

SCOMM

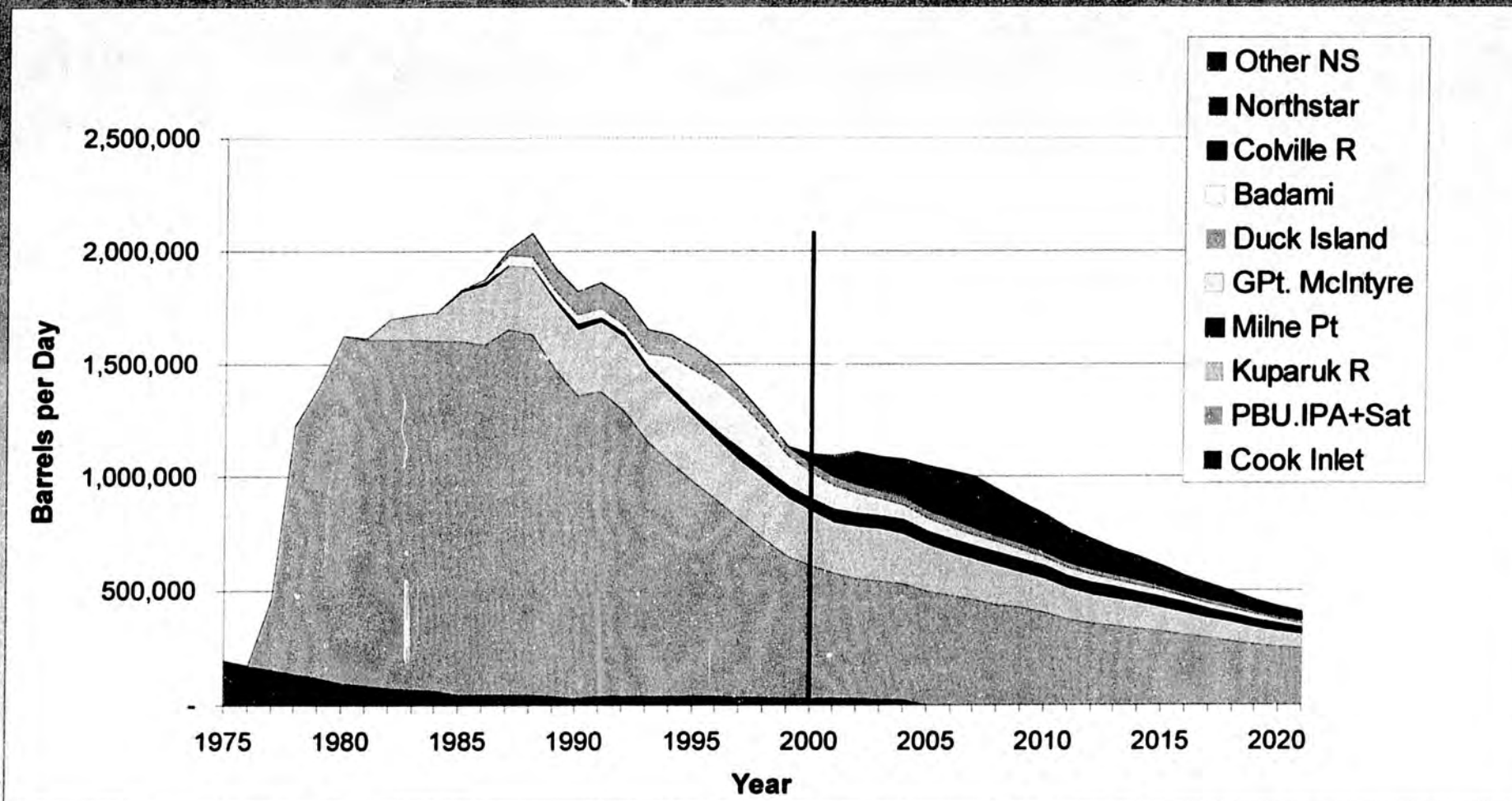
128:1

Division of Oil and Gas
January 2001



Alaska Department of
**Natural
Resources**

<http://www.dnr.state.ak.us/oil/products/data/data.htm>



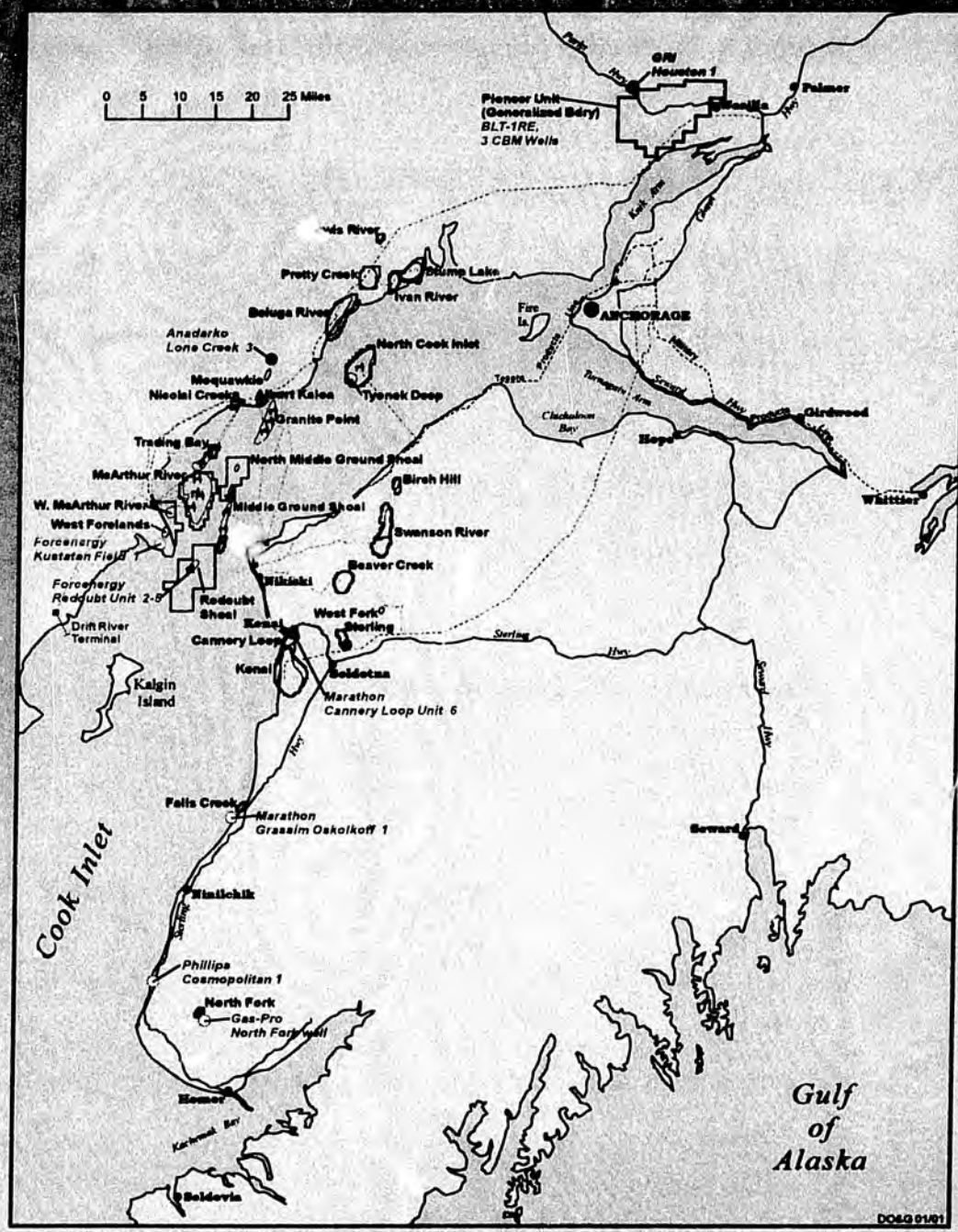
Cook Inlet Activity

Map Legend

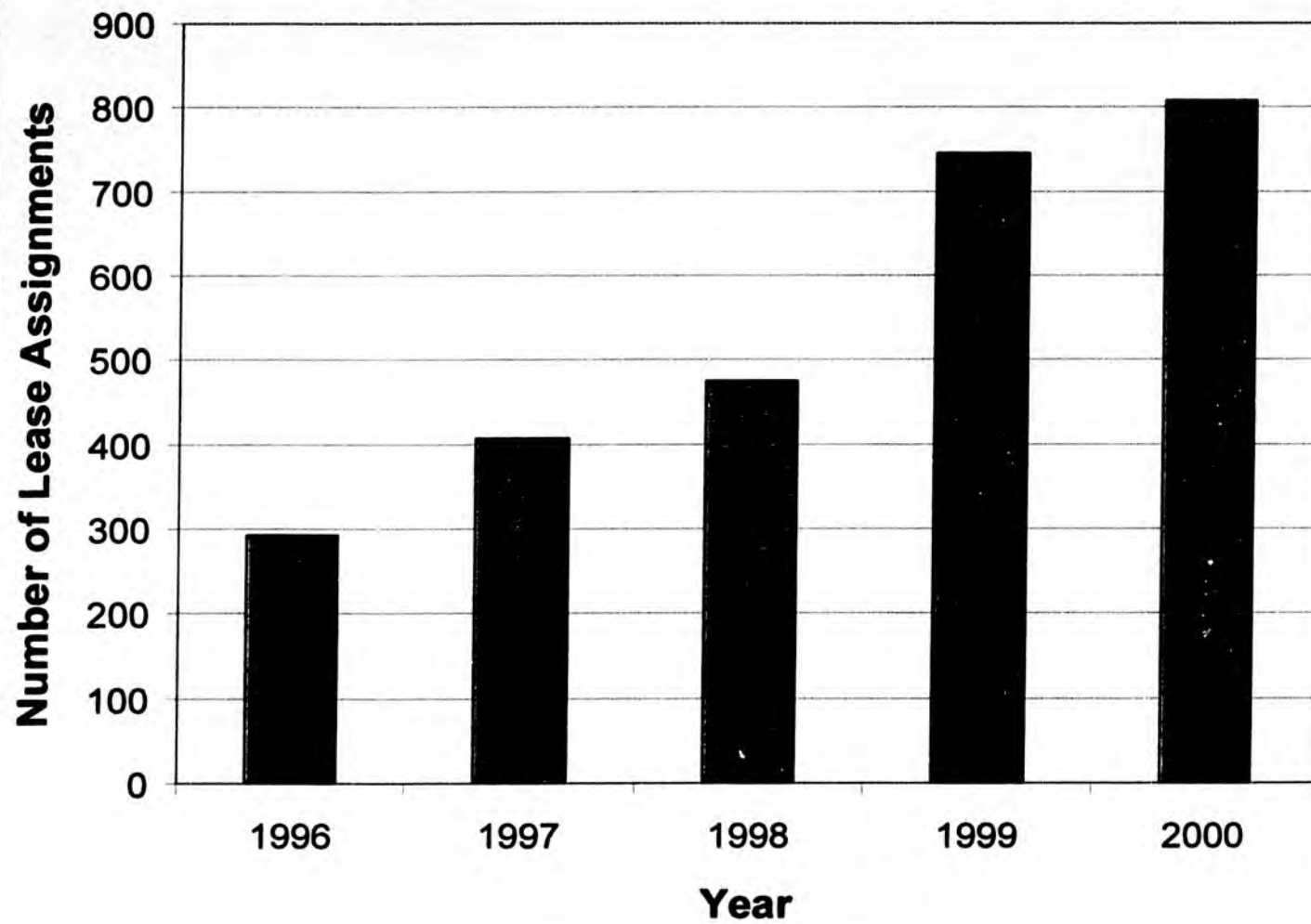
- Unit Boundary
- Oil Field / Accumulation
- Gas Field / Accumulation
- Selected Wells
- Proposed / Active Wells
- Platform
- Pipelines
- Production Facility



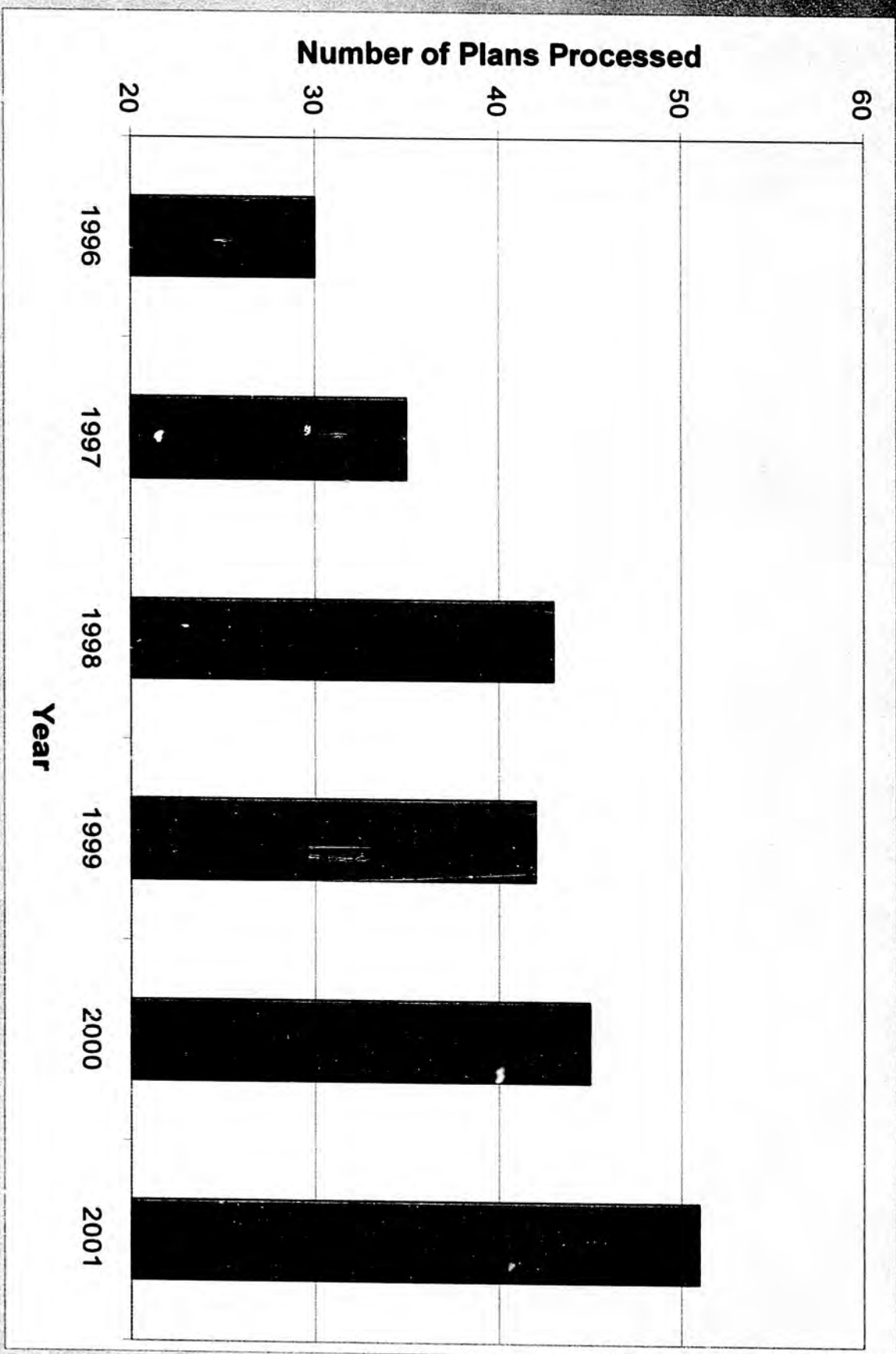
Map Area



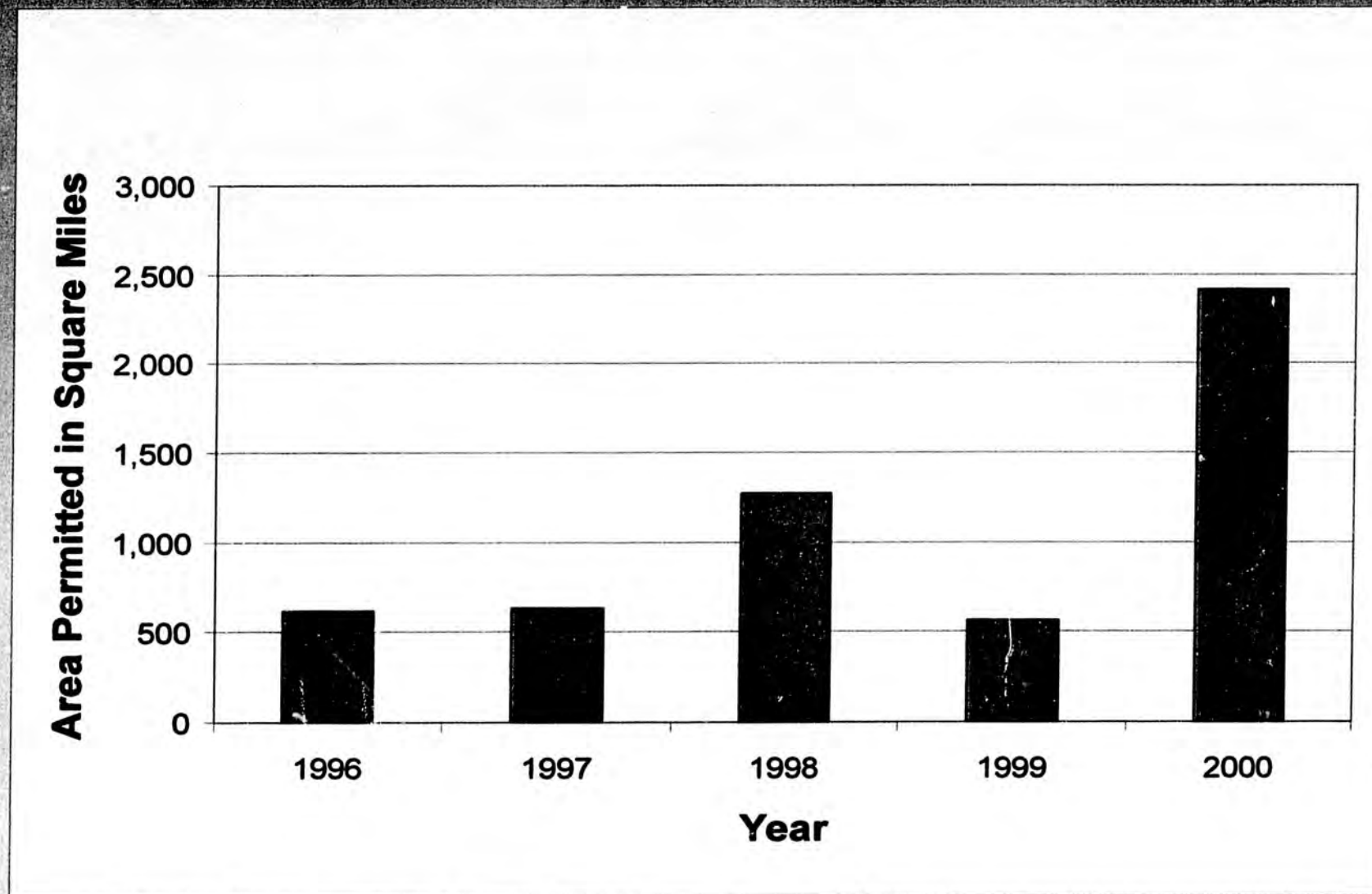
Lease Assignments in Alaska

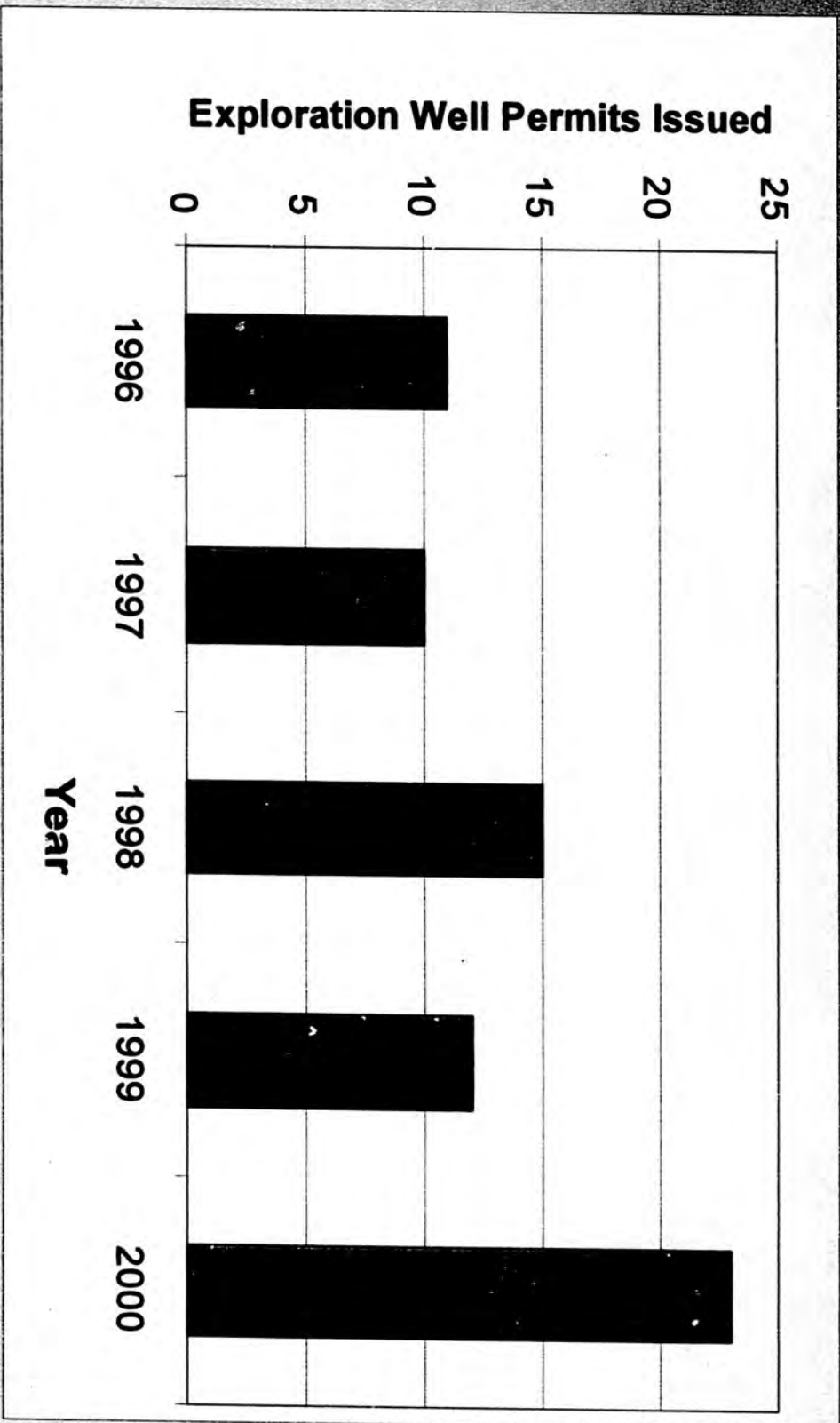


Plans of Development / Exploration



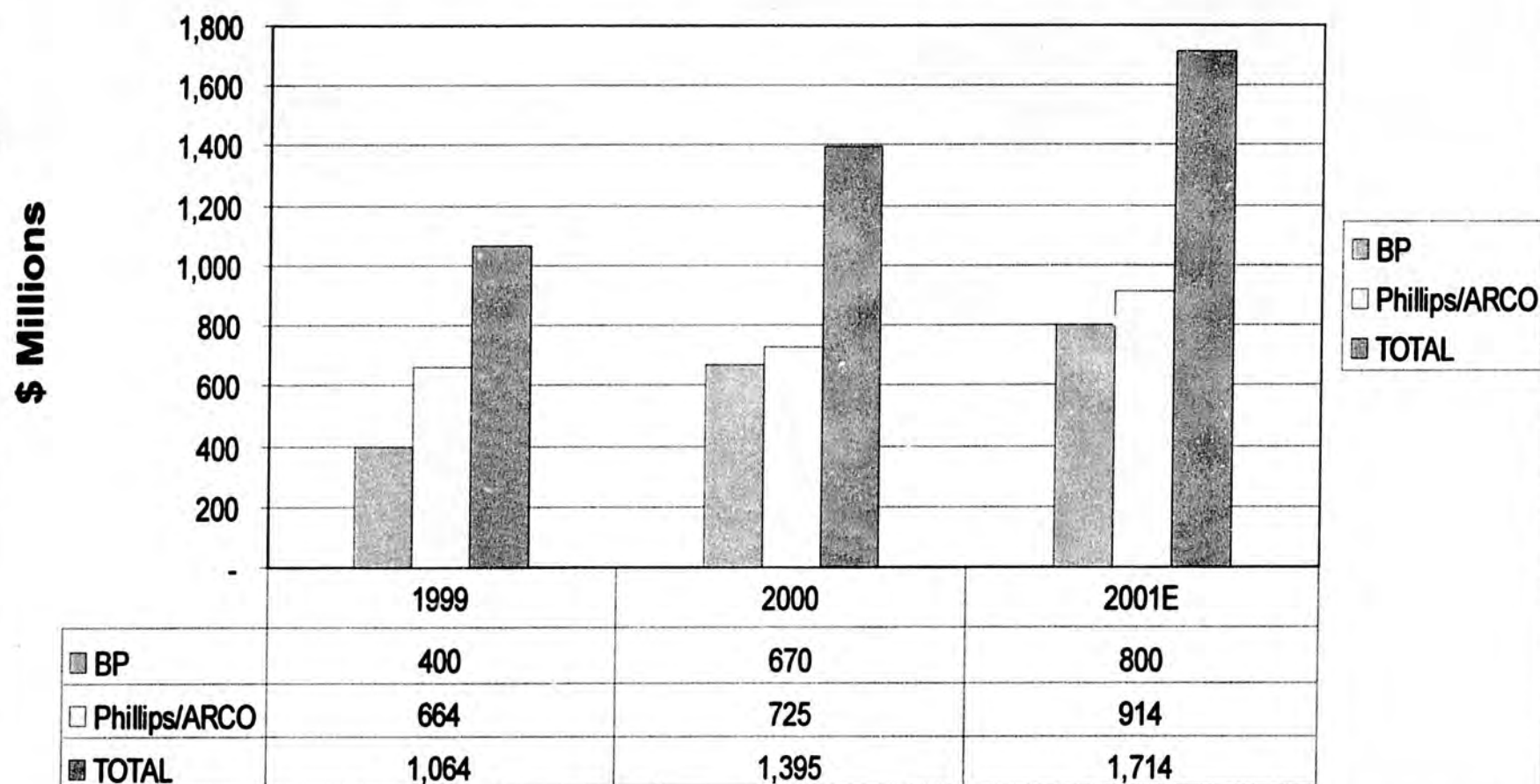
3-D Seismic Survey Miles in Alaska





Oil Industry Capital Spending In Alaska

BP and Phillips/ARCO Net Capital Spending in Alaska, 1999-2001



Elements of Successful Exploration

■ Source Rock

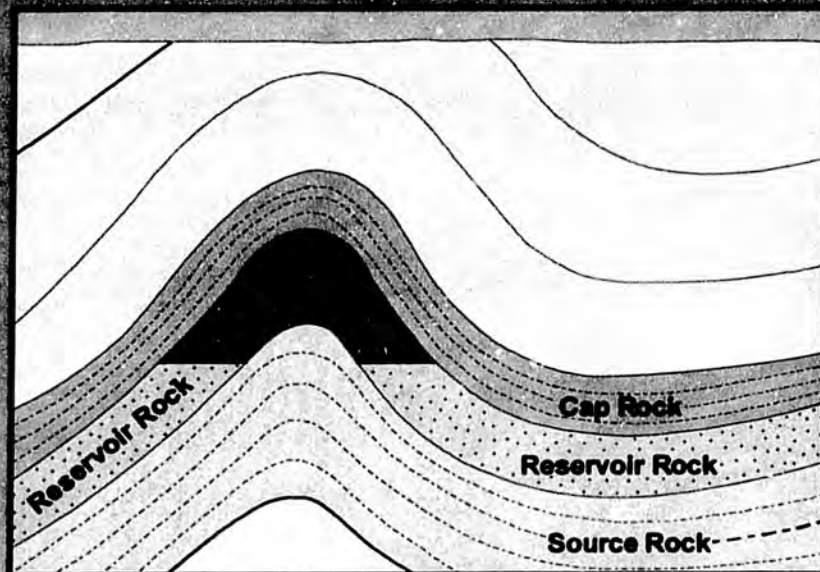
■ Generation

■ Migration

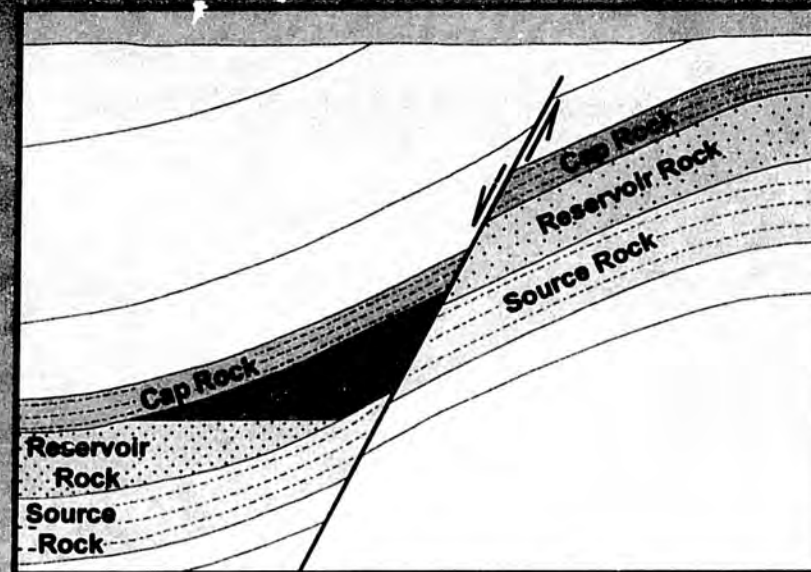
■ Reservoir Rock

■ Trap

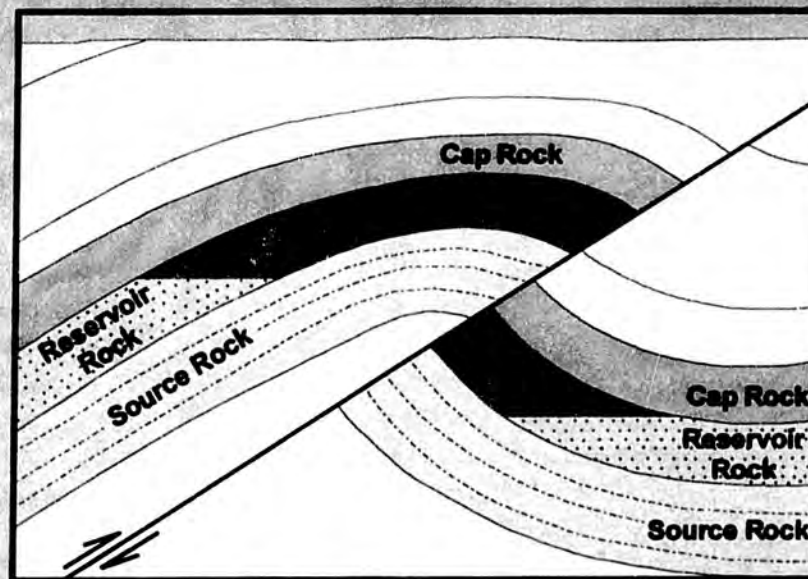
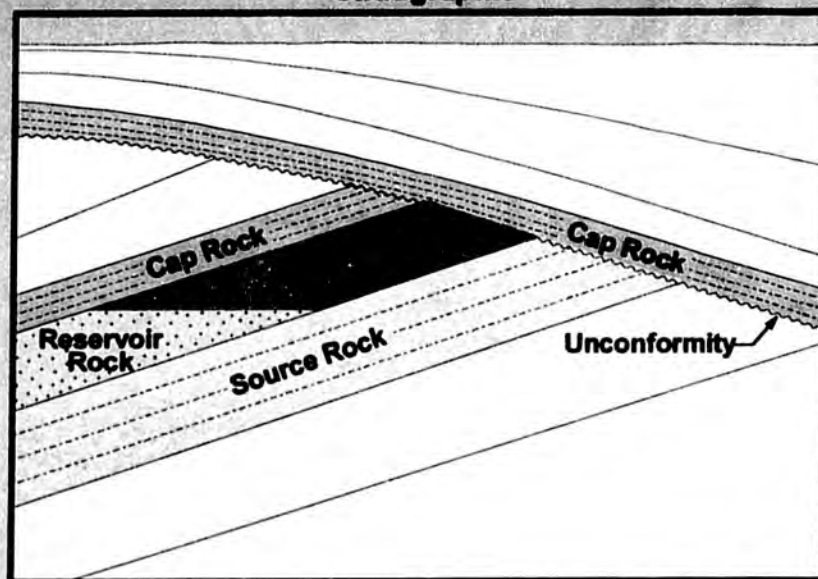
■ Seal



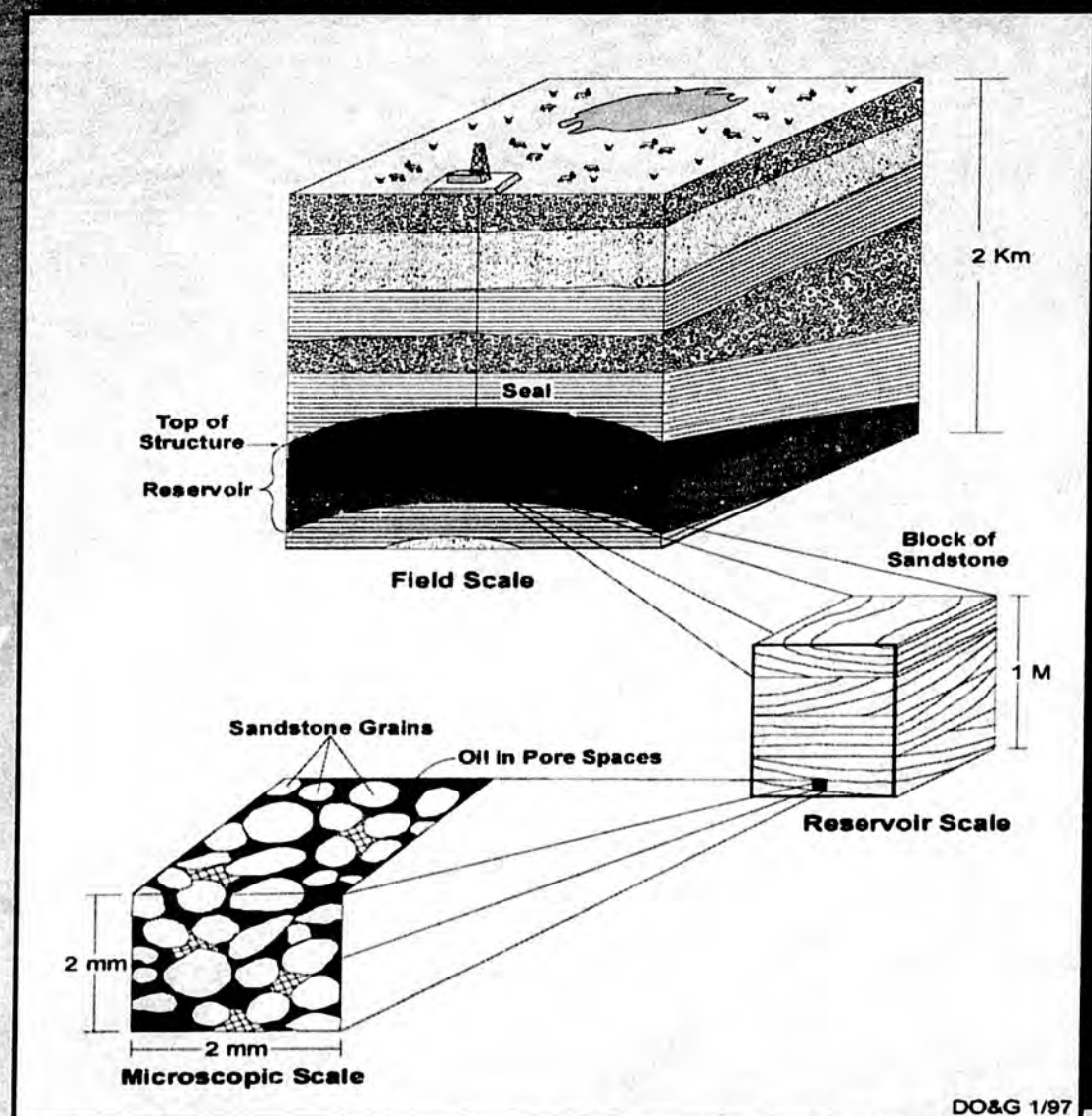
Stratigraphic

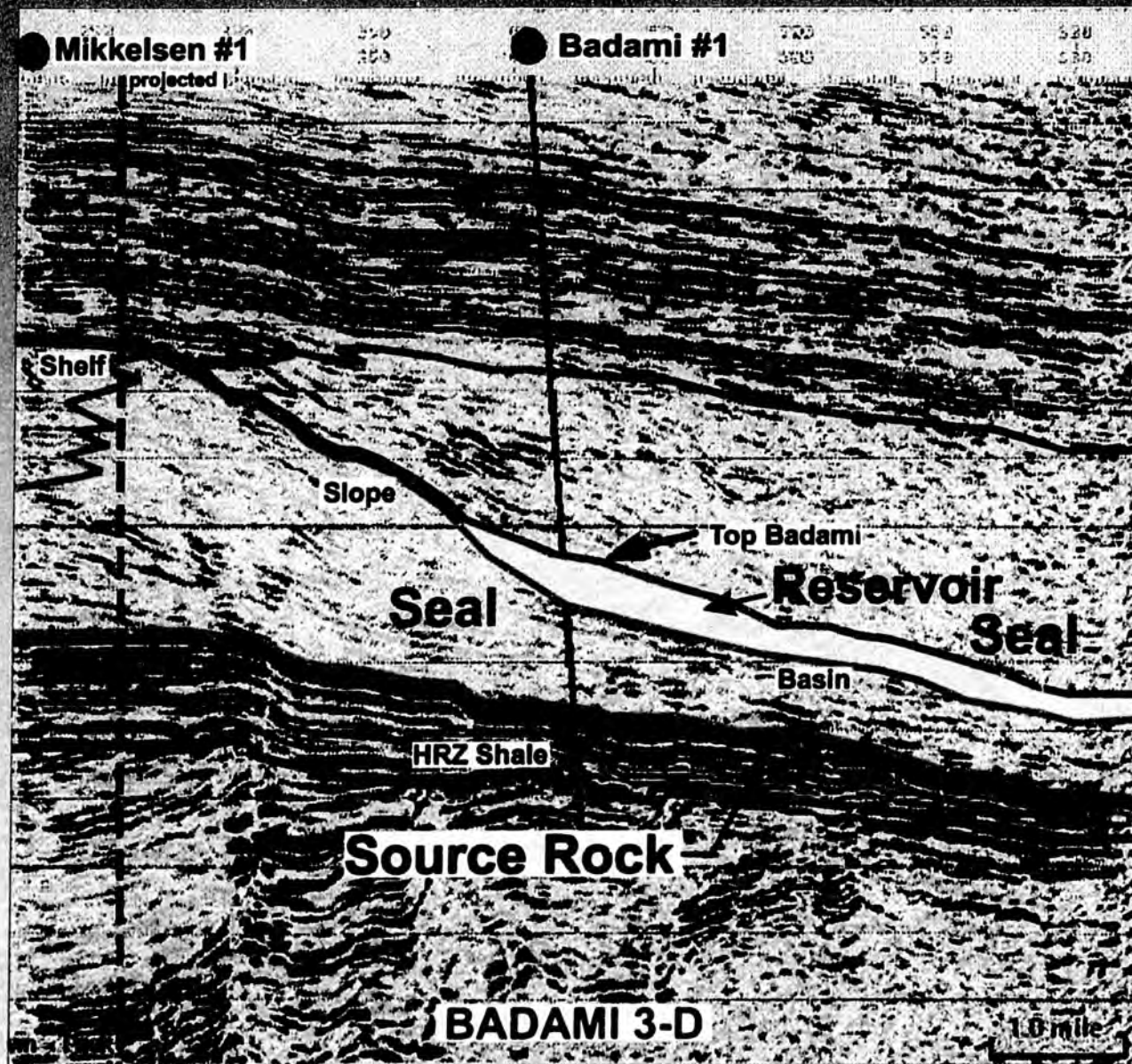


Thrust Fault



Oil in Sandstone Reservoirs Viewed at Different Scales



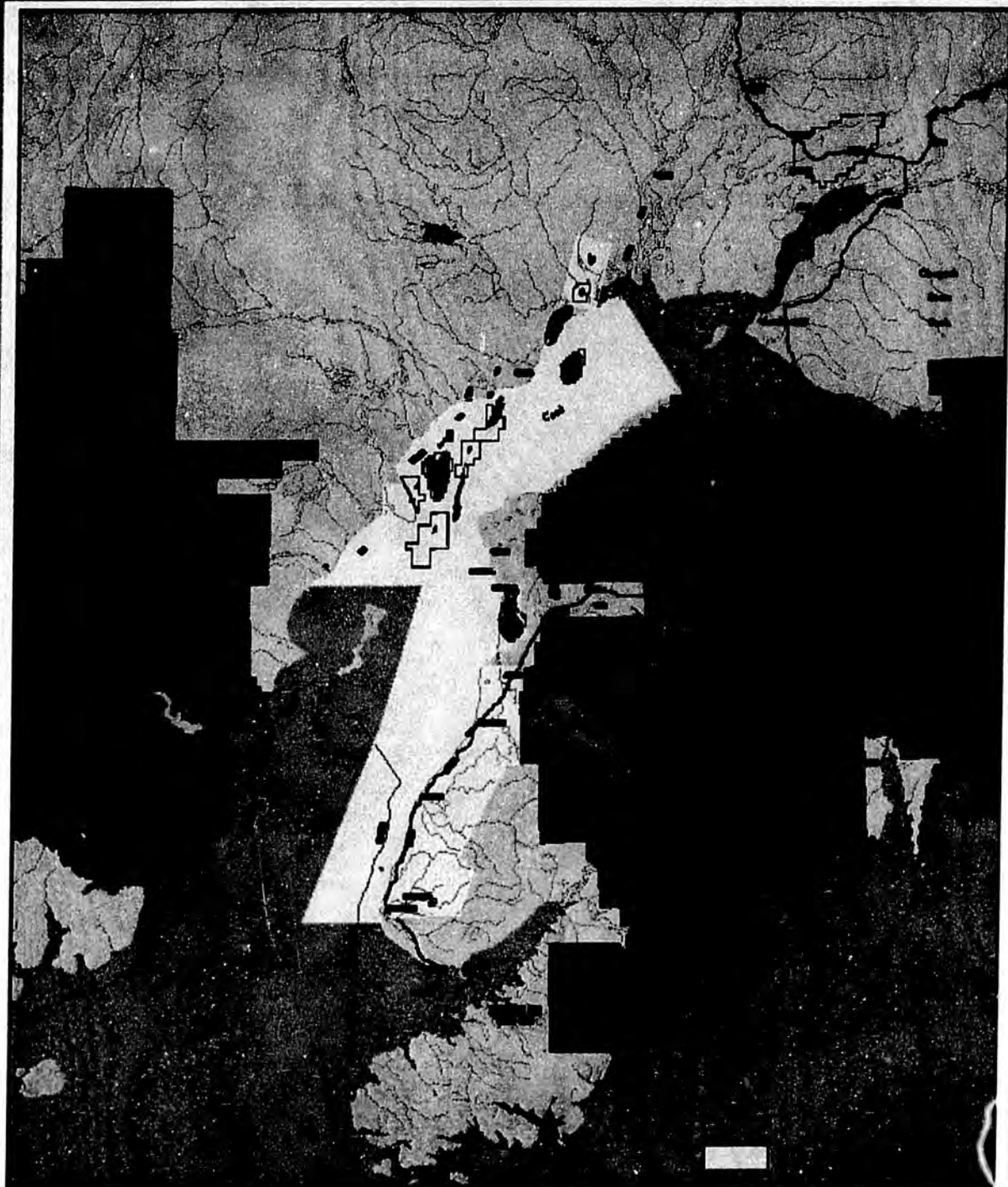


Submarine Fan Badami Depositional Model

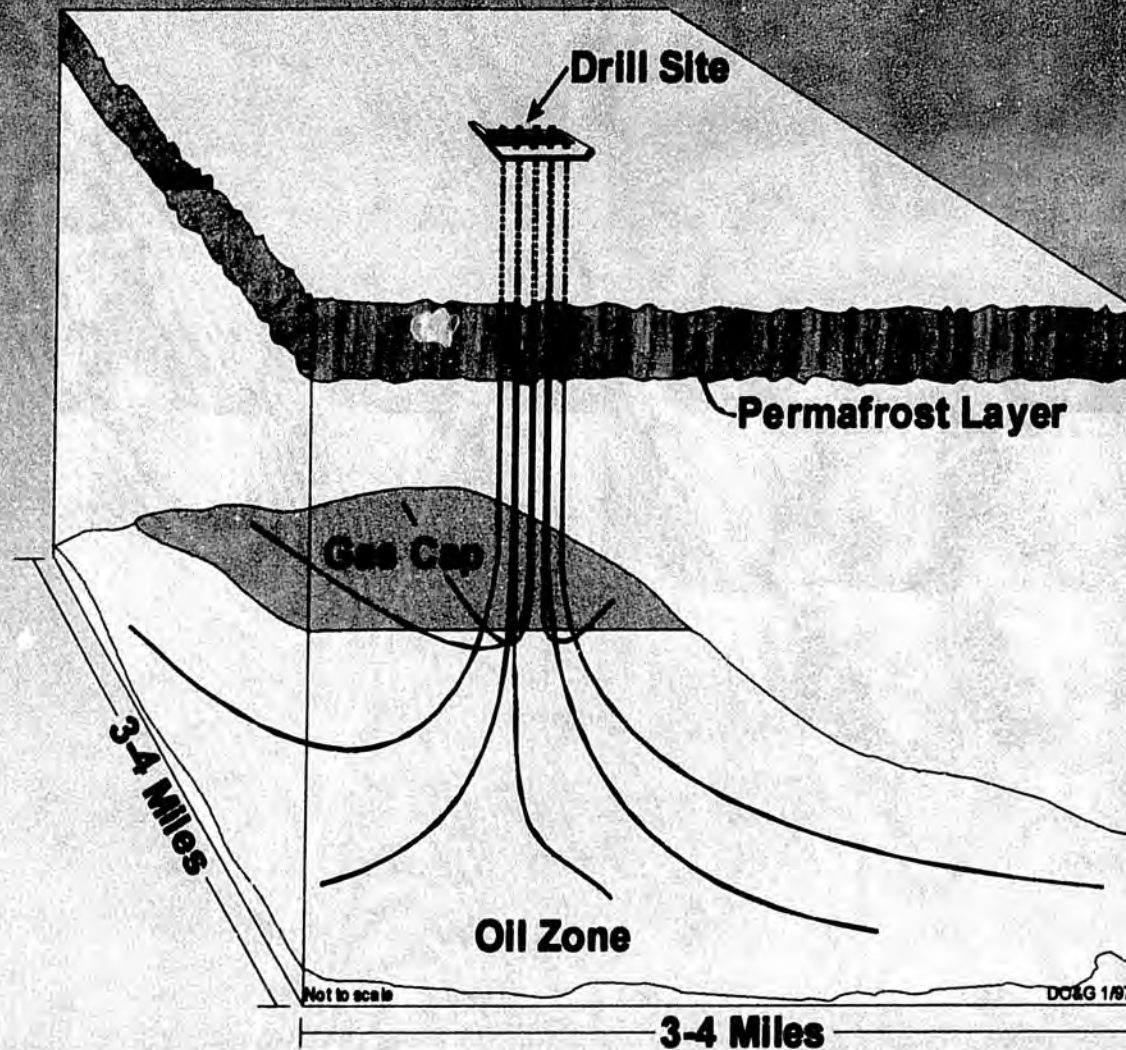




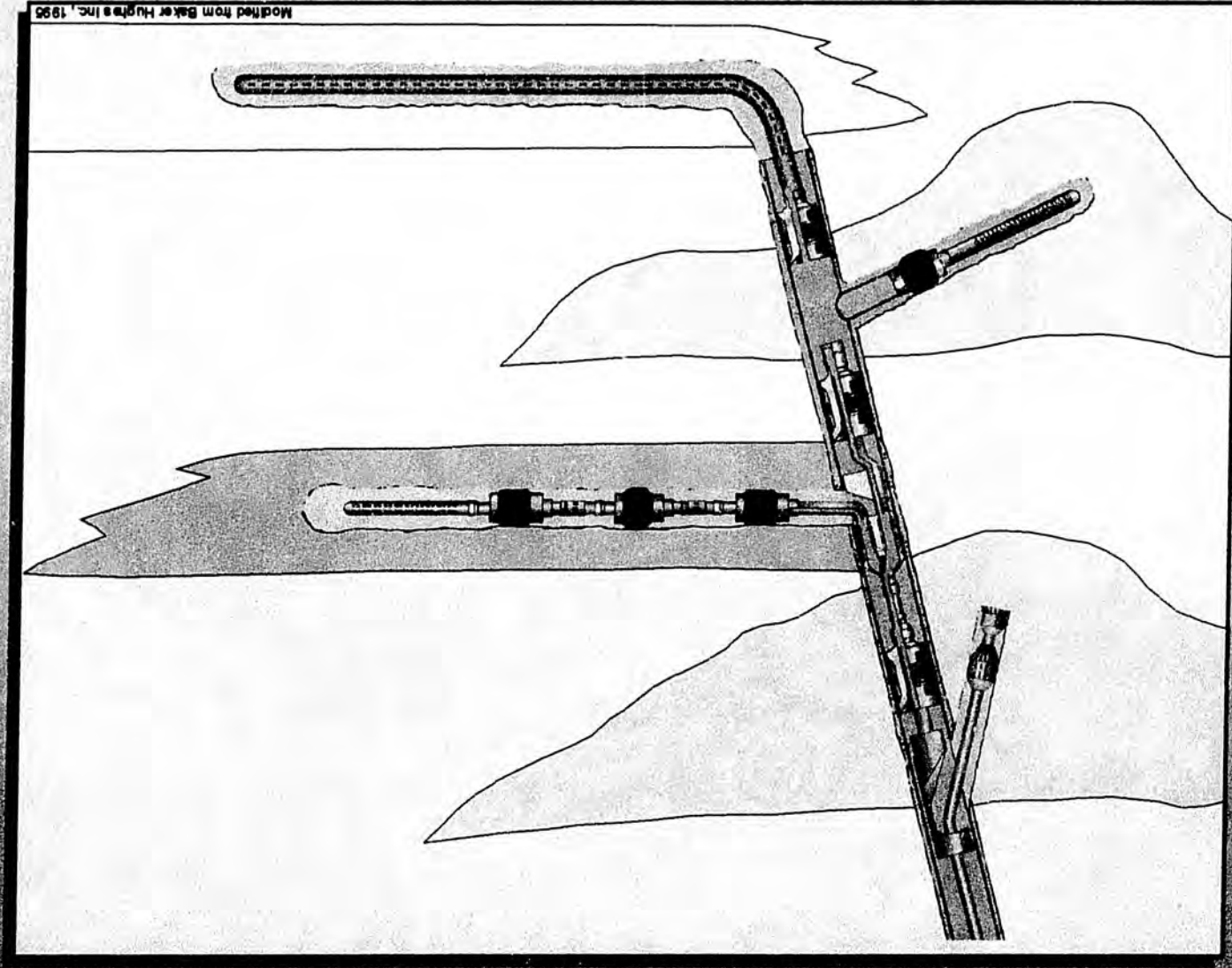
Survey Areas



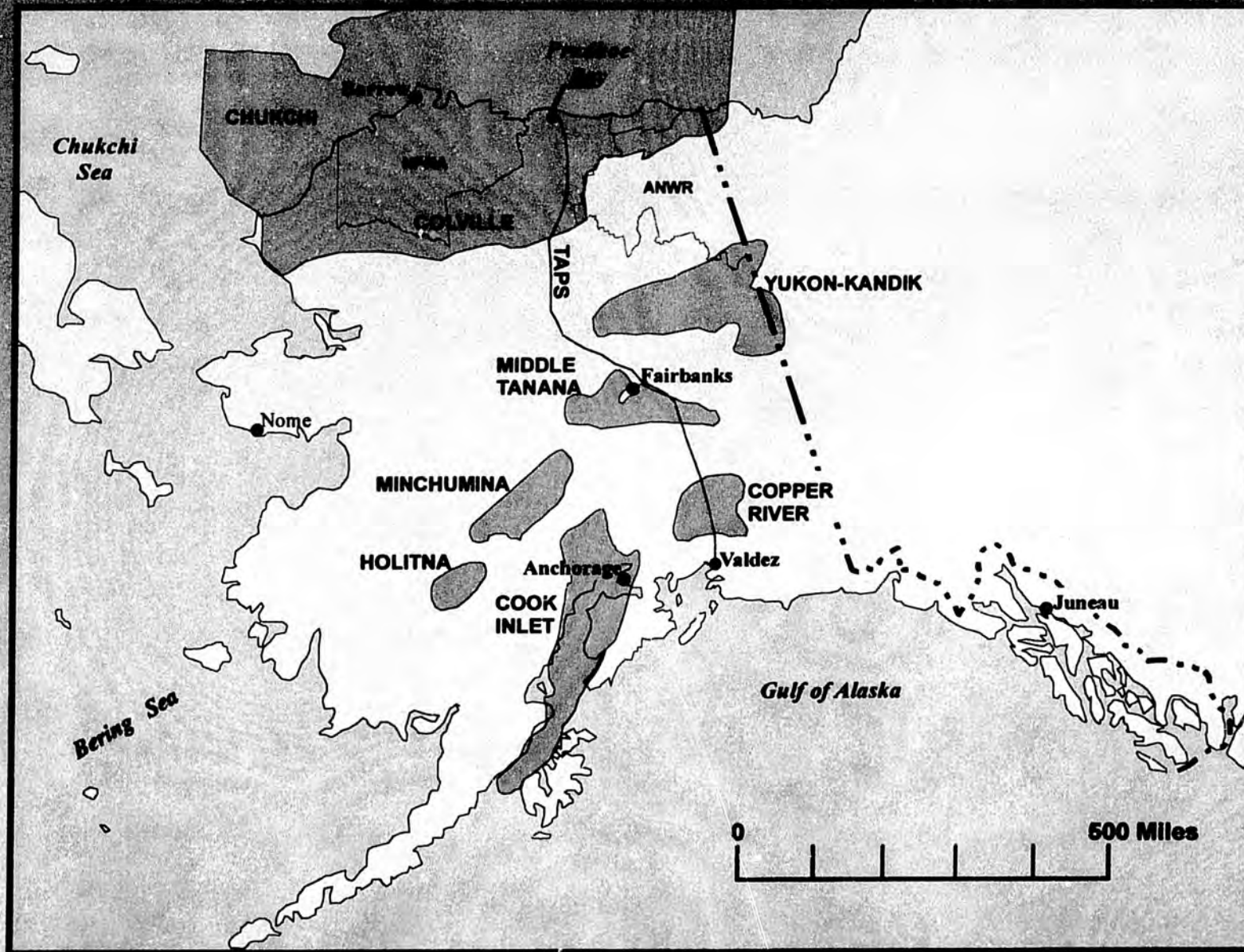
3-D View of North Slope Development Pad



Multi-Lateral Wellbore Completions



Alaska's Oil and Gas Reserves



1,200 m of Tertiary cover

- Basin structural style – Intermontane foreland
- No. of exploration wells drilled – Eleven
- Identified plays – Anticlines in Jurassic through Cretaceous clastics and carbonates, Tertiary coalbed gas
- Reservoirs – Naknek, Nelchina, and lower Matanuska formations
- Source – Mid-Jurassic marine shales, marine McCarthy Fm. shale and limestone, lower Matanuska Fm. shales
- Reported oil and gas shows – Minor oil and gas shows, more significant gas shows from Cretaceous in two wells
- Comments – Thick Cretaceous flysch, thin Tertiary cover

CORRECTION

**THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION**



Central Microfilm Services
Department of Education & Early Development
State of Alaska

Copper River Basin Petroleum Geology

- Area – 13,200 km²
- Basin fill – 2,700 m of Middle Jurassic through early Cretaceous sediments, 4,300 m of Early and Late Cretaceous flysch, and 1,200 m of Tertiary sediment
- Basin structural style – Intermontane lowland
- No. of exploration wells drilled – Eleven
- Identified plays – Anticlines in Jurassic through Cretaceous clastics and carbonates, Tertiary coalbed gas
- Reservoirs – Naknek, Nelchina, and lower Matanuska formations
- Source – Mid-Jurassic marine shales, marine McCarthy Fm. shale and limestone, lower Matanuska Fm. shales
- Reported oil and gas shows – Minor oil and gas shows, more significant gas shows from Cretaceous in two wells
- Comments – Thick Cretaceous flysch, thin Tertiary cover

Areawide Lease Sales

North Slope

- 3 Sales Held: 1998, 1999 & 2000
- 1.4 Million Acres Leased
- \$65 Million in Bonus Bids
- 1.9 Million Acres Under Lease
- 6 Sales Proposed Over Next 5 Years

Cook Inlet

- 2 Sales Held: 1999 & 2000
- 215,000 Acres Leased
- \$2.3 Million in Bonus Bids
- 716,000 Acres Under Lease
- 5 Sales Proposed Over Next 5 years

Beaufort Sea

- 1 Sale Held: 2000
- 33,900 Acres Leased
- \$440,000 in Bonus Bids
- 839,000 Acres Under Lease
- 5 Sales Proposed Over Next 5 Years

Oil and Gas Lease Sales: Major Issues

Cook Inlet

- **Beluga Whale Habitat**
 - Leasing deferred on 136 tracts
 - Cannot lease deferred tracts without court approval
 - Waiting for NMFS to develop a conservation plan

Beaufort Sea

- **Bowhead Whales**
 - Leasing deferred on 57 tracts
- **Oil & Gas Transportation -- ANWR & portions of NPRA off limits**
- **Oil Spill Cleanup during periods of broken ice**

Shallow Natural Gas Leasing

Statewide Program

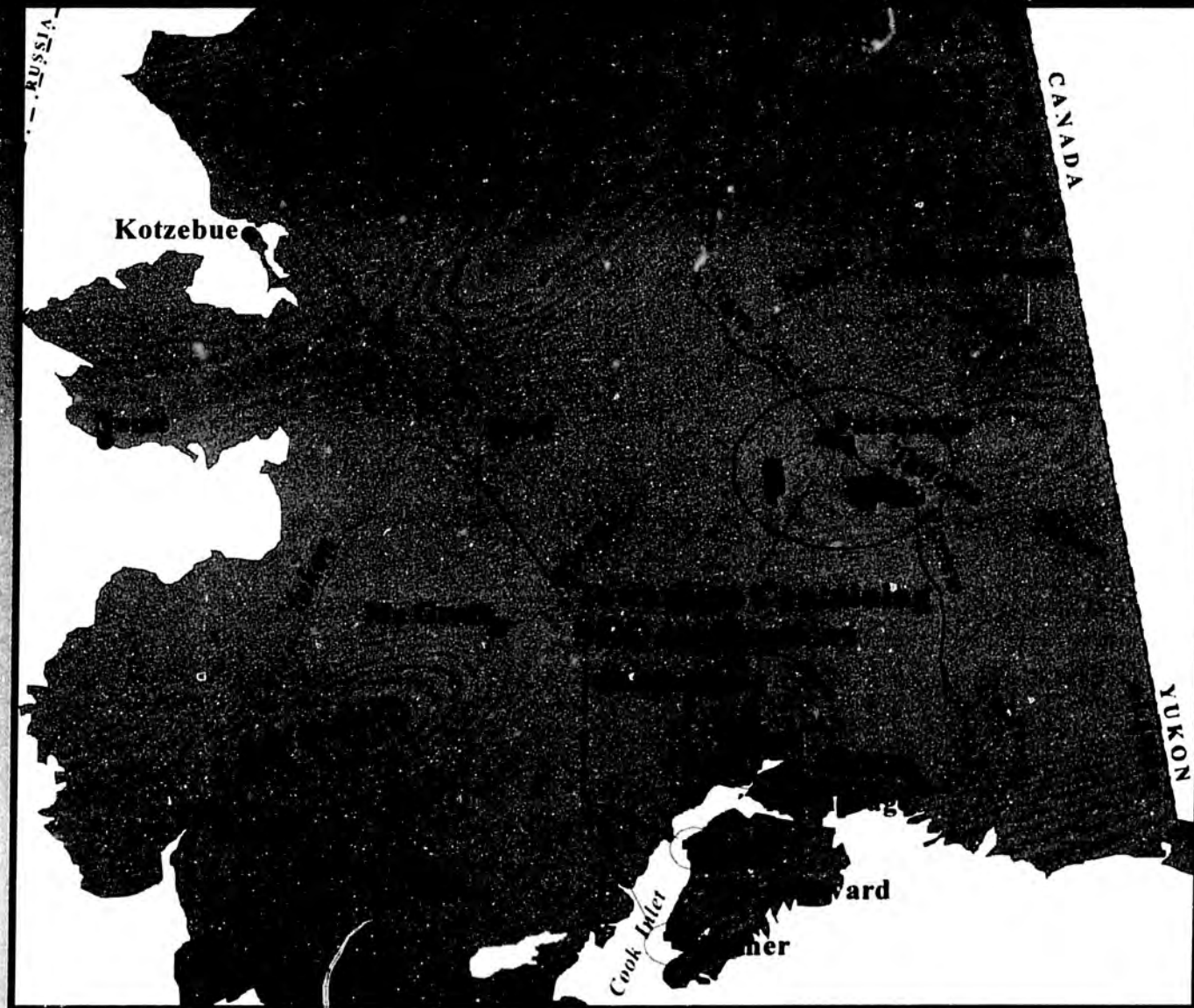
- **Allows drilling down to a depth of 3000 ft.**
- **Excludes areas included in Oil & Gas Leasing Program**
- **Purpose**
 - **Provide energy supply to rural areas**
 - **Encourage exploration in remote areas**
 - **Supplement declining Cook Inlet reserves**

Incentives

- **Reduced rents -- 50 cents/acre**
- **Reduced royalty -- 6.25%**
- **First-come, first-served**
- **No bonus bid, \$500 application fee only**
- **Exempt from c-plan**
- **Exempt from Best Interest Finding**
- **Reduced financial responsibility requirement**
- **Exempt from waste discharge permit during drilling**

Applications to Date -- 302

- **Northwest Arctic - 8 (Red Dog Mine)**
- **Interior - 100 (Nenana, Fairbanks, Big Delta)**
- **Railbelt - 194 (Talkeetna to Homer)**



Exploration Licensing

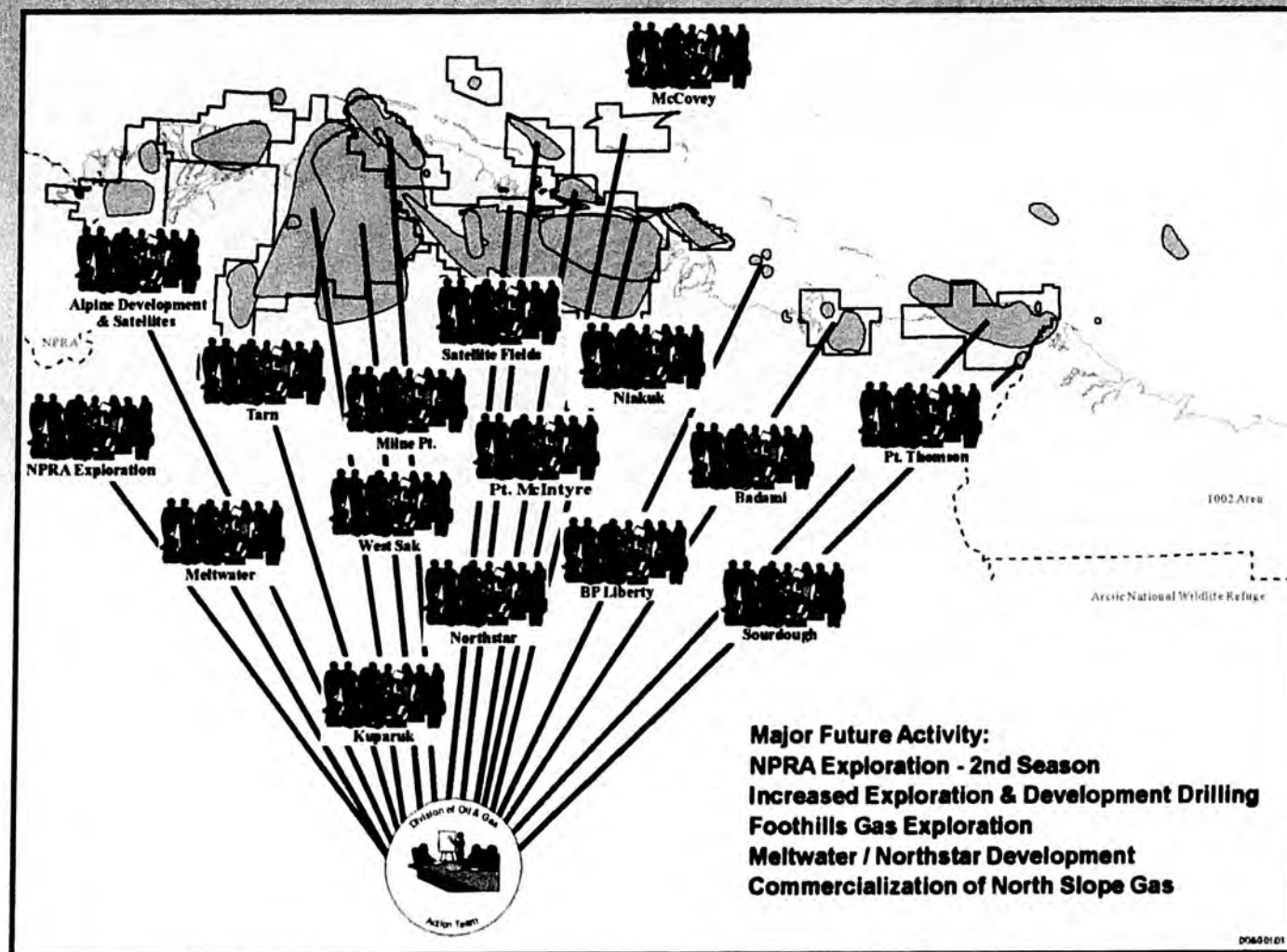
Issued -- Copper River Basin

- **State's first license: Issued October 1, 2000**
- **Anschutz Exploration Corp**
- **318,756 Acres**
- **Exploration commitment: \$1.42 million**
- **Term of license: 5 years**

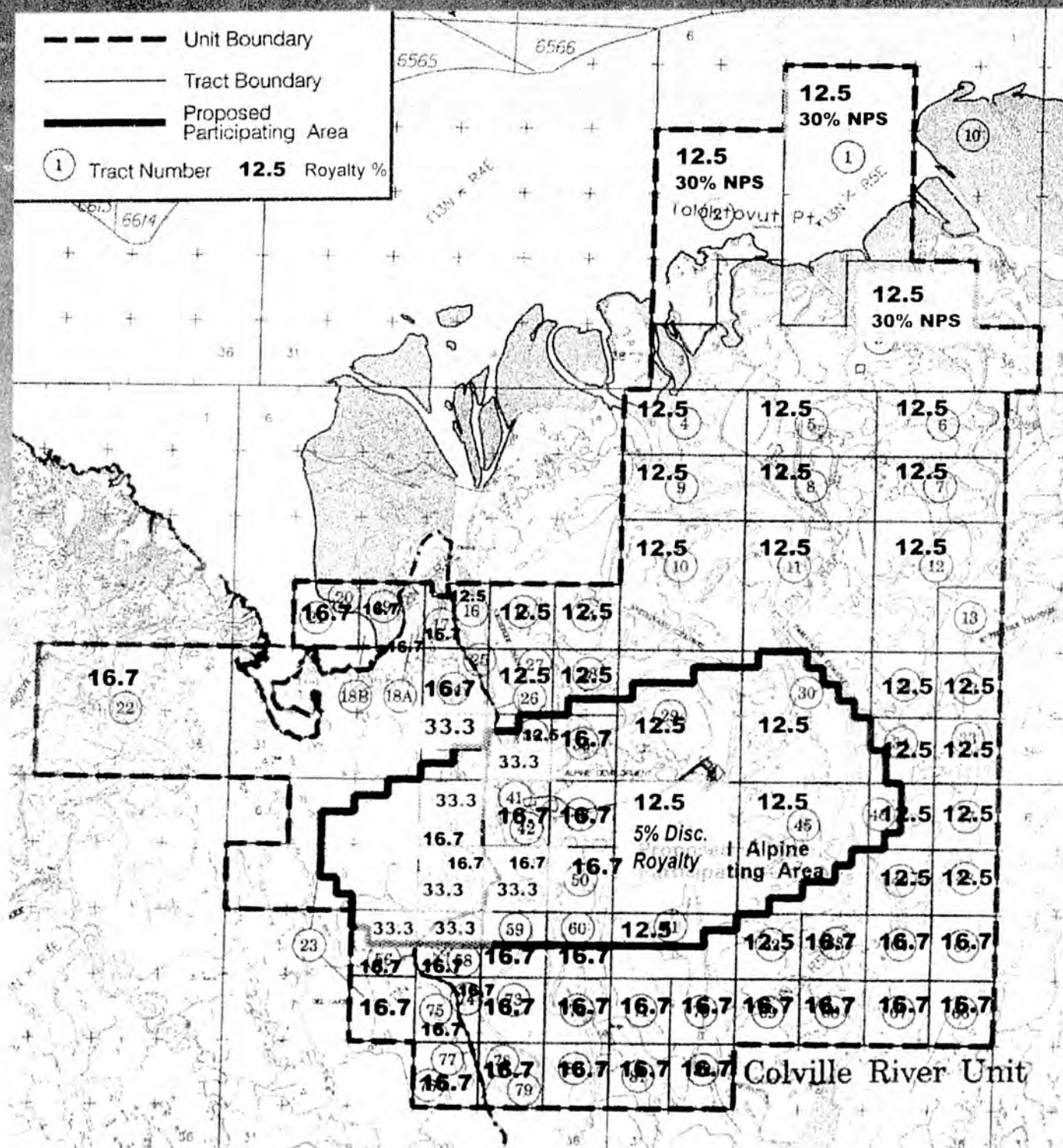
Proposed -- Susitna Valley

- **Forest Oil Corp (Forcenergy Inc.) submitted two proposals**
- **474,240 Acres each, located west of the Susitna River**
- **Exploration commitment for each: \$3 million**
- **DNR will determine terms of licenses & final configurations**
- **Preliminary Best Interest Finding (BIF) to be issued in April**
- **Final BIF and Decision to be issued in October**

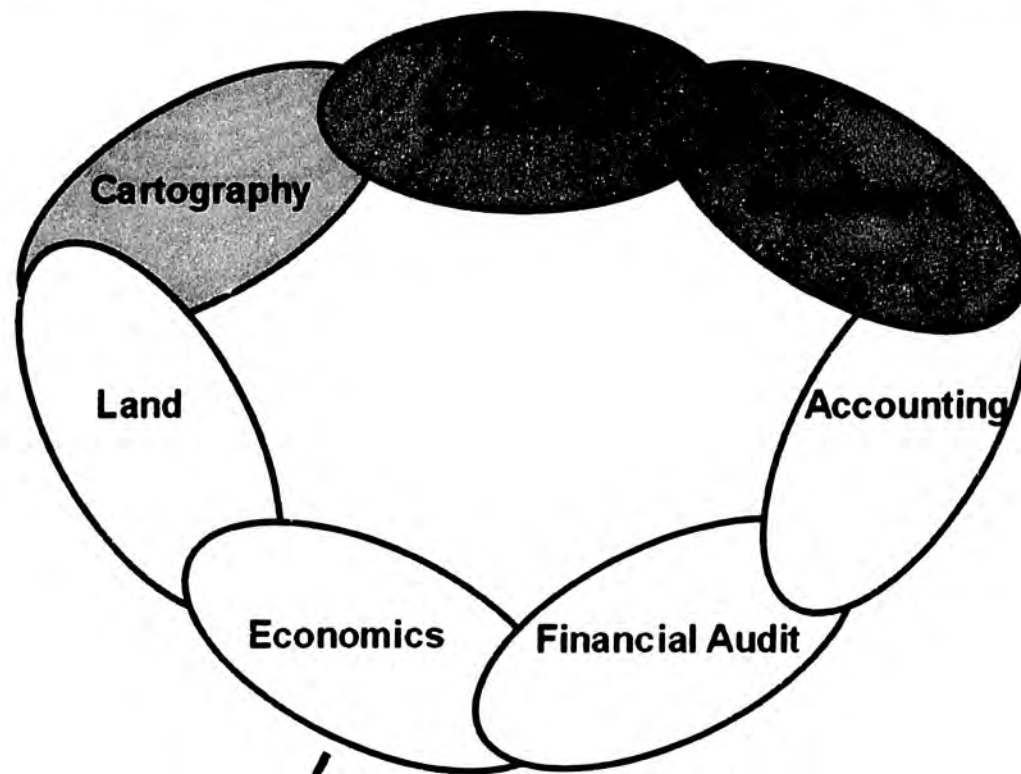
Invigorated Oil & Gas Industry Company Asset Teams Inundate Division



Colville River Unit Royalty Rates and Lease Terms



Division of Oil and
Gas Organization
Links Affect the
Bottom Line

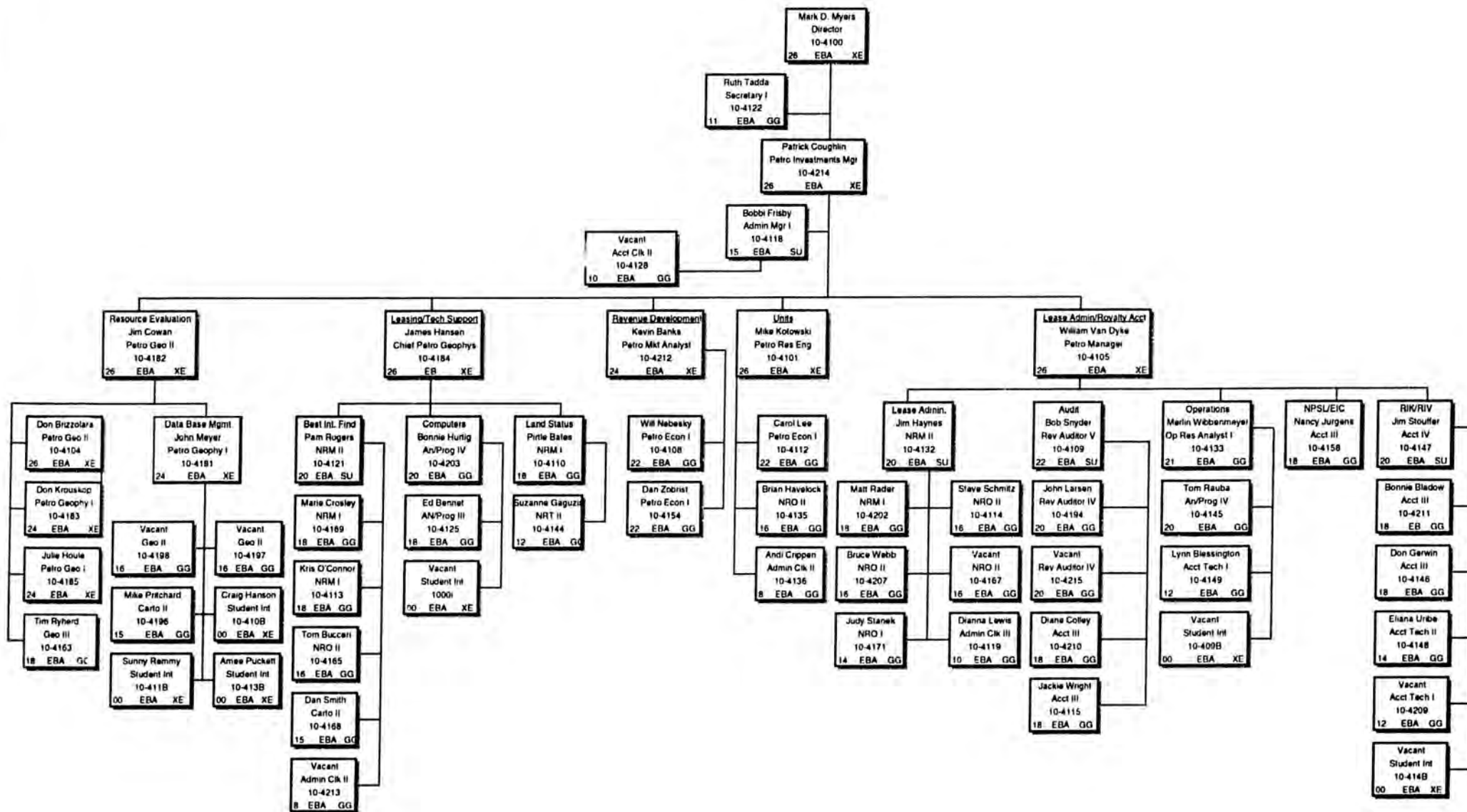


Oil and Gas Unit
and Participating
Area Decisions

→ **Royalty \$\$**

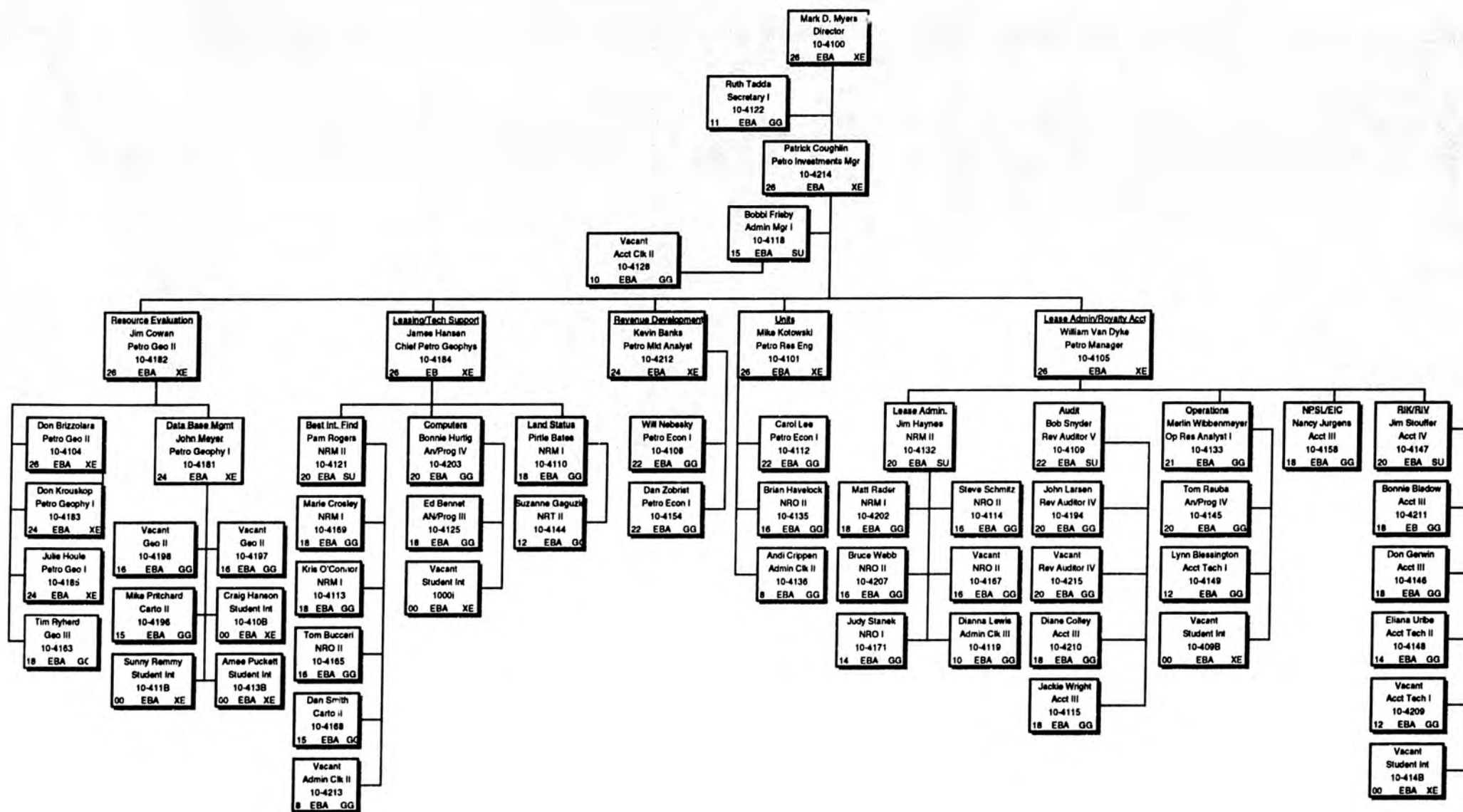
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS



DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS



State-Federal Comparison Activity, Staffing and Budgets for Oil and Gas Agencies⁽¹⁾

	<u>State DO&G</u>	<u>Federal</u> ⁽²⁾
Active Leases	1,202	171
Active Units	30	11
Producing Leases	320	38 ⁽³⁾
Annual Oil Production ...	462.6 mmbbls	1.0 mmbbls ⁽⁴⁾
Number of Employees	53	87 ⁽⁵⁾
Annual Budget	\$4.3	\$8.4 million

(1) all figures based on 1999 data

(2) combines MMS and BLM; does not include federal royalty accounting group in Denver

(3) all producing leases are in Cook Inlet, mostly gas production

(4) million barrels

(5) includes 80 MMS employees and 7 BLM employees

MEMORANDUM
DEPARTMENT OF NATURAL RESOURCES

State of Alaska
DIVISION OF OIL AND GAS

TO: Ken Boyd
Director

DATE: January 8, 2001

FROM: Patrick J. Coughlin
Deputy Director

TELEPHONE: 269-8800

SUBJECT: Salaries

The division's senior level managers and technical staff are grossly undercompensated relative to their peers in industry and government. This low salary level has been noted by the legislature's own consultants. For example, a KPMG salary survey conducted for LB&A examined the salaries of 92 state jobs. It concluded that only two job classifications, one of which was the geologist classification, were compensated below market range. The legislature's privatization study noted that the division's senior level employees appeared to be undercompensated. Industry and government data demonstrate the low level of compensation. In order to attract and keep qualified personnel, we need to pay competitive salaries and we are not.

The following table compares the salaries of various senior employees within the division with their counterparts in industry and the local MMS office. The table illustrates the problem.

Location	Position	Base Salary	Bonus/Cola	Total	% (under)
Alaska	Director	93,384	0	93,384	na
MMS	Regional Director	100,000	33,000	133,000	-42
Industry Av	Manager (+20 yrs)	112,921	34,616	139,535	-49
Alaska	Engineer (+20 yrs)	90,012	0	90,012	na
MMS	Engineer (+20 yrs)	85,774	28,305	114,079	-27
Industry Av	Engineer (+20 yrs)	97,035	34,616	131,651	-45
Alaska	Geologist (+20 yrs)	75,036	0	75,036	na
MMS	Geologist (+20 yrs)	72,586	23,953	96,539	-29
Industry Av	Geologist (+20 yrs)	106,600	34,616	141,216	-88
Alaska	Economist (+18 yrs)	75,036	0	75,036	na
MMS	Economist (+18 yrs)	85,774	28,305	114,079	-52
Industry Av	Not Available				

The MMS figures are exact. The industry engineer and management salary and bonus are based on 1998 SPE data. The industry geology salary is based on 1999 AAPG data. The bonus is estimated using SPE data. The industry average figures are conservative because they do not include Alaska Cola paid by the most oil companies.



State of Alaska

Division of Oil and Gas

Department of Natural Resources

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Welcome to the Division

Mark D. Myers, Director

Welcome to the Division of Oil and Gas. Alaskans and computer users throughout the world have gained a new way to obtain information about the Division of Oil and Gas. I hope you will find this "home page" both useful and informative.

First let me introduce you to the Division of Oil and Gas. We are the agency within state government that is responsible for the leasing of state lands for oil and gas exploration. We do this by implementing innovative new programs to encourage exploration on state and private lands. We ensure the continued flow of state revenues through monitoring and auditing subsequent lease and unit agreement operations, including accounting for oil and gas rental and royalty payments and continuing to promote new opportunities for the sale of royalty oil and gas.

The Division's programs enable Alaskans to enjoy low taxes, continued growth of the Permanent Fund and direct and indirect employment as a result of oil and gas development and subsequent state and local spending.

The Division's "customers" are all of the residents of Alaska who benefit from the availability of oil and gas revenues for education, public safety, revenue sharing to communities, capital improvement projects, the Permanent Fund and other state and local programs.

The primary services of the Division of Oil and Gas are: (1) ensuring that promising oil and gas lands are made available for competitive leasing on a timely and predictable basis, and the state receives full value for the sale of these resources; (2) advancing innovative programs such as exploration licensing and expanded exploration incentive credits that will promote exploration and development on both state and private lands in frontier interior basins; (3) ensuring that all royalty, rental and bonus revenues due the state from leasing and production are received, and that shared federal royalties are properly received and allocated; (4) ensuring that the surface operations of lessees and permittees are conducted in an environmentally, socially, and economically sound manner; (5) advocating petroleum resource development throughout the state; (6) developing and advocating marketing strategies for Alaska oil and gas, including negotiating royalty oil purchase agreements with in-state refineries; and (7) providing technical and policy support on oil and gas issues for the DNR Commissioner's and Governor's office and Alaska's congressional delegation.



State of Alaska
Division of Oil and Gas
Department of Natural Resources

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Some State Statutes & Regulations
Related to Oil and Gas

[HOME PAGE](#)[WELCOME](#)[O&G STATUTES](#)[DEFINITIONS](#)

Statutes

Public Land

Authority and duties of the commissioner.

Sec. 38.05.020:

Powers and duties of the director.

Sec. 38.05.035:

Reservation.

Sec. 38.05.125:

Damages and posting of bond.

Sec. 38.05.130:

Applicability; Determination; Regulations.

Sec. 38.05.131:

Oil And Gas Exploration License.

Sec. 38.05.132:

License Procedures.

Sec. 38.05.133:

Conversion To Lease.

Sec. 38.05.134:

Leasing Generally; Payments And Interest.

Sec. 38.05.135:

Limitations.

Sec. 38.05.140:

Leasing Procedure.

Sec. 38.05.145:

Shallow Natural Gas Leases.

Sec. 38.05.177:

Oil and Gas Leasing.

Sec. 38.05.180:

Qualifications.

Sec. 38.05.190:

Deposits.

Sec. 38.05.860:

Assignment.

Sec. 38.05.920:

Notice.

Sec. 38.05.945:

Public Resources

Exploration incentive credits.

Sec. 41.09.010:

Duties and powers of Department of Natural Resources; limitations.

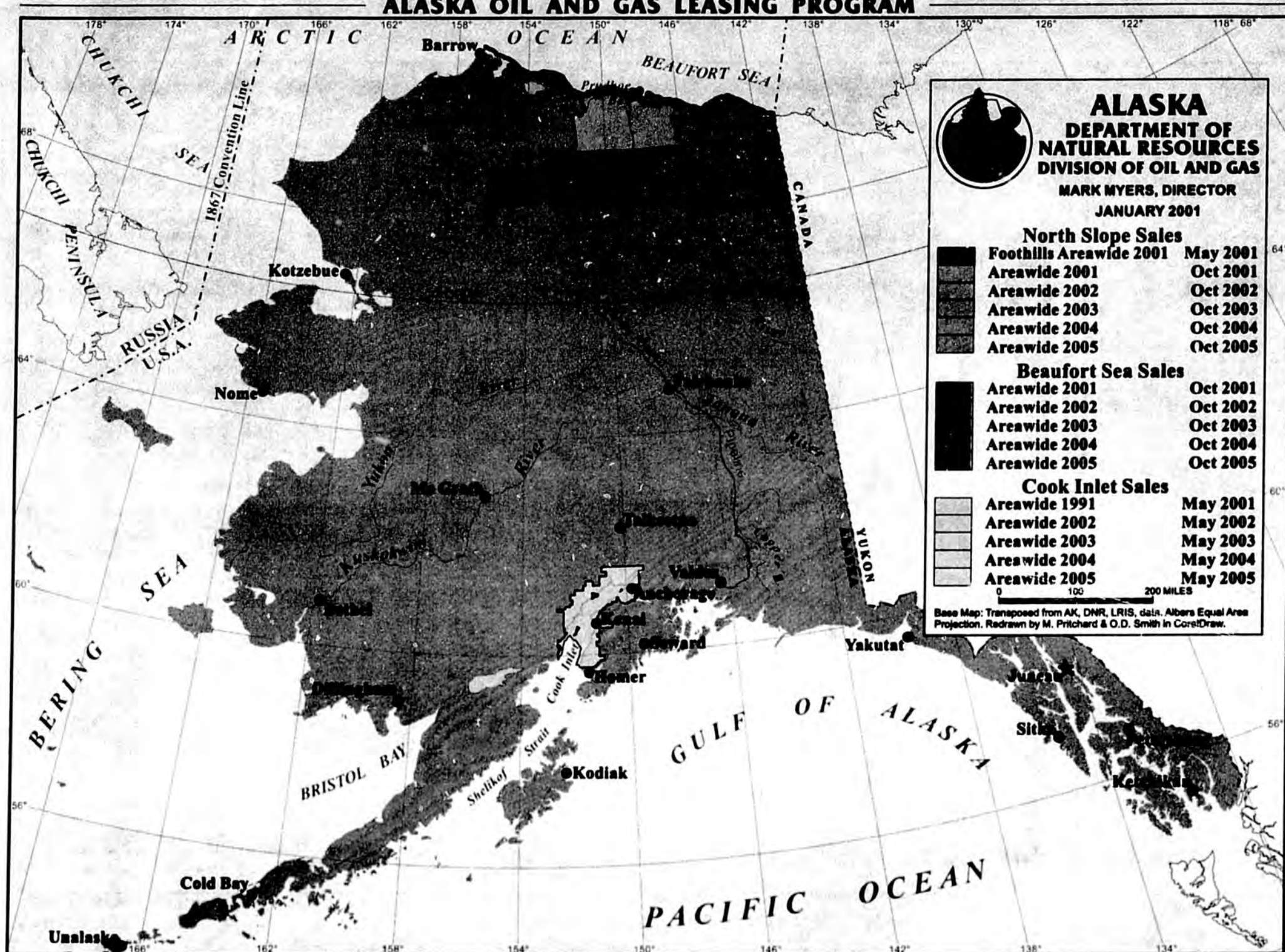
Sec. 41.21.020:

Regulations

Payment of O & G Royalties, Rents Competitive Bidding

and Bonuses.*Applicability.*11 AAC 04.010*Designated Payor.*11 AAC 04.020*Timing of Payments.*11 AAC 04.030*Supporting Documentation for Payments.*11 AAC 04.040*Methods of Payment; Payment Application.*11 AAC 04.050*Refunds and Credits.*11 AAC 04.060*Interest Payments.*11 AAC 04.070*Administrative Fee for Incomplete Royalty Reporting.*11 AAC 04.080*Waiver of Administrative Fee.*11 AAC 04.090*Appeal.*11 AAC 04.100*Definitions.*11 AAC 04.199**Fees For Departmental Services***Fees.*11 AAC 05.010**Mineral Leasing****Procedure***Qualifications.*11 AAC 82.200.*Statement Of Qualifications.*11 AAC 82.205.**Acreage Limitations***Chargeable Acreage.*11 AAC 82.300.*Statements.*11 AAC 82.305.**Unitization***Unit Plan Of Operations*11 AAC 83.346.*Certification Of Well Test Results.*11 AAC 83.361.**Exploration Incentive Credit***Exploration Incentive Credits.*11 AAC 83.800.**Practice and Procedure***Applicability.*11 AAC 88.100.*Applications.*11 AAC 88.105.*Withdrawal Of Applications.**Parcels Offered For Competitive Lease.*11 AAC 82.400.*Method Of Bidding.*11 AAC 82.405.*Minimum Bid.*11 AAC 82.410.*Public Notice.*11 AAC 82.415.*Bid Form.*11 AAC 82.420.*Bid Deposit.*11 AAC 82.425.*Qualification Of Bidders.*11 AAC 82.428.*Joint Bids.*11 AAC 82.430.*Bids At Public Auction.*11 AAC 82.435.*Opening Bids, Holding Auctions.*11 AAC 82.440.*Incomplete Bids.*11 AAC 82.445.*Rejection Of Bids.*11 AAC 82.450.*Tie Bids.*11 AAC 82.455.*Additional Information.*11 AAC 82.460.*Bonus; Rental; Bond.*11 AAC 82.465.*Issuance Of Lease.*11 AAC 82.470.*Return Of Deposits.*11 AAC 82.475.**Miscellaneous Leasing Procedure***Bonding.*11 AAC 82.600.*Assignments.*11 AAC 82.605.*Permits Or Leases Segregated**By Partial Assignment.*11 AAC 82.610.*Application For Approval Of Assignment.*11 AAC 82.615.*Transfer By Death.*11 AAC 82.620.*Effective Date Of Assignments.*11 AAC 82.625.*Responsibility.*11 AAC 82.630.**General Oil and Gas Lease Provisions***Plan Of Operations.*11 AAC 83.158.*Failure To Pay Rental.*11 AAC 83.170.*Reinstatement.*11 AAC 83.175.**Miscellaneous Land Use***Operations; Drilling Permits*

ALASKA OIL AND GAS LEASING PROGRAM



FIVE-YEAR OIL AND GAS LEASING PROGRAM PUBLIC NOTIFICATION SCHEDULE



A - Sale Added to Schedule.
C - Call for Comments:
Request for New Information Made Available Since Last Finding.
E - End of Comment Period.
P - Preliminary Best Interest Finding /
ACMP Consistency Analysis.

F - Final Finding and Notice of Sale and Terms.
F - Supplement to Final Finding and/or Notice of Sale and Terms.
S - Sale.

Visit our Website at "www.dog.dnr.state.ak.us/oil"