

Section Three

Oil and Gas Units

North Slope Cook Inlet Non-Unitized Production Fields and Pools

Oil and Gas Units

TABLE 3.1 OIL & GAS UNITS

	COOK INLET NORTH
	Pioneer
	Stump Lake
	Lewis River
	Pretty Creek
	Beluga River
	Three Mile Creek
	North Cook Inlet
NORTH SLOPE WEST	
Colville River	
Kuparuk River	
Ooguruk	
Nikaitchuq	
Tuvaag	
NORTH SLOPE CENTRAL	COOK INLET CENTRAL
	South Granite Point
	Nicolai Creek
	North Trading Bay
	Trading Bay
	West McArthur River
	South Middle Ground Shoal
	Redoubt
	Birch Hill
	Swanson River
	Beaver Creek
	Sterling
	Cannery Loop
	Kenai
Milne Point	
Prudhoe Bay	
Northstar	
Duck Island	
NORTH SLOPE EAST	COOK INLET SOUTH
	Kasilof
	Ninilchik
	South Ninilchik
	Deep Creek
	Nikolaevsk
	Cosmopolitan
	North Fork
Badami	
Point Thomson	

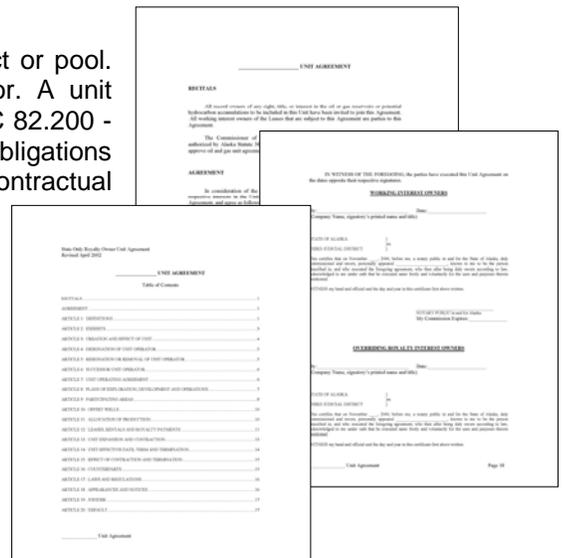
Oil and Gas Units

Unitization

Unitization is the grouping or pooling of working interest and royalty ownership in oil and gas leases that overlay a common petroleum reservoir. It is a method for developing an oil or gas pool that maximizes ultimate recovery, prevents economic and physical waste, and protects the rights of all parties with an ownership interest in the accumulation. When leases are unitized, operators can eliminate redundancy and waste by sharing infrastructure and facilities, splitting development costs fairly, and adopting unified reservoir management plans. Without unitization, competitive development can result in overly dense drilling, rapid loss of reservoir pressure, and undesired production of formation fluids. Unitization minimizes impacts to the environment, protects the value of leases, and ensures efficient and equitable recovery of hydrocarbons.

Unit Formation

The unitization process begins when lessees identify a prospect or pool. The lessees in the proposed unit area select a Unit Operator. A unit operator must be qualified to hold a lease as provided in 11 AAC 82.200 - 11 AAC 82.205 , and must be qualified to fulfill the duties and obligations prescribed in the Unit Agreement. A Unit Agreement defines a contractual relationship between the state, the royalty owners, and the working interest owners of the oil and gas leases included in the unit. The Unit Operator and the state negotiate the terms of the Unit Plan of Exploration or Development for the entire unit area, and the boundaries of the unit area (11 AAC 83.341). All lessees who hold an interest in the reservoir must be invited to join the unit. The Commissioner of the Alaska Department of Natural Resources then publishes a Decision and Finding approving or disapproving the unit application. Unitization extends a lease beyond its initial primary term.



Participating Areas

After delineation drilling and testing, the Unit Operator proposes a participating area within the boundaries of the unit. The Unit Operator must submit a participating area application 90-days before sustained production from a reservoir. Only those lands known to be capable of producing in paying quantities or capable of contributing to production are included in the participating area (11 AAC 83.351). The Unit Operator and state agree on a tract allocation schedule for leases in the participating area. Production volumes and costs are allocated to each tract. An oil and gas unit can have one or more participating areas within its boundaries depending on the geology of the area. Participating areas are described laterally and limited or defined by depth. After a stated period of time, usually 5 or 10 years to explore and delineate the pools in the unit, the unit boundary contracts down to the area that is contributing to production. The boundaries of the participating area must conform as close as possible to the boundaries of the oil or gas pool.



Chelatna River
C. Beatty

Unitization Criteria

The Director considers the following criteria when evaluating a unit or participating area application. Does the application,

- promote conservation of all natural resources, including all or part of an oil or gas pool, field, or like area;
- promote the prevention of economic and physical waste; and
- provide for the protection of all parties of interest, including the state.

In evaluating the above criteria, the Director considers

- the environmental costs and benefits of unitized exploration or development;
- the geological and engineering characteristics of the potential hydrocarbon accumulation or reservoir proposed for unitization;
- prior exploration activities in the proposed unit area;
- the applicant's plans for exploration or development of the unit area;
- the economic costs and benefits to the state; and
- any other relevant factors, including measures to mitigate impacts identified above, the commissioner determines necessary or advisable to protect the public interest.

The Unitization process takes about 100 days from the time of filing a complete unit application.

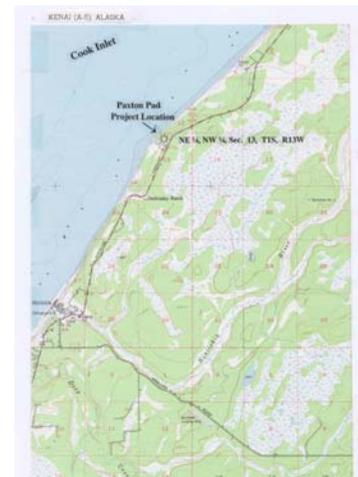
A complete application includes:

- 1) the unit agreement, including exhibits required under 11 AAC 83.341 or 11 AAC 83.343 , executed by the proper parties;
- 2) the unit operating agreement executed by the working-interest owners, which is submitted for information only and does not require the commissioner's approval for adoption or amendment;
- 3) evidence of reasonable effort made to obtain Joinder of any proper party who has refused to join the unit agreement;
- 4) all pertinent geological, geophysical, engineering, and well data, and interpretations of those data, directly supporting the application;
- 5) an explanation of proposed modifications, if any, of the standard state unit agreement form; and
- 6) the application fee prescribed by 11 AAC 05.010

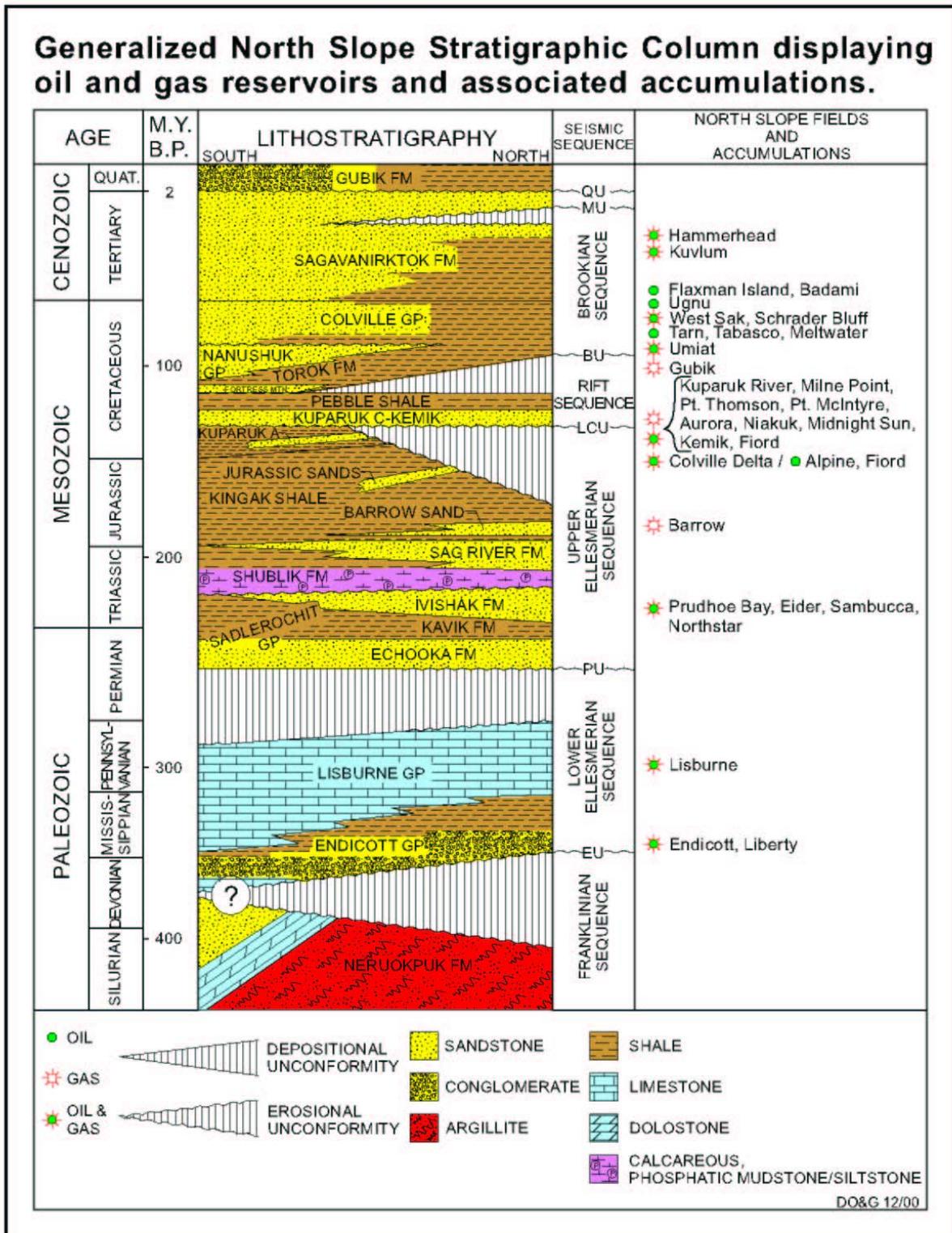
Within 10-days of receipt of a complete application, a public notice is published initiating a 30-day comment period.

Plans of Exploration and Development

The Unit Operator and state must also agree on an initial Unit Plan of Exploration or Development 11 AAC 83.343. In concert with the Unit Agreement and Plans of Exploration, Development and Operation, a Unit Operating Agreement is drafted describing how expenses and revenues are distributed or paid among the Working Interest Owners in the unit. Unit Operators must submit an annual Plan of Development for approval (11 AAC 83.343). Often unit areas are explored and developed at the same time. Failure to meet the goals, objectives, and commitments in the Plan of Exploration or Development can result in default and unit termination.



Generalized North Slope Stratigraphic Column





Alpine CD #2
S. Schmitz

Colville River Unit

Status: Producing Oil and Gas
Royalty Ownership: State of Alaska and Arctic Slope Regional Corporation
Operator: ConocoPhillips (Alaska), Inc.
State Acres: 88,766
First Production: 2000

Alpine PA

Status: Producing
Discovery: 1994, ARCO Bergschrund #1
Reservoir: Jurassic Kingak Formation, Alpine sandstone (-6,850 ft.)
Working Interest: ConocoPhillips (Alaska), Inc. 56%
Anadarko Petroleum Corp. 22%
Phillips Alpine AK, LLC 22%

Nanuk Tract Operation

Status: Test production
Discovery: 2000, ARCO Nanuk #2
Reservoir: Cretaceous Torok Fm., Nanuq sandstone (-6,140 ft.)
Working Interest: ConocoPhillips (Alaska), Inc. 56%
Anadarko Petroleum Corp. 22%
Phillips Alpine AK, LLC 22%

Fiord Discovery

Status: Undeveloped
Discovery: 1992, ARCO Fiord #1
Reservoir: Kuparuk/Nechelik sandstones (-6,890 ft. and -7,400 ft.)
Working Interest: ConocoPhillips (Alaska), Inc. 56%
Anadarko Petroleum Corp. 22%
Phillips Alpine AK, LLC 22%



Alpine expansion loop
S. Schmitz

Oil and Gas Units

North Slope

Kuparuk River Unit



Meltwater Pad
S. Schmitz

Status: Producing Oil and Gas
 Royalty Ownership: State of Alaska
 Operator: ConocoPhillips Alaska, Inc.
 Acres: 276,027
 First Production: 1981

Kuparuk PA

Status: Producing
 Discovery: 1969, Sinclair Ugnu #1
 Reservoir: Cretaceous Kuparuk Formation
 (-5,600 ft subsea)
 Working Interest: BP Exploration (Alaska), Inc. 39%
 ConocoPhillips 55%
 Unocal 5%
 XTO Energy, Inc./ExxonMobil 1%

Meltwater PA

Status: Producing
 Discovery: 2000, ARCO Meltwater North #1
 Reservoir: Late Cretaceous Seabee Fm.
 Bermuda/Cairn sand
 Working Interest: BP Exploration (Alaska), Inc. 39%
 ConocoPhillips 55%
 Unocal 5%
 XTO Energy, Inc./ExxonMobil 1%



Hot Ice
B. Webb

Status: Producing
 Discovery: 1986, ARCO Kuparuk River Unit #2T-02
 Reservoir: Cretaceous Colville Group
 Tabasco sand
 Working Interest: BP Exploration (Alaska), Inc. 39%
 ConocoPhillips 55%
 Unocal 5%
 XTO Energy, Inc./ExxonMobil 1%

Tabasco PA

Tarn PA

Status: Producing
 Discovery: 1991, ARCO KRU Bermuda #3
 Reservoir: Late Cretaceous Seabee Fm.,
 Bermuda sand (-4,376 to -5,990 ft)
 Working Interest: BP Exploration (Alaska), Inc. 39%
 ConocoPhillips 55%
 Unocal 5%
 XTO Energy, Inc./ExxonMobil 1%

Oil and Gas Units

North Slope

Kuparuk River Unit, Cont.

West Sak PA

Status:	Producing
Discovery:	West Sak River State #1
Reservoir:	Cretaceous Colville Group Tabasco sand
Working Interest:	BP Exploration (Alaska), Inc. 39% ConocoPhillips Alaska, Inc. 55% XTO Energy, Inc./ExxonMobil 1% Unocal 5%

Oooguruk Unit

Status:	Exploration
Royalty Ownership:	State of Alaska
Operator:	Pioneer Natural Resources, Inc.
Acres:	20,394
Working Interest:	Pioneer Alaska, Inc. 70% Armstrong Alaska, Inc. 30%



Nabors Rig 27E
C. Ruff

Nikaitchuq Unit

Status:	Exploration
Royalty Ownership:	State of Alaska
Operator:	Pioneer Natural Resources, Inc.
Acres:	12,047
Working Interest:	Kerr-McGee Oil & Gas Corp. 70% Armstrong Alaska, Inc. 30%

Tuvaq Unit

Status:	Exploration
Royalty Ownership:	State of Alaska
Operator:	Pioneer Natural Resources, Inc.
Acres:	14,561
Working Interest:	Armstrong Alaska, Inc. 100%

Oil and Gas Units

North Slope



Milne Point Unit F-Pad
S. Schmitz

Milne Point Unit

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska
Operator:	BP Exploration (Alaska), Inc.
Acres:	68,830
First Production:	1985

Kuparuk PA

Status:	Producing
Discovery:	1969, Chevron Kavearak Pt. #32-25 1993, BP Cascade #1
Reservoir:	Cretaceous Kuparuk Formation (-7,200 ft subsea)
Working Interest:	BP Exploration (Alaska), Inc. 100%

Schrader Bluff PA

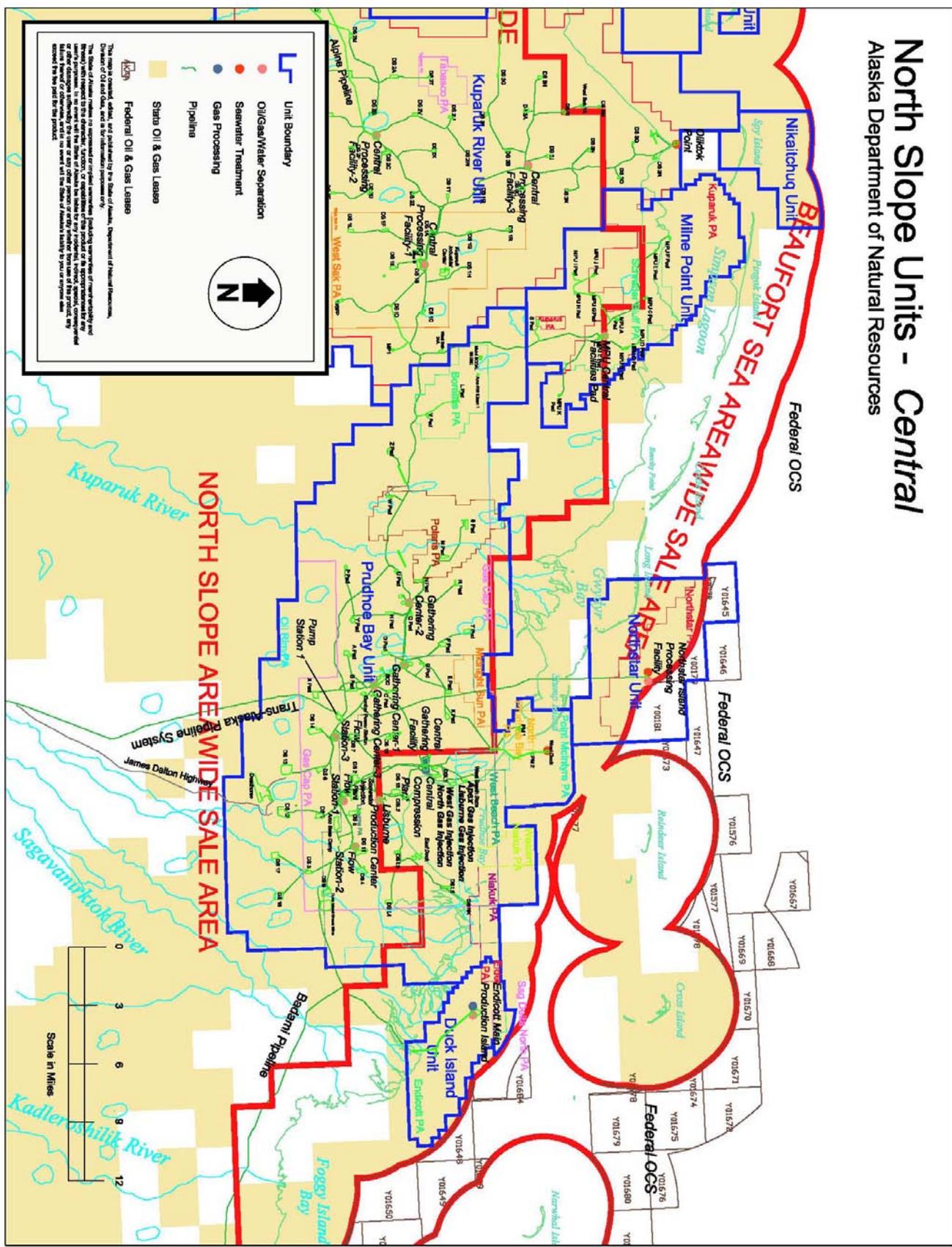
Status:	Producing
Discovery:	1969, Chevron Kavearak Pt. #32-25
Reservoir:	Cretaceous Colville Group Schrader Bluff Fm.
Working Interest:	BP Exploration (Alaska), Inc. 100%

Sag River Tract Operations (Undefined Pool)

Status:	Producing
Discovery:	1969, Chevron Kavearak Pt. #32-25
Reservoir:	Sag River and Ivishak formations
Working Interest:	BP Exploration (Alaska), Inc. 100%

North Slope Units - Central

Alaska Department of Natural Resources



Oil and Gas Units

North Slope



Central Gas Facility
S. Schmitz

Prudhoe Bay Unit

Status: Producing Oil and Gas
Royalty Ownership: State of Alaska
Operator: BP Exploration (Alaska), Inc.
Acres: 247,477
First Production: 1977
Working Interest: ExxonMobil Alaska Production, Inc. 36.39%
(Aligned for all PA's ConocoPhillips Alaska, Inc. 36.07%
~December 2001) BP Exploration (Alaska), Inc. 26.36%
ChevronTexaco 1.16%
Forest Oil Corporation 0.02%

Aurora PA

Status: Producing
Discovery: 1969, Mobil North Kuparuk State #1
Reservoir: Cretaceous Kuparuk Formation

Borealis PA

Status: Producing
Discovery: 1969, Mobil West Kuparuk State #1
Reservoir: Cretaceous Kuparuk Formation

Gas Cap PA

Status: Producing
Discovery: 1968, Richfield Prudhoe Bay State #1
Reservoir: Triassic Ivishak Sandstone
(-8,800 ft subsea)

Lisburne PA

Status: Producing
Discovery: 1968, Richfield Prudhoe Bay State #1
Reservoir: Mississippian Lisburne Group



MIX Module
S. Schmitz

Midnight Sun PA

Status: Producing
Discovery: 1997, BP Prudhoe Bay Un MDS #E-100
Reservoir: Cretaceous Kuparuk Formation

Niakuk PA

Status: Producing
Discovery: 1985, BP Niakuk #5
Reservoir: Cretaceous Kuparuk Formation (-9,350 ft.)

Oil and Gas Units

North Slope



Oliktok Point
S. Schmitz

Prudhoe Bay Unit, Cont.

North Prudhoe Bay PA

Status: Producing
Discovery: 1970, ARCO North Prudhoe Bay State #1
Reservoir: Triassic Sadlerochit Group

Oil Rim PA

Status: Producing
Discovery: 1968, Richfield Prudhoe Bay State #1
Reservoir: Triassic Ivishak sandstone (-8,800 ft subsea)

Polaris PA

Status: Producing
Discovery: 1969, Mobil North Kuparuk State #1
Reservoir: Cretaceous Colville Group, Schrader Bluff Fm.

Point McIntyre PA

Status: Producing
Discovery: 1988, ARCO Pt. McIntyre #3A
Reservoir: Cretaceous Kuparuk Formation

West Beach PA

Status: Producing
Discovery: 1976, ARCO West Beach #3
Reservoir: Cretaceous Kuparuk Formation



Deadhorse
S. Schmitz

Western Niakuk PA

Status: Producing
Discovery: 1985, BP Niakuk #5
Reservoir: Cretaceous Kuparuk Formation (-9,350 ft.)

Orion PA

Status: Producing
Discovery: 1968, Mobil Kuparuk State #1
Reservoir: Cretaceous Schrader Bluff Fm (-4,500 ft.ss)

Oil and Gas Units

North Slope



Northstar
C. Ruff

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska/Federal
Operator:	BP Exploration (Alaska), Inc.
Acres:	23,343
First Production:	2001

Northstar Unit

Northstar PA

Producing

Status:

1984, Shell BF-47 (Seal Island) #1

Discovery:

Triassic Ivishak Sandstone

Reservoir:

(-11,000 ft. subsea)

Working Interest:

BP Exploration (Alaska), Inc. 100%



Northstar pipeline Construction
S. Schmitz

Oil and Gas Units

North Slope



Tundra Moss Companion
S. Schmitz

Duck Island Unit

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska
Operator:	BP Exploration (Alaska), Inc.
Acres:	28,189
First Production:	1994

Eider PA

Status:	Producing
Discovery:	1998, BP Duck Island Unit MPI #2-56/EID
Reservoir:	Triassic Ivishak Sandstone
Working Interest:	BP Exploration (Alaska), Inc. 100%

Endicott PA

Status:	Producing
Discovery:	1978, Sohio Sag Delta 34633 #4
Reservoir:	Mississippian Kekiktuk Conglomerate (-10,000 ft subsea)
Working Interest:	BP Exploration (Alaska), Inc. 68%
	ExxonMobil 21%
	Unocal 10%
	Doyon Ltd./NANA Regional Corporation/ConocoPhillips 1%

Sag Delta North PA

Status:	Producing
Discovery:	1982, Sohio Sag Delta #9
Reservoir:	Mississippian Alaphah Limestone
Working Interest:	BP Exploration (Alaska), Inc. 98%
	NANA Regional Corporation/Doyon Ltd. 2%



Brooks Range
S. Schmitz



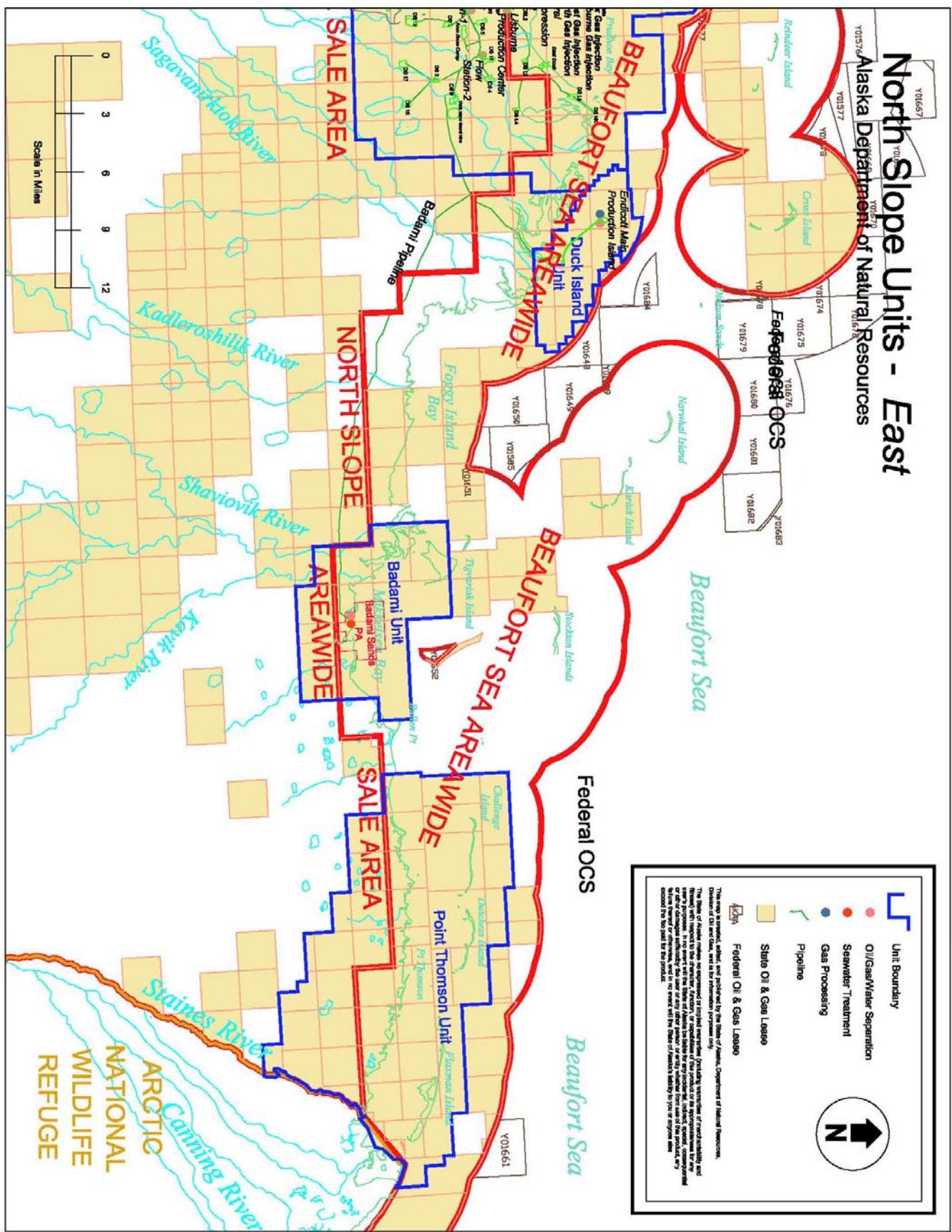
Barrier Islands
B. Webb



Canning River well
B. Webb

North Slope Units - East

Alaska Department of Natural Resources



Legend

- Unit Boundary
- Oil/Gas/Water Separation
- Seawater Treatment
- Gas Processing
- Pipeline
- State Oil & Gas Lease
- Federal Oil & Gas Lease

Scale: 0, 3, 6, 9, 12 Miles

North Arrow

The map is a general reference map and is not intended for use as a legal document. It is the responsibility of the user to verify the accuracy of the information shown on this map. The Alaska Department of Natural Resources is not responsible for any errors or omissions on this map. The Alaska Department of Natural Resources is not responsible for any damages, including consequential damages, arising from the use of this map. The Alaska Department of Natural Resources is not responsible for any claims, damages, or liabilities arising from the use of this map. The Alaska Department of Natural Resources is not responsible for any claims, damages, or liabilities arising from the use of this map.

Oil and Gas Units

North Slope



Badami Pad
B. Webb

Badami Unit

Status:	Suspended
Royalty Ownership:	State of Alaska
Operator:	BP Exploration (Alaska), Inc.
Acres:	37,401
Working Interest:	BP Exploration (Alaska), Inc. 100%

Badami Sands PA

Status:	Suspended
Discovery:	1990, Conoco Badami #1
Reservoir:	Tertiary Canning Formation Badami sandstone (-9,900 ft)
Working Interest:	BP Exploration (Alaska), Inc. 100%



Arctic Coastal Plain
B. Webb



Exploration site before reclamation
B. Webb

Point Thomson Unit

Status:	Development
Royalty Ownership:	State of Alaska
Operator:	ExxonMobil
Acres:	106,184
First Production:	~2008
Discovery:	1977, Exxon Pt. Thomson #1
Working Interest:	BPAmerica 42%
	ExxonMobil 37%
	Chevron 19%
	Others <3%

Point Thomson Sands Discovery

Status:	Undeveloped
Discovery:	1977, Exxon Pt. Thomson #1
Reservoir:	Lower Cretaceous Thomson sandstone (-12,834 ft.)

Flaxman Discovery

Status:	Undeveloped
Discovery:	1975, Exxon Alaska State A #1
Reservoir:	Tertiary Flaxman sand (-12,565 ft.)

Sourdough Discovery

Status:	Undeveloped
Discovery:	1994, BP Sourdough #2
Reservoir:	Reservoir information not available



Exploration pad
B. Webb

Oil and Gas Units

Cook Inlet



Pioneer Peak
ADCED

Status:
Royalty Ownership:

Operator:
State Acres:
Reservoir:

Working Interest:

Pioneer Unit

Exploration
State of Alaska/Federal/
Cook Inlet Regional Corporation/
Alaska Mental Health Trust/
University of Alaska/Fee
Evergreen Resources, Inc. 37,885
Tertiary Tyonek Formation
Coalbed methane target
Evergreen Resources Alaska, Inc. 100%



Stump Lake Unit
B. Havelock

Status:
Royalty Ownership:
Operator:
Acres:
First Production:

Status:
Discovery:
Reservoir:
Working Interest:

Stump Lake Unit

Suspended
State of Alaska
Unocal
4,880
1990

Stump Lake Gas Pool #1 PA

Shut-in 1978, Restart 1990, Shut-in 2000
1978, Chevron Stump Lake Unit #41-33
Tertiary Beluga Formation
Unocal 100%

Ivan River Unit

Status:
Royalty Ownership:
Operator:
Acres:
First Production:

Producing Gas
State of Alaska
Unocal
2,291
1990

Ivan River Gas Pool #1 PA

Status:
Discovery:
Reservoir:
Working Interest:

Producing Gas
1966, Chevron Ivan River Unit #44-1
Tertiary Tyonek Formation
Unocal 100%

Oil and Gas Units

Cook Inlet



Lewis River Pad
B. Havelock

Lewis River Unit

Status:	Producing Gas
Royalty Ownership:	State of Alaska
Operator:	Unocal
Acres:	720
First Production:	1984

Lewis River PA #1

Status:	Producing
Discovery:	1975, Cities Lewis River #1
Reservoir:	Tertiary Tyonek and Beluga formations
Working Interest:	Unocal 100%

Lewis River PA #2

Status:	Producing
Discovery:	1975, Cities Lewis River #1
Reservoir:	Tertiary Tyonek and Beluga formations
Working Interest:	Unocal 100%

Pretty Creek Unit

Status:	Suspended
Royalty Ownership:	State of Alaska
Operator:	Unocal
Acres:	4,579
First Production:	1986

Beluga PA

Status:	Suspended
Discovery:	1979, Chevron Pretty Creek Unit #2
Reservoir:	Tertiary Beluga Formation
Working Interest:	Unocal 100%

Oil and Gas Units

Cook Inlet



B. Havelock

Beluga River Unit

Status:	Producing Gas
Royalty Ownership:	State of Alaska/Federal/Fee
Operator:	ConocoPhillips Alaska, Inc.
Acres:	12,743
First Production:	1968

Beluga-Sterling Gas Pool PA

Status:	Producing gas
Discovery:	1962, Chevron Beluga River Unit 212-35 #1
Reservoir:	Tertiary Sterling Formation
Working Interest:	Chevron USA 33 ^{1/3} % ConocoPhillips Alaska, Inc. 33 ^{1/3} % Municipality of Anchorage 33 ^{1/3} %

Three Mile Creek Unit

Status:	Exploration
Royalty Ownership:	State of Alaska/CIRI
Operator:	Aurora Gas, LLC.
Acres:	12,743

North Cook Inlet Unit

Status:	Producing Gas
Royalty Ownership:	State of Alaska
Operator:	ConocoPhillips Petroleum Company
Acres:	23,368
First Production:	1970

North Cook Inlet Initial PA

Status:	Producing gas
Discovery:	1962, Pan Am Cook Inlet State 17589 #1
Reservoir:	Tertiary Tyonek, Beluga and Sterling formations
Working Interest:	ConocoPhillips Petroleum Company 100%

Oil and Gas Units

Cook Inlet

South Granite Point Unit



Anna Metering
B. Havelock

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska
Operator:	Unocal
Acres:	10,209
First Production:	1967

Granite Point Sands PA

Status:	Producing
Discovery:	1965, Mobil Granite Point 11965 #1
Reservoir:	Tertiary Tyonek Formation
Working Interest:	ExxonMobil 75% Unocal 25%

Hemlock PA

Status:	Producing
Discovery:	1965, Mobil Granite Point 11965 #1
Reservoir:	Tertiary Hemlock Conglomerate
Working Interest:	ExxonMobil 75% Unocal 25%

Nicolai Creek Unit



Nicolai Creek drilling
B. Havelock

Status:	Producing Gas
Royalty Ownership:	State of Alaska/Federal
Operator:	Aurora Gas, LLC
Acres:	698
First Production:	Shut-in 1977, Restart 2001

Nicolai Creek Gas Pool "A" PA

Status:	Shut-In
Discovery:	1966, Texaco Nicolai Creek State #1A
Reservoir:	Tertiary Tyonek and Beluga formations
Working Interest:	Aurora Gas, LLC 100%

Nicolai Creek Gas Pool "B" PA

Status:	Producing gas
Discovery:	1967, Texaco Nicolai Creek Unit #3
Reservoir:	Tertiary Tyonek and Beluga formations
Working Interest:	Aurora Gas, LLC 100%

Oil and Gas Units

Cook Inlet

Redoubt Unit



Status: Development
Royalty Ownership: State of Alaska
Operator: Forest Oil Company
Acres: 23,526
First Production: December 2002

Hemlock PA

Status: Producing Oil
Discovery: 1968, Pan Am Redoubt Shoal Unit #2
Reservoir: Tertiary Hemlock Conglomerate
Working Interest: Forest Oil Corporation 100%

Trading Bay Unit



Status: Producing Oil and Gas
Royalty Ownership: State of Alaska
Operator: Unocal
Acres: 17.859
First Production: 1967

Grayling Gas Sands PA

Status: Producing gas
Discovery: 1968, Trading Bay Unit #G-18
Reservoir: Tertiary Tyonek Formation
(-2,500 to -6,500 ft. subsea)
Working Interest: Unocal 48.8%
Marathon Oil Company 51.2%

McArthur River Hemlock Oil Pool PA

CIRCAC

Status: Producing oil
Discovery: 1965, UNOCAL Grayling #1A
Reservoir: Tertiary Hemlock Conglomerate
Working Interest: Unocal 46.8%
Forest Oil Corporation 53.2%

McArthur River Middle Kenai G Oil Pool PA

Status: Producing oil
Discovery: 1965, UNOCAL Grayling #1A
Reservoir: Tertiary Tyonek Formation
Working Interest: Unocal 46.8%
Forest Oil Corporation 53.2%

McArthur River West Foreland Oil Pool PA

Status: Producing oil
Discovery: 1965, UNOCAL Grayling #1A
Reservoir: Tertiary West Foreland Formation
Working Interest: Unocal 46.8%, Forest Oil Corporation 53.2%

Oil and Gas Units

Cook Inlet



Monopod Platform

B. Webb

North Trading Bay Unit

Status: Suspended
Royalty Ownership: State of Alaska
Operator: Marathon Oil Company
Acres: 1,120
First Production: Shut-in 1992

Hemlock and "G" Formation PA

Status: Suspended
Discovery: 1965, Chevron Trading Bay #1A
Reservoir: Tertiary Hemlock and Tyonek formations
Working Interest: Marathon Oil Company 81%
Unocal 19%

West McArthur River Unit

Status: Producing Oil and Gas
Royalty Ownership: State of Alaska
Operator: Forest Oil Corporation
Acres: 6,330
First Production: 1994

Area 1 PA

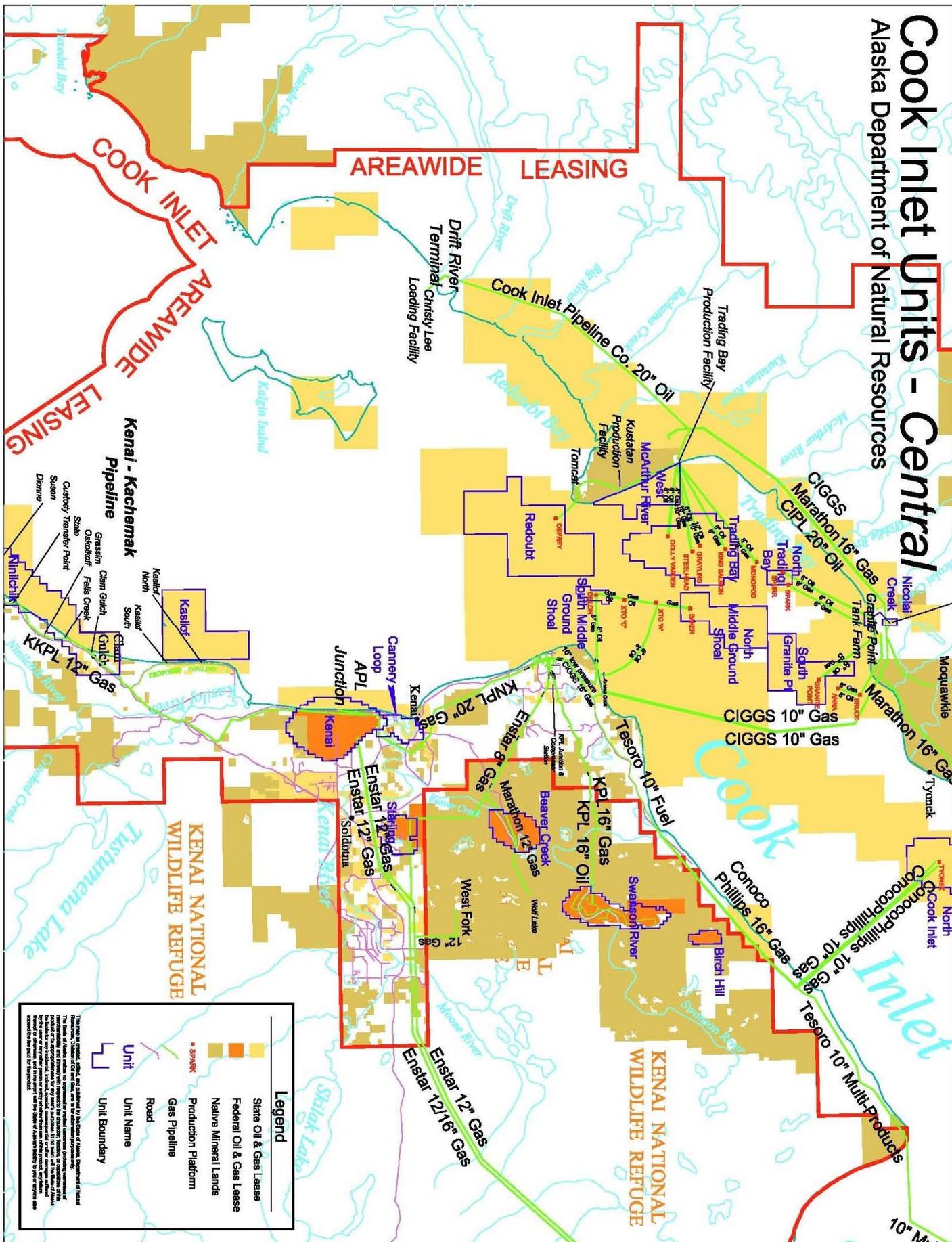
Status: Producing oil
Discovery: 1991, Stewart West McArthur River #1
Reservoir: Tertiary Hemlock Conglomerate
Working Interest: Forest Oil Corporation 100%

West Foreland Field

Status: Producing gas
Discovery: 1962, West Foreland #1
Reservoir: Tertiary Tyonek Formation
Working Interest: Forest Oil Corporation 100%

Cook Inlet Units - Central

Alaska Department of Natural Resources



Legend

- State Oil & Gas Lease
- Federal Oil & Gas Lease
- Native Mineral Lands
- Production Platform
- Gas Pipeline
- Road
- Unit Name
- Unit Boundary

This map is intended to provide a general overview of the oil and gas units in the Cook Inlet region. It is not intended to be used as a legal document. The Alaska Department of Natural Resources is not responsible for the accuracy or completeness of the information shown on this map. For more information, please contact the Alaska Department of Natural Resources, Division of Oil and Gas, at (907) 487-2000.

Oil and Gas Units

Cook Inlet

South Middle Ground Shoal Unit

Status:	Suspended
Royalty Ownership:	State of Alaska
Operator:	Unocal
Acres:	1,160
First Production:	1967

South Middle Ground Shoal Tertiary System PA

Status:	Shut-in
Discovery:	1962, Pan Am MGS State 17595 #1
Reservoir:	Tertiary Hemlock and Tyonek formations
Working Interest:	Unocal 100%

Birch Hill Unit

Status:	Suspended
Royalty Ownership:	Federal
Operator:	ConocoPhillips Alaska, Inc.
Acres:	1,240
First Production:	Shut-in 1965

Gas Pool #1 PA

Status:	Shut-in
Discovery:	1965, Chevron Birch Hill Unit #22-25
Reservoir:	Tertiary Tyonek Formation
Working Interest:	Unocal 79%
	CIRI Production Company 20%
	Marathon Oil Company 1%

Swanson River Unit

Status:	Producing Oil and Gas
Royalty Ownership:	Federal/CIRI
Operator:	Unocal
Acres:	7,880
First Production:	1960

"B, C, D & E" Zone Gas Pools #1 and #2 Consolidated Hemlock PA

Status:	Producing
Discovery:	1957, Richfield Swanson River Unit #34-10
Reservoir:	Tertiary Hemlock, Lower Tyonek and Beluga
Working Interest:	Unocal 100%

Oil and Gas Units

Cook Inlet

Beaver Creek Unit

Status: Producing Oil and Gas
Royalty Ownership: Federal, Fee
Operator: Marathon
Acres: 4,960
First Production: 1973

Sterling Gas, Beluga Gas, and Beaver Creek Oil Pools

Status: Producing oil and gas
Discovery: 1972, Marathon Beaver Creek #4
Reservoir: Tertiary Hemlock, Lower Tyonek and Beluga formations
Working Interest: Marathon Oil Company

Sterling Unit

Status: Producing Gas
Royalty Ownership: Federal/CIRI/State of Alaska/Fee
Operator: Marathon Oil Company
Total Acres: 3,600
First Production: 1962

"A" Zone PA (Sterling Formation Gas Zone PA)

Status: Producing
Discovery: 1961, UNOCAL Sterling Unit #23-15
Reservoir: Tertiary Sterling Formation
Working Interest: Marathon Oil Company 100%

Lower Beluga PA

Status: Producing
Discovery: 1999, UNOCAL Sterling Unit #41-15
Reservoir: Tertiary Beluga Formation
Working Interest: Marathon Oil Company 100%

Tyonek PA

Status: Producing
Discovery: 1999, UNOCAL Sterling Unit #41-15
Reservoir: Tertiary Tyonek Formation
Working Interest: Marathon Oil Company 100%

Oil and Gas Units

Cook Inlet

Cannery Loop Unit

Status:	Producing Gas
Royalty Ownership:	State of Alaska/Federal/CIRI/Fee
Operator:	Marathon Oil Company
Total Acres:	1,900
First Production:	1988
Working Interest:	Marathon Oil Company 100%

Beluga Formation Undifferentiated Gas Sands PA

Status:	Producing
Discovery:	1979, UNOCAL Cannery Loop Unit #1
Reservoir:	Tertiary Beluga Formation

Sterling Sands PA

Status:	Producing
Discovery:	1979, UNOCAL Cannery Loop Unit #1
Reservoir:	Tertiary Sterling Formation

Tyonek D Zone Gas Sands PA

Status:	Producing
Discovery:	1979, UNOCAL Cannery Loop Unit #1
Reservoir:	Tertiary Tyonek Formation

Upper Tyonek Formation Undifferentiated Gas Sands PA

Status:	Producing
Discovery:	1979, UNOCAL Cannery Loop Unit #1
Reservoir:	Tertiary Tyonek Formation

Kenai River Unit

Status:	Producing Gas
Royalty Ownership:	State of Alaska/Federal/CIRI/Fee
Operator:	Marathon Oil Company
Total Acres:	8,264
First Production:	1961
Working Interest:	Marathon Oil Company ~100%

Sterling Formation Gas Zone PA (A Zone PA)

Status:	Producing
Discovery:	1959, UNOCAL Kenai Unit #14-6
Reservoir:	Tertiary Sterling Formation

Beluga PA (Beluga Formation Gas Zones PA)

Status:	Producing
Discovery:	1959, UNOCAL Kenai Unit #14-6
Reservoir:	Tertiary Beluga Formation (-4,595 to -5,108 ft. subsea)

Oil and Gas Units

Cook Inlet

Ninilchik Unit

Status: Gas Exploration and Production
Royalty Ownership: State of Alaska/CIRI/Fee
Operator: Marathon Oil Company
Total Acres: 27,860
Working Interest: Marathon Oil Company 60%
Unocal 40%

Falls Creek PA

Status: Producing Gas
Discovery: 1961, Chevron Falls Creek Unit #43-1
Reservoir: Tertiary Tyonek Formation
Working Interest: Marathon Oil Company 50.44%
Unocal 33.63%
ConocoPhillips (Alaska), Inc. 15.93%

Grassim Oskolkoff PA

Status: Producing Gas
Discovery: 1961, Chevron Falls Creek Unit #43-1
Reservoir: Tertiary Tyonek Formation
Working Interest: Marathon Oil Company 60%
Unocal 40%

Susan Dionne PA

Status: Producing Gas
Discovery: 1961, Chevron Falls Creek Unit #43-1
Reservoir: Tertiary Tyonek Formation
Working Interest: Marathon Oil Company 60%
Unocal 40%



Kenai River
B. Havelock

Kasilof Unit

Status: Gas Exploration
Royalty Ownership: State of Alaska
Operator: Marathon Oil Company
Acres: 13,289

South Ninilchik Unit

Status: Exploration
Royalty Ownership: State of Alaska/CIRI/Fee
Operator: Unocal
Acres: 6,998
Working Interest: Unocal 100%

Oil and Gas Units

Cook Inlet

Deep Creek Unit



Nikolaevsk Pad
C. Ruff

Status: Exploration
Royalty Ownership: State of Alaska/CIRI
Operator: Unocal
Acres: 22,617
Working Interest: Unocal 100%

Happy Valley Discovery

Status: Exploration
Discovery: 2003, Happy Valley #1

Nikolaevsk Unit

Status: Exploration
Royalty Ownership: State of Alaska/CIRI
Operator: Unocal
Acres: 16,589
Working Interest: Unocal. 100%

Cosmopolitan Unit

Status: Exploration
Royalty Ownership: State of Alaska/Federal
Operator: ConocoPhillips Alaska, Inc.
Acres: 23,369
Working Interest: ConocoPhillips Alaska, Inc. 57%
Anadarko Petroleum Corporation 20%
Forest Oil Corporation 14%
Devon Energy Production Company 4%
ExxonMobil 4%
Others 1%

Starichkof Discovery

Status: Exploration
Discovery: 1967, Penzoil Starichkof St. #1
Reservoir: Tertiary Hemlock Conglomerate

Oil and Gas Units

Cook Inlet

North Fork Unit

Status:	Shut-In
Royalty Ownership:	State of Alaska/Federal
Operator:	Gas-Pro Alaska, LLC
Acres:	2,480
First Production:	Shut-in in 1965

North Fork PA

Status:	Suspended
Discovery:	1965, Chevron North Fork Unit #41-35
Reservoir:	Tertiary Tyonek Formation
Working Interest:	Gas-Pro Alaska, LLC 73%
	ConocoPhillips Alaska, Inc. 27%

Oil and Gas Units

Non-Unitized Production

Middle Ground Shoal Field

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska
Operator:	Cross Timbers Oil Co./ Forest Oil Company/ Unocal
First Production:	1967
Discovery:	1962, Pan Am MGS State 17595 #1
Reservoir:	Tertiary Hemlock and Tyonek formations

Granite Point Field

Status:	Producing Oil and Gas
Royalty Ownership:	State of Alaska
Operator:	Unocal
First Production:	1967
Discovery:	1965, Mobil Granite Point 11965 #1
Reservoir:	Tertiary Hemlock and Tyonek formations



Cook Inlet Platform
B. Webb

Oil and Gas Units

Table 3.2 Fields and Pools

FIELD NAME	TYPE OF FIELD	UNIT	DISCOVERED	OPERATOR	STATUS	LOCATION
ALBERT KALOA	GAS		1/4/1968	CIRI	shut-in 1971	CI, west side, onshore
ALPINE	OIL	Colville River	3/27/1994	ConocoPhillips	prod. began 2000, Nov.	NS, Colville Delta, onshore
AURORA	OIL	Prudhoe Bay	8/24/1969	BP	prod. began 2000	NS, central, onshore
BADAMI	OIL & GAS	Badami	4/27/1990	BP	prod. began 1998, Aug. shut in	NS, Canning R., onshore
BEAVER CREEK	OIL & GAS	Beaver Creek	12/17/1972	UNOCAL	prod. began 1973	CI, east side, onshore
BELUGA RIVER	GAS	Beluga River	12/1/1962	ConocoPhillips	prod. began 1968	CI, west side, onshore
BIRCH HILL	GAS	Birch Hill	6/9/1965	ConocoPhillips	shut-in 1965	CI, east side, onshore
BOREALIS	OIL	Prudhoe Bay	8/8/1969	BP	prod. began 2000	NS, central, onshore
BURGER	OIL & GAS		10/14/1989		undeveloped	OCS, Chukchi Sea, offshore
CANNERY LOOP	GAS	Cannery Loop	6/24/1979	Marathon	prod. began 1988	CI, east side, onshore
CANNERY LOOP BELUGA	GAS	Cannery Loop	6/24/1979	Marathon	prod. began 1988	CI, east side, onshore
CANNERY LOOP STERLING	GAS	Cannery Loop	10/23/2000	Marathon	prod. began 2000	CI, east side, onshore
CASCADE	OIL	Milne Point	3/14/1993	BP	prod. began 1996, Aug.	NS, foothills, onshore
COLVILLE DELTA	OIL		4/26/1985	ConocoPhillips	undeveloped	NS, Colville Delta, onshore
EAST BARROW	GAS	Barrow	5/4/1974	NS Borough	prod. began 1981	NS, western, onshore
EAST KURUPA	GAS		3/1/1976		undeveloped	NS, foothills, onshore
EAST UMIAT	GAS		3/28/1964	UMC Petroleum	shut-in, no production.	NS, foothills, onshore
EIDER	OIL	Duck Island	3/20/1998	BP	prod. began 1998, Jul.	NS, central, onshore
ENDICOTT	OIL	Duck Island	2/14/1978	BP	prod. began 1987	NS, central, onshore
FALLS CREEK	GAS	Falls Creek	4/10/1961	Marathon	shut-in 1961; prod began 2003	CI, east side, onshore
FIORD	OIL	Colville River	4/18/1992	ConocoPhillips	undeveloped	NS, Colville Delta, onshore
FISH CREEK	OIL		9/4/1949	ConocoPhillips	undeveloped	NS, NPRA, onshore
FLAXMAN	OIL	Point Thomson	9/6/1975	Exxon	undeveloped	NS, Canning R., offshore
GRANITE POINT	OIL & GAS		5/16/1965	UNOCAL	prod. began 1967	CI, west side, offshore
GRANITE POINT TYONEK	GAS		8/5/1965	UNOCAL	prod. began 1995	CI, west side, offshore
GRASSIM OSKOLKOFF	GAS	Ninilchik	7/31/2001	Marathon	prod began 2003	CI, east side, offshore
GUBIK	GAS		8/11/1951		undeveloped	NS, foothills, onshore
GWYDYR BAY	OIL	Prudhoe Bay	11/25/1969	BP	undeveloped	NS, central, onshore
HAMMERHEAD	OIL		10/11/1986	Anadarko	undeveloped	OCS, Beaufort Sea, offshore
HAPPY VALLEY	GAS	Deep Creek	7/9/2003	Unocal	prod began 2004	CI, east side, onshore
HEMI SPRINGS	OIL		4/3/1984		undeveloped	NS, central, onshore
IVAN RIVER	GAS	Ivan River	10/8/1966	UNOCAL	prod. began 1990	CI, west side, onshore
KALUBIK	OIL	Alpine	5/1/1992	ConocoPhillips	undeveloped	NS, Colville Delta, onshore
KASILOF	GAS	Kasilof	2004	Marathon	undeveloped	CI, east side, offshore
KATALLA	OIL		1/1/1902		abandoned 1933	Gulf of Alaska, onshore
KAVIK	GAS		11/5/1969	Phillips	undeveloped	NS, foothills, onshore
KEMIK	GAS		6/17/1972	BP	undeveloped	NS, foothills, onshore
KENAI	GAS	Kenai	10/11/1959	Marathon	prod. began 1961	CI, east side, onshore
KENAI STERLING	GAS	Kenai		Marathon		CI, east side, onshore
KUPARUK RIVER	OIL & GAS	Kuparuk River	4/7/1969	ConocoPhillips	prod. began 1981	NS, central, onshore
KUVLUM	OIL		10/1/1992	Union Texas Pet.	undeveloped	OCS, Beaufort Sea, offshore
LEWIS RIVER	GAS	Lewis River	10/1/1975	UNOCAL	prod. began 1984	CI, west side, onshore
LIBERTY	OIL		3/3/1983	BP	undeveloped	OCS, Beaufort Sea, offshore
LISBURNE	OIL & GAS	Prudhoe Bay	12/19/1967	BP	prod. began 1986	NS, central, onshore
LONE CREEK	GAS	Moquawkie	10/12/1998	Anadarko	prod began 2003	CI, west side, onshore
MCARTHUR RIVER	OIL & GAS	Trading Bay	9/29/1965	UNOCAL	prod. began 1967	CI, west side, offshore
MCARTHUR RIVER TYONEK	GAS	Trading Bay		UNOCAL		CI, west side, offshore
MEADE	GAS		8/21/1950		undeveloped	NS, NPRA, onshore
MELTWATER	OIL	Kuparuk River	4/26/2000	ConocoPhillips	prod. began 2001, Nov.	NS, central, onshore
MIDDLE GROUND SHOAL	OIL	N & S MGS	6/10/1962	UNOCAL/XTO	prod. began 1967	CI, mid channel, offshore
MIDNIGHT SUN	OIL	Prudhoe Bay	12/20/1997	BP	prod. began 1998, Oct.	NS, central, onshore
MIKKELSON	OIL		11/11/1978	ExxonMobil	undeveloped	NS, central, onshore
MILNE POINT	OIL	Milne Point	8/9/1969	BP	prod. began 1985	NS, central, onshore
MOQUAWKIE	GAS	Moquawkie	11/28/1965	CIRI	shut-in 1979	CI, west side, onshore
NIKAITCHUQ	OIL	Nikaitchuq	4/1/2004	Kerr-McGee	undeveloped	NS, central, offshore
N MID GROUND SH (MGS)	GAS	N Mid Ground Sh	6/10/1962	UNOCAL	prod. began 1982	CI, mid channel, offshore
N MIDDLE GROUND SHOAL	GAS		11/15/1964	UNOCAL/Cross Timber	undeveloped	CI, mid channel, offshore
NANUQ	OIL	Colville River	5/7/2000	ConocoPhillips	prod. began 2000	NS, Colville Delta, onshore
NIAKUK	OIL	Prudhoe Bay	3/7/1985	BP	prod. began 1994	NS, central, offshore
NICOLAI CREEK	GAS	Nicolai Creek	4/28/1966	Aurora Gas LLC	production began 2001	CI, west side, onshore
NORTH COOK INLET	GAS	N Cook Inlet	8/21/1962	ConocoPhillips	prod. began 1970	CI, mid channel, offshore
NORTH FORK	GAS	North Fork	12/20/1965	Alliance LLC	shut-in 1965	CI, east side, onshore
NORTH PRUDHOE	OIL & GAS	Prudhoe Bay	3/31/1970	BP	prod. began 1993, Oct.	NS, central, onshore
NORTHSTAR	OIL & GAS	Northstar	1/30/1984	BP	prod. began 2001, Oct.	NS, central, offshore
NPRA LOOKOUT	OIL/COND		4/30/2002	ConocoPhillips	undeveloped	NS, NPRA, onshore
NPRA RENDEZVOUS	OIL/COND		4/27/2001	ConocoPhillips	undeveloped	NS, NPRA, onshore
NPRA SPARK	OIL/COND		4/12/2000	ConocoPhillips	undeveloped	NS, NPRA, onshore

Oil and Gas Units

Table 3.2 Fields and Pools, Cont.

FIELD NAME	TYPE OF FIELD	UNIT	DISCOVERED	OPERATOR	STATUS	LOCATION
OOOGURUK	OIL	Oooguruk	3/29/2003	Pioneer	undeveloped	NS, central, offshore
PALM	OIL	Kuparuk River	2/21/2001	ConocoPhillips	prod. began 2002	NS, central, onshore
PETE'S WICKED	OIL	Prudhoe Bay	2/24/1997	BP	undeveloped	NSe, central, onshore
POINT MCINTYRE	OIL & GAS	Prudhoe Bay	3/22/1988	BP	prod. began 1993	NS, central, offshore
POINT THOMSON	OIL & GAS	Point Thomson	12/8/1977	ExxonMobil	undeveloped	NS, Canning R., onshore
POLARIS	OIL	Prudhoe Bay	8/24/1969	BP	prod. began 2001	NS, central, onshore
PRETTY CREEK	GAS	Pretty Creek	2/20/1979	UNOCAL	prod. began 1986	Cl, west side, onshore
PRUDHOE BAY	OIL & GAS	Prudhoe Bay	12/19/1967	BP	prod. began 1977	NS, central, onshore
REDOUBT SHOAL	OIL	Redoubt Shoal	9/21/1968	Forest	prod. began 2001	Cl, west side, offshore
SAG DELTA NORTH	OIL	Duck Island	1/25/1982	BP	prod. began 1989	NS, central, onshore
SAG RIVER	OIL	Milne Point	8/9/1969	BP	prod. began 1994	NSe, central, onshore
SAMBUCCA	OIL	Prudhoe Bay	1/20/1998	BP		NS, central, onshore
SANDPIPER	OIL	Sandpiper	1/25/1986	Murphy	undeveloped	OCS, Beaufort Sea, offshore
SCHRADER BLUFF	OIL	Milne Point	8/9/1969	BP	prod. began 1991	NS, central, onshore
SIKULIK	GAS		4/18/1988	NS Borough	undeveloped	NS, western, onshore
SIMPSON	OIL		10/23/1950		undeveloped	NS, NPRA, onshore
SOURDOUGH	OIL	Point Thomson	4/27/1994	BP	undeveloped	NS, Canning R., onshore
SOUTH BARROW	GAS	Barrow	4/15/1949	NS Borough	prod. began 1950	NS, western, onshore
SQUARE LAKE	GAS		4/18/1952		undeveloped	NS, NPRA, onshore
STARICHKOF	OIL	Cosmopolitan	4/1/1967	ConocoPhillips Alaska	undeveloped	Cl, east side, offshore
STERLING	GAS	Sterling	7/11/1961	Marathon	prod. began 1962	Cl, east side, onshore
STERLING BELUGA	GAS	Sterling	1/19/1999	Marathon	prod. began 1999	Cl, east side, onshore
STERLING TYONEK	GAS	Sterling	1/19/1999	Marathon		Cl, east side, onshore
STINSON	confidential		8/20/1990	ConocoPhillips	undeveloped	NS, Canning R., offshore
STUMP LAKE	GAS	Stump Lake	5/14/1978	UNOCAL	prod. began 1990	Cl, west side, onshore
SUSAN DIONNE	GAS	Ninilchik	1/23/2002	Marathon	prod. began 2003	Cl, east side, offshore
SWANSON RIVER	OIL & GAS	Swanson River	7/19/1957	UNOCAL	prod. began 1958	Cl, east side, onshore
TABASCO	OIL	Kuparuk River	10/18/1986	ConocoPhillips	prod. began 1998, May	NS, central, onshore
TARN	OIL	Kuparuk River	2/2/1991	ConocoPhillips	prod. began 1998, Aug.	NS, central, onshore
THETIS ISLAND	OIL		4/28/1993	Anadarko	undeveloped	NS, central, offshore
TRADING BAY	OIL	N Trading Bay	6/17/1965	UNOCAL	prod. began 1967	Cl, west side, offshore
TRADING BAY TYONEK	GAS	N Trading Bay		UNOCAL		Cl, west side, offshore
TYONEK DEEP	OIL	N Cook Inlet	11/5/1991	ConocoPhillips	undeveloped	Cl, mid channel, offshore
UGNU	OIL	Kuparuk River	8/9/1969	ConocoPhillips	prod. began 2003	NS, central, onshore
UMIAT	OIL		12/26/1946	U.S. Dept Interior	undeveloped	NS, foothills, onshore
WALAKPA	GAS		2/7/1980	NS Borough	prod. began 1992	NS, western, onshore
WEST BEACH	OIL & GAS	Prudhoe Bay	7/22/1976	BP	prod. began 1994, Apr.	NS, central, onshore
WEST FORELAND	GAS		3/29/1962	ConocoPhillips	shut-in 1962; prod. began 2001	Cl, west side, onshore
WEST FORK	GAS		9/26/1960	CIRI	prod. began 1978	Cl, east side, onshore
WEST MCARTHUR RIVER	OIL & GAS	W McArthur River	12/2/1991	Forest	prod. began 1994	Cl, west side, onshore
WEST SAK	OIL	Kuparuk River	8/9/1969	ConocoPhillips	prod. began 1998	NS, central, onshore
WOLF CREEK	GAS		6/4/1951		undeveloped	NS, NPRA, onshore
WOLF LAKE	GAS		11/12/1983	Marathon	prod. began 2001	Cl, east side, onshore