

# Alaska Oil and Gas Fundamentals

*Senate Resources Committee*

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# Types of Oil and Gas Contracts

- There are 3 basic types of oil and gas contracts in the world:
  - Service Contracts
    - Where the resource owner hires a company to develop the resource
    - Uncommon, found in places like Iraq
  - Production Sharing Agreements
    - Where the resource owner develops the resource along side a partner
    - Common in resource owning regions
  - Concession Agreements
    - Where the resource owner allows another party to develop the resource on their behalf
    - Common in private owner regions
- Each type of contract has different distributions of risk, reward, responsibility, and ownership

# Types of Oil and Gas Contracts

- Alaska's system was largely imported from federal law, which was used to lease lands before Statehood
  - Mineral Leasing Act of 1920
  - Alaska Constitution Article 8, Section 12
  - Alaska Land Act
- U.S. jurisdictions generally confer oil and gas rights by lease

# Oil and Gas Leasing in Alaska

- A ***lease*** is a contract between the State and the leaseholder
  - Both parties agree to the terms of the lease and to fulfill the obligations therein
- A lease cannot be altered unilaterally
  - The parties may mutually agree to alter drilling, producing, and royalty requirements through a unit agreement
    - AS 38.05.180(p)
  - DNR has authority to reduce royalty rates through the royalty modification process
    - AS 38.05.180(j)
  - Otherwise, material changes to the lease require legislative approval.

# Oil and Gas Leasing in Alaska

- The lease gives the exclusive right to the resources for a set amount of time (***primary term***)
  - Our leases reserve a portion of those produced resources for the State, at a rate defined in the lease, called a ***royalty***
  - The leaseholder also agrees to pay ***rent*** while they hold the lease, which is deductible from royalty payments
  - At the time of the lease issuance, the lessee makes an upfront payment, called a ***bonus***, in order to secure the lease
  - After a lease is issued, the ownership of a lease may be transferred to a new lessee through an application process that includes approval of the transfer by the Director of the Division
  - A lessee may extend a lease past its primary term by actively drilling, producing, unitizing, or seeking a lease extension in limited circumstances.

# Oil and Gas Leasing in Alaska

- Oil and gas leasing of State land is now only conducted by competitive auction, often called a ***lease sale***
  - Federal lands within the state are leased by the BLM
  - Federal waters are leased by BOEM
- A state lease sale is carried out by DNR
  - Prior to a lease sale, the *Leasing Section* of the Division of Oil and Gas issues a sale notice, which describes the terms of the leases being offered
    - The *Resource Evaluation* and *Commercial* sections assist in defining those lease terms
- State land may also be *licensed* under the Exploration License Program (AS 38.05.131-.134)
  - Licenses may be converted to leases if work commitments met

# Oil and Gas Leasing in Alaska

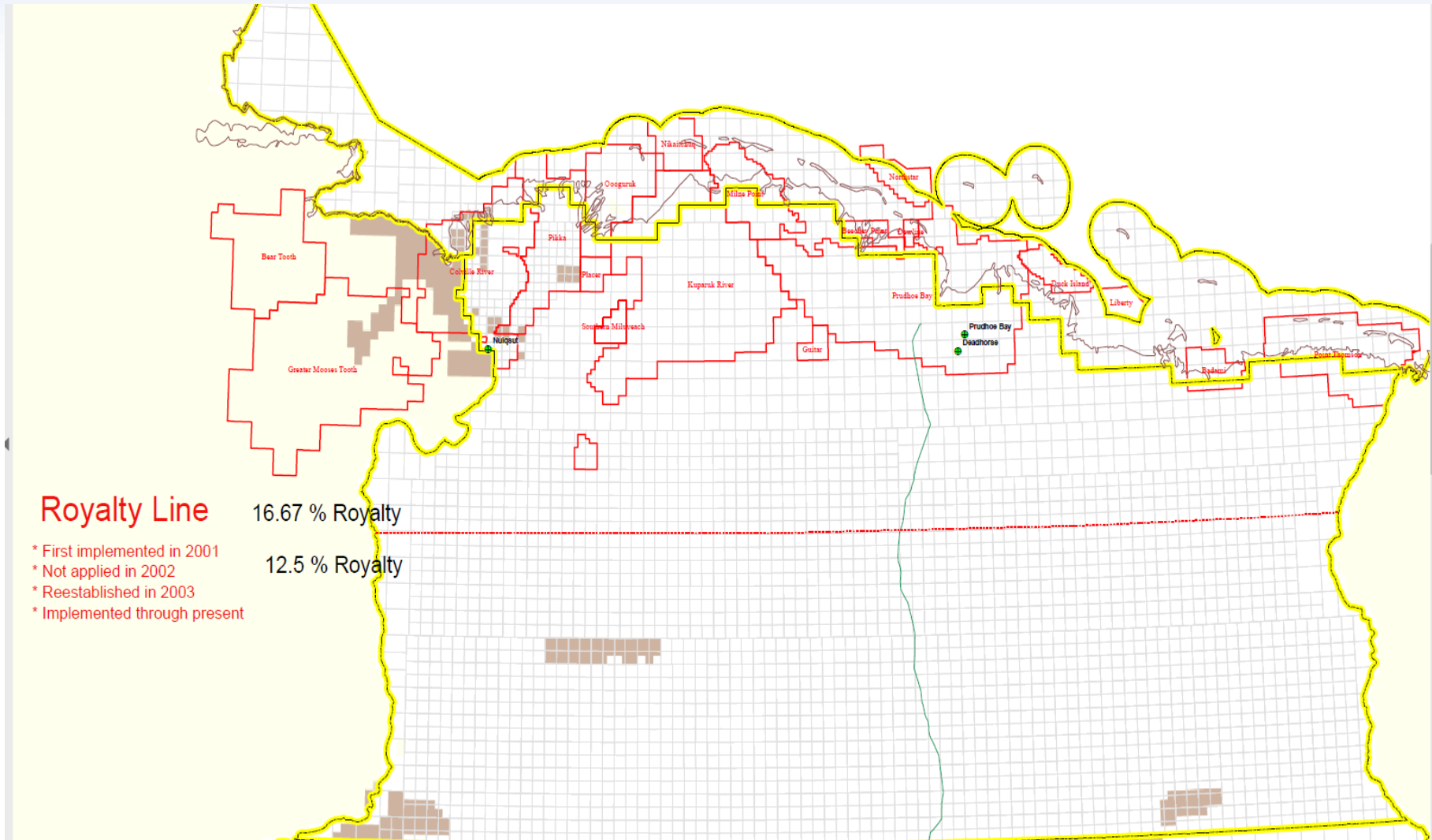
- A lease sale can be conducted as an “areawide” or a “special” lease sale
  - An areawide lease sale occurs annually, in the fall
  - A special lease sale is conducted in special circumstances, covering only specific lands
- The Commissioner decides which type of ***bid variable*** is used to determine the high bidder after analysis by Division staff
  - The bonus bid is typically used as the bid variable for recent Areawide lease sales
  - Other bid variables have been explored in the past
    - Some of those leases still exist today

# Oil and Gas Leasing History in Alaska

- North Slope leases issued prior to 1980 all reserved a 1/8 royalty (12.5%) for the State
  - Around 300 leases issued prior to 1980 are still active today, on these lease forms often called ***DL-1 leases***
- During the 1980's, the department offered alternative lease terms
  - One such term is a Net Profit Share Lease (NPSL) which reserves a portion of producer profits for the State, in addition to the royalty
    - 24 NPSLs are still active today
  - Another experimental lease term was a “sliding scale” lease, in which the amount of royalty depended on certain price or production levels
    - 11 sliding scale leases are still active today
- Today, all new North Slope leases are issued on a 1/6 fixed royalty
  - Unless the lease is below the royalty line, then 1/8<sup>th</sup>



# Royalty Line



# Exploration and Development

- A lease is not needed for a seismic permit to explore resources on state land
- A lessee (also called a Working Interest Owner) must obtain a ***Plan of Operations*** to conduct operations to explore and develop the lease (11 AAC 83.158 and 11 AAC 83.346)
  - WIO must demonstrate compliance with the mitigation measures attached to each lease to minimize the adverse impacts of exploration and development
- The *Permitting* Section adjudicates seismic permits and Plans of Operations

# Oil and Gas Unitization

- WIOs often combine their leases into a single **Unit** for joint development
- Unitization provides economic efficiencies, avoids waste of oil and gas resources, and minimizes impact to the environment
- The state approves a **Unit Agreement** between WIOs that provides for joint development as if the area was all one lease
  - The entity in charge of the Unit operations, typically one of the WIOs, is called the Unit **Operator**
- The WIOs enter a separate agreement, called a **Unit Operating Agreement**, with each other to define the rights and responsibilities of each participant
- Unitization extends leases past their primary term
- The *Units* section adjudicates the formation and administration of units, drawing on expertise from other sections, including the *Resource Evaluation* and *Commercial* sections

# Oil and Gas Units

- DNR regulates and manages Units under a combination of statute, regulation, and lease and unit agreement terms.
- Units have a five year initial term
  - The Unit automatically extends if there is a unit well certified as being capable of producing in paying quantities and the Operator is either producing or conducting operations under an approved Plan to achieve production.
  - If production ceases, the Operator must be diligently conducting operations to return production or the unit automatically terminates.
  - The Operator may seek a discretionary extension if it has been conducting exploration operations under an approved Plan of Exploration.
- Units expand or contract based on the resources and Operator's plans
  - Ten years after unit formation, DNR has discretion to contract the unit.
  - Ten years after sustained production starts, the unit contracts to the acreage contained in Participating Areas.

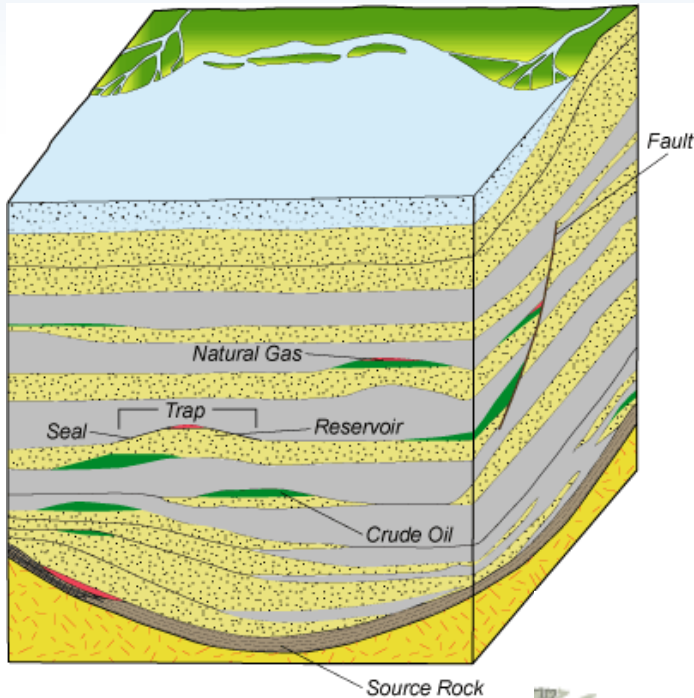
# Unit Plans

- At unit formation and in subsequent years, the Operator submits a Unit ***Plan of Exploration (POE)*** or ***Plan of Development (POD)***.
  - A POE is appropriate when an operator is conducting initial exploration. DNR determines the term of a POE.
  - Once any part of the unit is ready for development, the Operator then submits PODs. PODs must be submitted annually.
  - Both types of Plans specify short and long term plans for the Unit.
  - Failure to perform the work commitments set forth in a POE or POD is a default of the unit agreement. The Commissioner may issue a notice of default that sets forth how the Operator may “cure” the default. Failure to cure can lead to unit termination.
- POEs and PODs set forth the type of work commitments the Operator is making for the coming POE or POD period. Before the Operator may conduct the operations to carry out that work, the Operator also needs a Plan of Operations.

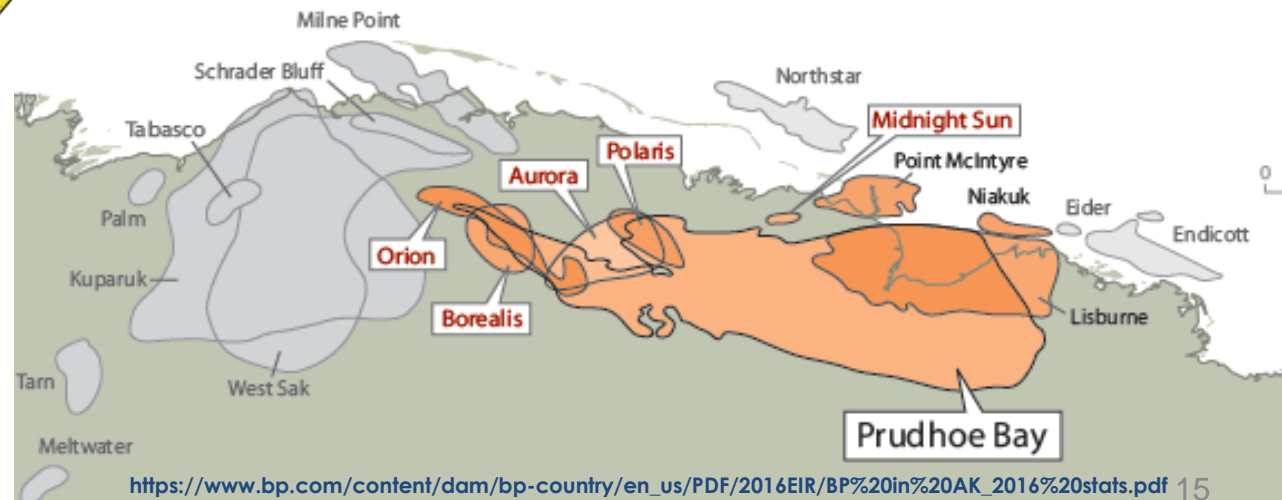
# Participating Areas

- When an Operator is ready to produce, it applies for a ***Participating Area (PA)*** within a Unit (11 AAC 83.351)
  - The purpose of a PA is to keep track of the production from each tract for purposes of calculating royalty for that tract in accordance with that tract's lease terms.
  - When approving a PA, DNR defines the percentage of the production that will be allocated to each tract, called a ***Tract Factor***
    - As new information is collected during production, Tract Factors are occasionally updated by a process called a ***Redetermination***
  - A Unit may include multiple PAs, one for each delineated reservoir.
    - DNR may also approve a PA that includes more than one reservoir
  - PAs are different from AOGCC-determined “pools.” The extent of a PA is based on both the technical aspects of the reservoir and the Operator's plans for developing it. The AOGCC determines pools based solely on the technical aspects.

# Participating Areas



- Generally, an area encompassing the portion of a hydrocarbon reservoir that is capable of contributing to production
- A unit may include multiple PAs.
- A single tract within a unit may be divided into multiple PAs



# Accounting and Audit

- Producers are required to provide monthly royalty payments and report how they calculated those amounts
  - These payment amounts and production volumes are publicly available at the DNR website
- DOG has its own accountants that track payments of royalties
  - This is the *Accounting* section
- DOG also has 6 years to conduct an audit of any reports, to ensure compliance and accuracy
  - This is the *Audit* section



# Net Profit Share Leases

- A NPSL is just like a regular lease, except it also requires a percentage of net profits to be paid
  - Example: 12.5% royalty plus 30% of net revenues after capital costs and operating are recovered
- Pre-production costs go into a “development account”
- Once production starts, net revenues pay down the development account balance
  - Net revenues are gross revenues minus costs
    - Costs include operating costs, maintenance capital, well drilling, taxes, etc.
- Complicated accounting and auditing requires significantly more attention than simple fixed royalty lease provisions
- NPSL payments are not considered royalty payments (they are considered rental payments)

# Royalty Modifications

- One of the limited circumstances where the parties can modify lease terms is royalty modification
  - Royalty modification is limited to certain circumstances
    - AS 38.05.180(j)
    - To extend the life of a project
    - To push a marginal project into development
    - To restart production from an abandoned project
- Operators may apply for a royalty reduction
  - Must provide evidence that it is necessary
- DOG *Commercial* section evaluates the application, proposes modifications, and writes a best interest finding

# RIK vs RIV

- The lease reserves a percentage of production for the State
  - We have the option to receive the monetary value of that production if we choose (***royalty-in-value or RIV***)
  - If we choose to accept the royalty barrels as physical oil (***royalty-in-kind or RIK***), we must sell those barrels ourselves
- As a general rule, we try to select whichever generates more revenue for the State
- Historically, about 95% of North Slope royalty oil is sold as RIK to in-state refineries
  - DOG *Commercial* is responsible for negotiating RIK contracts
  - We typically can make more money because RIV barrels include a higher transportation to California than the marine differential allowance in the RIK contracts

# Regions

- Revenue to State from the same barrel of oil produced in different regions\*

	UGF	Restricted	Total
State Land**	\$4.84	\$3.16	\$8.00
NPRA	\$1.75	\$3.13	\$4.88
ANWR	\$3.30	\$1.58	\$4.88
Other Federal Land	\$4.53	\$2.85	\$7.38
3-6 Miles Offshore	\$0.84	\$0.85	\$1.69
>6 Miles Offshore	\$0.00	\$0.00	\$0.00
Native Corp Land	\$2.06	\$0.00	\$2.06

\*Assumes \$50 wellhead value at all locations, 12.5% royalty rate, paying the 4% gross minimum tax, and a lease newer than 1979. Numbers are greatly simplified and approximated to show scale, not to be used for any other purpose.

\*\*Includes submerged lands up to 3 miles offshore

# THANK YOU!



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