adjudication, gas flaring, safety equipment, and others)- 67 last 10 years
Development Timeline for North Slope Oil Fields

Average = 11 years (neglecting the 5 longest)
Alaska Oil and Gas Conservation Commission

• AOGCC Mission
• **Charts and Statistics**
  1. Historical O & G Activity
  2. Drilling Permits (the Plan)
  3. Drilled Wells and Well Work (the Actual Work)
• The Future
Alaska Oil & Gas Activity

Satellite Developments

Prudhoe Bay / Kuparuk

Cook Inlet

Number of Permits and Active Oil and Gas Reservoirs

Number of Active Wells

AOGCC

House Finance 3/16/11

March 15, 2011
Alaska's Average Daily Oil & NGL Production Rate

Daily Production Rate (Barrels per Day)

- Oooguruk & Nikaitchuq
- Colville River & Northstar
- North Slope - Other Fields
- Kuparuk & Milne Point
- Prudhoe Bay
- Cook Inlet

Production rates are represented for different regions over the years from 1960 to 2010.
North Slope Average Daily Oil & NGL Production Rate

- Ooguruk & Nikaitchuq
- Colville River & Northstar
- North Slope - Other Fields
- Kuparuk & Milne Point
- Prudhoe Bay

Daily Production Rate (Barrels per Day)

- 1970
- 1975
- 1980
- 1985
- 1990
- 1995
- 2000
- 2005
- 2010
Alaska Oil and Gas Conservation Commission

• AOGCC Mission
• Charts and Statistics
  1. Historical O & G Activity
  2. Drilling Permits (the Plans of interested serious potential investors)
  3. Drilled Wells and Well Work (the Actual Work)
• The Future
EXPLORATORY WELL PERMITS (1996 - 2010)
Statewide: Oil, Gas, and Alternative Energy
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Statewide Oil, Gas, and Alternative Energy

Approved Permits


Key
Number of Operators obtaining permits during specified year

Alternative Energy Permits
- CIRI
- ORMAT NEVADA
- CITY OF AKUTAN

Oil and Gas Permits
- LINC ENERGY
- ULTRASTAR
- RAMPART ENERGY
- EXXONMOBIL
- SAVANT
- RENAISSANCE
- FOWLER
- ARMSTRONG
- BROOKS RANGE
- STORM CAT
- ALASKAN CRUDE
- RUTTER & WILBANKS
- TECK COMINCO
- FEX
- DEPT of INTERIOR
- ENI / KERR-MCGEE
- TOTAL E&P
- PELICAN HILL
- PIONEER/EVERGREEN
- ANADARKO
- GRI
- AURORA
- PACIF/FOREST/FORCE
- UNOCAL
- MARATHON
- CONOCOPHIL/ARCO
- BP
EXPLORATORY WELL PERMITS (1996 - 2010)

Statewide: Oil and Gas

with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)
EXPLORATORY WELL PERMITS (1996 - 2010)
Statewide: Oil and Gas
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Statewide
Oil and Gas Only

Key
2 Number of Operators obtaining permits during specified year

Oil and Gas Permits
- LINC ENERGY
- ULTRASTAR
- RAMPART ENERGY
- EXXONMOBIL
- SAVANT
- RENAISSNACE
- FOWLER
- ARMSTRONG
- BROOKS RANGE
- STORM CAT
- ALASKAN CRUDE
- RUTTER & WILBANKS
- TECK COMINCO
- FEX
- DEPT of INTERIOR
- ENI / KERR-MCGEE
- TOTAL E&P
- PELICAN HILL
- PIONEER/EVERGREEN
- ANADARKO
- GRI
- MARATHON
- BP
- CONOCOPHIL/ARCO
EXPLORATORY WELL PERMITS (1996 - 2010)
Statewide: Oil and Gas
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)
Approved Permits to Drill for Each Year (1996 - 2010)
Statewide: Oil, Gas and Alternative Energy Wells and Wellbores
with Quarterly Average West Coast Spot Price for North Slope Crude Oil

Statewide
Oil, Gas, and
Alternative Energy

West Coast Spot Price

Approved Permits


AK Permits Approved Each Year
Quarterly Average of W. Coast Spot Price

March 11, 2011
Approved Permits to Drill for Each Year (1996 - 2010)
North Slope: Oil-Related Wells and Wellbores

with Quarterly Average West Coast Spot Price for North Slope Crude Oil

North Slope Only
Oil-Related Only

Approved Permits

West Coast Spot Price


AOGCC

March 11, 2011
Alaska Oil and Gas Conservation Commission

- AOGCC Mission
- Charts and Statistics
  1. Historical O & G Activity
  2. Drilling Permits (the Plan)
  3. Drilled Wells and Well Work (the Actual Work done by actual investors)
- The Future
EXPLORATORY WELLS AND WELLBORES
Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Key
- Number of Operators completing wells or wellbores during specified year

Alternative Energy
- NAKNEK ELECTRIC
- CIRI
- ORMAT NEVADA
- CITY OF AKUTAN

Oil and Gas
- ULTRASTAR
- RAMPART ENERGY
- EXXONMOBIL
- SAVANT
- RENAISSNACE
- FOWLER
- ARMSTRONG
- BROOKS RANGE
- STORM CAT
- ALASKAN CRUDE
- RUTTER & WILBANKS
- TECK COMINCO
- FEX
- DEPT of INTERIOR
- ENI / KERR-MCGEE
- TOTAL E&P
- PELICAN HILL
- PIONEER/EVERGREEN
- ANADARKO
- GRI
- AURORA
- PACIF/FOREST/ FORCE
- UNOCAL
- MARATHON
- CONOCOPHIL/ARCO
- BP

*Total Wells and Wellbores Completed, Suspended or Abandoned = 248
**Reported as of March 1, 2011
EXPLORATORY WELLS AND WELLBORES
Oil and Gas: Completed, Suspended or Abandoned (1996 - 2010)*
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

AOGCC

*Total Wells and Wellbores Completed, Suspended or Abandoned = 240
**Reported as of March 1, 2011

March 1, 2011
Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Number of Operators completing wells and/or wellbores during a specified year

Number of Wells and Wellbores = 2,784

*Reported as of March 1, 2011
DEVELOPMENT AND SERVICE WELLS / WELLBORES
Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
by BP Exploration (Alaska), Inc.
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Number of Wells and Wellbores Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
by BP Exploration (Alaska), Inc.
with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

AOGCC
Total Wells and Wellbores = 2,784
*Reported as of March 1, 2011
March 1, 2011
DEVELOPMENT AND SERVICE WELLS / WELLBORES

Statewide: Completed, Suspended or Abandoned (1996 - 2010)*
by ConocoPhillips Alaska, Inc.

with West Coast Spot Price for Alaska North Slope Crude Oil (Dollars per Barrel)

Number of Operators completing wells and / or wellbores during a specified year

Total Wells and Wellbores = 2,784

*Reported as of March 1, 2011

March 1, 2011
Completed, Suspended and Abandoned Oil and Support Wells and Wellbores – North Slope Only 1996 – 2010* with Quarterly Average West Coast Spot Price for North Slope Crude Oil

North Slope Only
Oil Only

Quarterly Average of W. Coast Spot Price

Total Wells and Wellbores = 2,710
*Reported as of March 1, 2011

Oil Producer - Active
Oil Producer - Inactive
Injector - Active
Injector - Inactive
Injector - Waste
Water Supply

March 2, 2011
Alaska’s Active Drilling and Workover Rigs for Each Quarter (2005 - 2010) with Quarterly Average West Coast Spot Price for North Slope Crude Oil

Statewide Oil, Gas, and Alternative Energy
Alaska's Active Drilling Rigs for Each Quarter (2005 - 2010) with Quarterly Average West Coast Spot Price for North Slope Crude Oil

Statewide Oil, Gas, and Alternative Energy

Drilling Rigs (Quarter Avg.)
West Coast Spot Price (Quarter Avg.)

AOGCC
March 8, 2011
Alaska's Active Workover Rigs for Each Quarter (2005 - 2010) with Quarterly Average West Coast Spot Price for North Slope Crude Oil

Statewide Oil and Gas Only
Well Workover Activities for Each Year (North Slope Only) 2003 - 2010*
with Quarterly Average West Coast Spot Price for North Slope Crude Oil

North Slope Only
Oil Only

AOGCC's database is incomplete prior to 2003.

*Reported as of March 9, 2010

Sundry and Completion Reports Received

Workover Activities Performed Each Year
Quarterly Average of W. Coast Spot Price

March 9, 2011
Alaska Oil and Gas Conservation Commission

• AOGCC Mission
• Charts and Statistics
  1. Historical O & G Activity
  2. Drilling Permits (the Plan)
  3. Drilled Wells and Well Work (the Actual Work)
• The Future
Alaska's Average Daily Oil & NGL Production Rate

(6% Annual Decline Rate)

- Oooguruk & Nikaitchuq
- Colville River & Northstar
- North Slope - Other Fields
- Kuparuk & Milne Point
- Prudhoe Bay
- Cook Inlet

Daily Production Rate (Barrels per Day)

200,000 BOPD
Alaska's Average Daily Oil & NGL Production Rate
(6% Annual Decline Rate with Alpine-Sized Field Added 2018)

Another Alpine (Online 2018)
Oooguruk & Nikaitchuq
Colville River & Northstar
North Slope - Other Fields
Kuparuk & Milne Point
Prudhoe Bay
Cook Inlet

Daily Production Rate (Barrels per Day)

200,000 BOPD
Alaska's Average Daily Oil & NGL Production Rate
(6% Annual Decline Rate with New Fields Added 2018 and 2024)

- Another Northstar (2024)
- Another Alpine (Online 2018)
- Oooguruk & Nikaitchuq
- Colville River & Northstar
- North Slope - Other Fields
- Kuparuk & Milne Point
- Prudhoe Bay
- Cook Inlet

Daily Production Rate (Barrels per Day)

200,000 BOPD
Alaska Oil and Gas Conservation Commission (AOGCC)

Contact Information

Phone: (907) 793-1221
Fax: (907) 276-7542

www.aogcc.alaska.gov