

SCOMM

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FISCAL NOTE

STATE OF ALASKA

1992 LEGISLATIVE SESSION

BILL NO. SB 460Revision Date: 3-Apr-92Department Affected: Natural ResourcesTitle: Oil and Gas Exploration LicensesBRU: Petroleum ManagementComponents: Petroleum ManagementSponsor: Senate Rules by RequestRequestor: Senate Oil and Gas

COMPONENT SERIAL NO.

439

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	0.0	0.0	0.0	0.0	0.0	0.0
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
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REVENUE						
Funding Source:	0.0	0.0	0.0	0.0	0.0	0.0

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
Funding Source:						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME	0.0	0.0	0.0	0.0	0.0	0.0
PART-TIME	0.0	0.0	0.0	0.0	0.0	0.0
TEMPORARY	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of Current year impact:

No additional funds necessary

ANALYSIS: (Attach a separate page if necessary)

The oil and gas exploration license program established by this bill could lead to new discoveries of oil and gas on State land, and as a result, significantly increase State revenues. Existing staff will implement and manage the program.

Prepared by: Bob LoefflerPhone: 762-2578Division: Oil and GasDate: 3-Apr-92Approved by Commissioner: Harold C. HeinzeDate: 3-Apr-92Agency: Department of Natural Resources

Distribution (by preparer) : Legislative Finance, legislative Sponsor, Requestor, OMB,
& Impacted Agency(ies).

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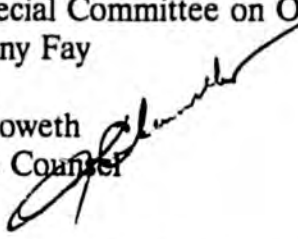
MEMORANDUM

March 23, 1992

SUBJECT: Oil and gas exploration licenses and related leasing methods
(Work Order No. 7-LS2149D)

TO: Senator Sam Cotten, Chair
Senate Special Committee on Oil and Gas
Attn: Ginny Fay

FROM: Jack Chenoweth
Legislative Counsel



Since time is of the essence and you and the personnel of the Division of Oil and Gas who participated in Thursday's teleconference agree that the committee should give the substance of the proposed measure careful attention, I am sending this along, warts and all. It is a bill that does, indeed, require more work.

Per expectation of the Division of Oil and Gas, I settled the new section, bill section 1 authorizing exploratory licenses, ahead of the current statutes (AS 38.05.-135 - 38.05.184, collectively designated as Article 6 of AS 38.05) that direct state leasing of its mineral lands. Frankly, I think it may be a mistake to place this provision outside Article 6, for by doing so, none of the substantive provisions of AS 38.05.135 - 38.05.184 necessarily applies to the exploratory licenses and, more significantly, none of them applies to leasing activities commenced on the basis of exploratory licensing.

I'm worried that proposed AS 38.05.133(a) says nothing about who may be a "qualified applicant." Omitted from the subsection, too, is any requirement that the commissioner of natural resources will provide advance public notice that the department will receive license applications. In the model I was asked to work from, delivered to me on Friday, the department has deleted even reference to licensing on a competitive basis. Consequently, there are no statutory criteria offered as to award of licenses, on any basis, and precious little provided to guide the commissioner on what factors to consider in evaluating applications. (At least under the regular leasing provision of current law, AS 38.05.180(f), the commissioner must report how the anticipated bidding procedure will be in accord with the best interests of the state.)

Senator Sam Cotten

March 23, 1992

Page 2

In Thursday's teleconference, you touched on the omission of the scope of the licensee's work commitment. In response, division personnel related that, at a minimum, they would expect the commitment include completion of seismic work, reporting of seismic data, and drilling of necessary wells. Rather than rely on insertion of these requirements in regulation, the legislature may want to set out the anticipated minimum requirements in the legislation.

In (b)(1), is the 2,500,000 acre maximum defensible when division personnel suggested that the more likely maximum would be 600,000 acres, or roughly only one-quarter that size?

Proposed AS 38.05.133(b)(3) mentions a bond. The bond must at least equal "the estimated cost of completion of the activity under the approved exploration plan and work commitment." It seemed clear to me on the basis of the teleconference that the bond requirement did not reach to reclamation costs and expenses of habitat rehabilitation. If you want those to be covered, they should be inserted.

Under (b)(4), termination is authorized, but basic due process provisions--notice and an opportunity to contest a proposed finding--are not included.

With respect to proposed AS 38.05.133(c), there is no guidance provided as to what "part of the land subject to the license" may be leased--division personnel alluded to a decision based on the reported structural formation and, by implication, indicated that the area to be leased would include the likeliest prospects for recovery.

With respect to proposed AS 38.05.133(d), there is no language offered to indicate the basis for the commissioner's decision to award a lease and nothing to indicate what might be meant by "condition[ing] a lease upon other payments to the state."

The division personnel indicated that they would anticipate loading into the exploration license agreement (that is, up front, at the beginning) some tie to the kind of lease terms that would be imposed if a lease were eventually to be entered into under (c) and (d). While, upon reflection, those who spoke may find that front end guessing to be unworkable, if it can be done, the committee may want to consider making it a requirement.

Bill sections 2 and 3 are drawn from the earlier draft and are unobjectionable. Since the license provision mentions that a lease under proposed AS 38.05.133 would be exempt from the acreage limitation of AS 38.05.180(m), I carried that change forward from the earlier draft where it had appeared as bill section 4.

JBC:LMB
92-072.lmb

Enclosure

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

WALTER J. HICKEL, GOVERNOR

400 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1796
PHONE: (907) 465-2400
FACSIMILE: (907) 586-2754

April 6, 1992

The Honorable Sam Cotten, Chair
Senate Special Committee for Oil and Gas
State Capitol
Juneau, AK 99811-1182

Dear Senator Cotten:

Subject: Senate Bill 460, which establishes an oil and gas exploration license and leasing program.

Position: The Department of Natural Resources supports this bill because it will encourage exploration of state land that industry is not interested in exploring under current oil and gas leasing methods. Oil and gas discoveries under this new program will return royalty and tax dollars to the state, provide jobs for Alaska's residents, and increase the tax base for local governments.

Background: In areas of Alaska where there is a significant probability of discovering oil and gas, the level of risk justifies the large up-front investment (bonus bids, lease rentals, etc.) industry must make to acquire targeted acreage under the existing oil and gas leasing program. But in areas where the potential is low or unknown, appropriate areas to lease cannot be identified and the level of risk does not justify the large up-front expenditures. As a result, the interior basins of Alaska remain largely unexplored for oil and gas.

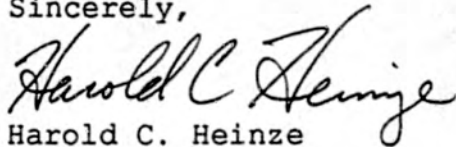
The exploration license and leasing program established in this bill would encourage industry to explore areas of low or unknown potential such as the Copper River or Yukon-Kandik basins. Up-front expenses would be greatly reduced because bonus bids would not be required. Very large tracts would be available for exploration, increasing the probability of finding oil somewhere in the area.

A company would "bid" on an area with a work commitment. The company or companies with the "best" work program would win the right to explore the acreage. The best program would generally be one which used a variety of exploration techniques in a relatively short period of time. If oil or gas is found, the licensed company would have the right to produce it. The state would receive its agreed upon royalty share. Finding oil on state land could increase interest in adjacent federal or private land. The state also shares in revenues from private and federal land through taxes and in some cases royalties.

Recommendation: Work with the Administration and industry to craft a bill that meets state and industry needs and concerns. We have

enclosed a suggested amendment for your information.

Sincerely,

A handwritten signature in cursive script, reading "Harold C. Heinze". The signature is written in dark ink and is positioned above the printed name and title.

Harold C. Heinze
Commissioner

cc: Paul Fuhs, Legislative Liaison, Office of the Governor

BRIEFING PACKAGE

**SENATE SPECIAL COMMITTEE
FOR OIL AND GAS**

SB 460

Exploration Licensing and Leasing Program

April 7, 1992

STATE OF ALASKA

DEPT. OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

WALTER J. HICKEL, GOVERNOR

P.O. BOX 107034
ANCHORAGE, ALASKA 99510-7034
PHONE: (907) 762-2553

Proposed Revision to SB 460, Large Block Exploration Licenses:

Proposed Revision (Deletion is ~~struck-out~~, proposed addition is *in italics*.)

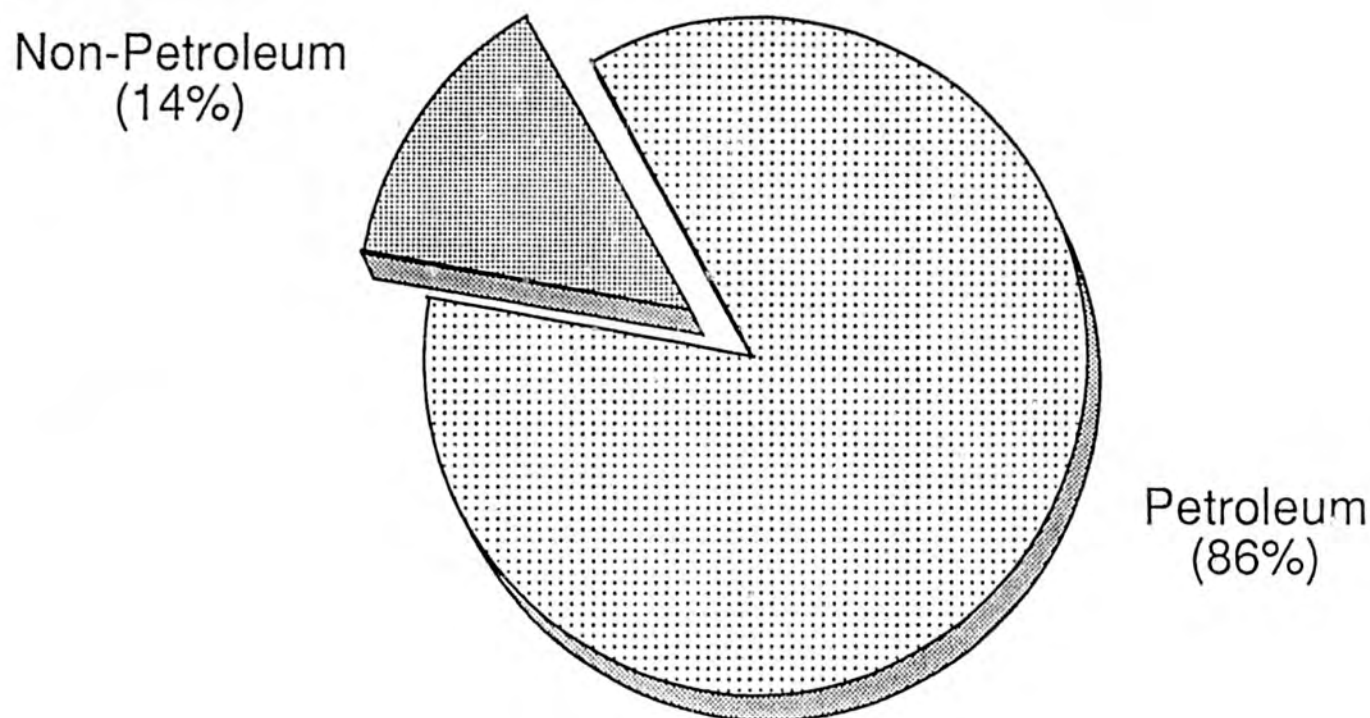
AS 38.05.133(c):

(c) *Upon making a discovery of oil or gas, and submitting a plan of development for the discovery which the commissioner determines is in the state's best interest, the licensee is entitled to a lease covering that portion of the licensed area containing the discovery. At any time during the term of the license, if the licensee submits a plan of development satisfactory to the commissioner, the commissioner may issue the licensee a lease of part of the land subject to the license.*—A lease awarded under this subsection is not subject to the acreage limitation imposed by AS 38.05.180(m).

Justification

In this proposal, the incentive for companies to "bid" work commitments in speculative oil and gas regions, is that if oil or gas is found, the exploring company will gain an exclusive right to the production. The present language in the bill does not provide that incentive. It makes the production rights subject to the discretion of the commissioner. Without a guarantee that rights will follow from a discovery, there is little incentive to spend exploration funds. The proposed revision reestablishes the incentive, giving the commissioner direction to ensure an adequate plan to develop the discovered oil or gas. (The commissioner's decision is analogous to what happens during unitization of a discovery.)

Where Our Money Comes From



Major Sources of Income (In 1991):

BONUS:	\$38.3 Million
RENTS:	\$21.3 Million
ROYALTIES:	\$1.26 Billion
TAXES:	\$1.28 Billion

Invitation to Bid for Petroleum Acreage

Mongol Petroleum Company (MGT) is pleased to announce that contract areas in Eastern Mongolia will be offered on a production-sharing basis in 1992. These areas are located in the previously oil-producing East Govi basin and the Tamsag, Choybalsan, and Nyalga basins.

MGT and Western Geophysical are currently conducting a 1500-km speculative seismic survey over the East Govi, Tamsag, and Choybalsan basins. Purchase of the complete data package is a requirement for application in these three basins. The applications for all areas will be processed in four stages:

Stage 1

Application opening
June 1, 1992

Stage 2

Geological, geophysical, legal,
and fiscal evaluation
June 1 - Nov. 15, 1992

Stage 3

Application closing
Nov. 16 - Dec. 15, 1992

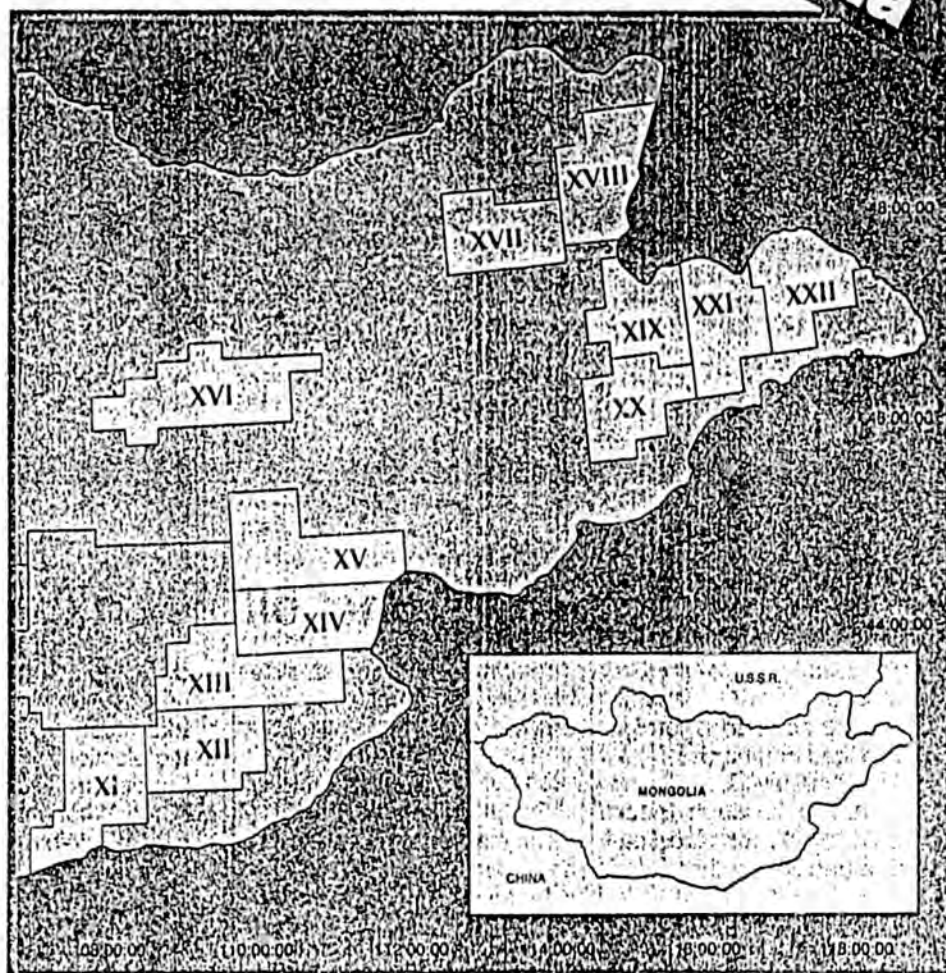
Stage 4

Contract negotiation and award
Jan. 1 - Feb. 28, 1993

For further information, contact:

Mongol Petroleum Company (MGT)
Gudamj Mongol Gazryntos
Ulaanbaatar 37, Uildverchnii Eveliin,
Tel: 31176, 31038, or 31048
Telex: 79238 ICCME MH

D. Sodnom, President
Mongol Petroleum Company (MGT)



Block No.	Block Name	Area (km ²)
XI	Galba	13 800
XII	Ergel	11 700
XIII	Tsagaan Els	14 600
XIV	Zuunbayan	12 800
XV	Tariach	15 300
XVI	Nyalga	18 430
XVII	Bayan Tümen	12 550
XVIII	Höh Nuur	13 570
XIX	Toson Uul	10 460
XX	Matad	10 700
XXI	Tamsag	11 130
XXII	Buir	11 400

Reservoir Facies and the Application of Sequence Stratigraphy

April 19-26,
Cape Town, South Africa
Transgressive-Regressive Cycles and
Foreland Basin Tectonics
May 4-10, Utah
Wave-Dominated Deltas and Shelf
Sands: Depositional Models for
Hydrocarbon Exploration
June 8-17
Aug. 17-26
Utah, Colorado and Wyoming
Turbidite Systems and Facies and Their
Relations to Depositional Systems
June 11-18, Spain

Clastics - Modern Modern Clastic Depositional Environments

April 11-18
Sept. 22-28
North and South Carolina
Modern Deltas
July 20-24, Louisiana

Structure

Utah-Nevada Overthrust Belt and
Eastern Great Basin Tectonics
June 7-12,
Utah and Nevada
Sedimentation, Tectonics and Basin
Evolution: Application to International
and Domestic Exploration
July 27-31, Alberta, Canada
Intracontinental and Foreland Wrench-
Tectonics - A Structural Journey into
the Heartland of Europe
Sept. 11-19, France

Tectonics and Sedimentation Exploration Potential and Tectonic and Depositional Framework of Strike-Slip Related Basins

April 6-12, California/Nevada
Styles of Deformation and Exploration
Strategies in Mobile Belts
May 3-10, Sicily

Tectonics and Sedimentation of Turbidites in California Sept. 11-20, California

Jointly Arranged with Geodynamics Institute of Nice Cosponsor: EAPG

Alpine Mesozoic Basin in the
Southeast of France
June 5-12, Grenoble-Nice, France
(Register through Geodynamics
Institute, Attn: Michel Popoff, CNRS
B3, Sophie Antipolis, Ave. Albert
Einstein F-06560 Valbonne)

For more information, contact the
AAPG education department, P.O. Box
979, Tulsa, Okla. 74101; (918) 584-
2555.

problems.

SEISMIC MODELLING INTERPRETATION

- Wav-X
WAVELET
EXTRACTION
- Software
Training
ON-SITE
COURSES

SEISMIC
INTERPRETATION

STRUCTURAL
MODELLING

• SSD
SEISMIC SECTION
DIGITIZING

PHYSICAL MICRO COMPUTER
APPLICATIONS

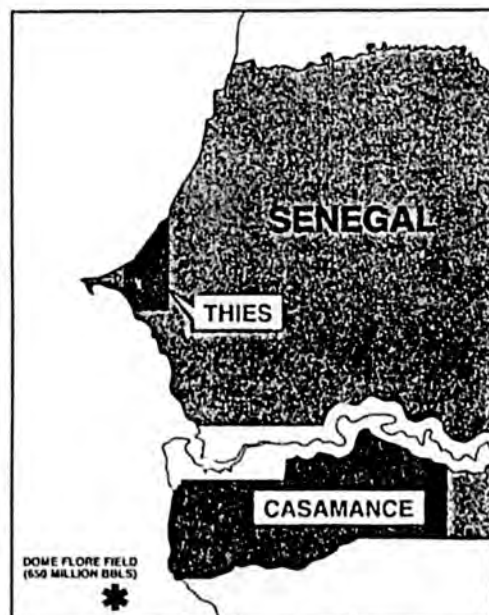
Canada CAN T2P 3C8 Fax: 263-6493 (403) 261-4025

USA USA 77079 Fax: 589-0617 (713) 589-6898

UK (303) 595-4848

SENEGAL

SECOND ROUND OF HYDROCARBON LICENSING



The Government of Senegal and Petrosen is inviting oil companies to apply for hydrocarbon licenses over the onshore areas of Casamance and Thies. Three blocks are offered over these areas covering approximately 18,000 sq. km.



PRESENTATION

Presentations of the hydrocarbon potential, legislative and fiscal terms will be made as follows:

Calgary - March 2, 1992
Houston - March 5, 1992
London - March 9, 1992

For more information, contact:

Petrosen - Dakar
Ousmane N'Diaye - Gen. Manager
(221) 22.04.44
Houston - Roger Welch
(713) 954-4600
Calgary - Fred Rayer
(403) 262-5886
London - Cliff Hunter
(0784) 434-377
or fax - (713) 954-4650

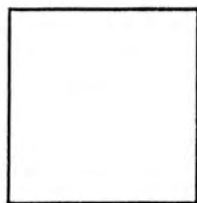


FIRST EXCHANGE
A FIRST SEISMIC COMPANY



62.5 mi.

2,500,000 acres
3,906 square miles



39 mi.

1,000,000 acres
1,562 square miles



28 mi.

500,000 acres
781 square miles



3 mi.

5,760 acres
9 square miles

Scale: 1: 2,500,000
1" = 40 miles

Concessions

The concession was the original system used in world petroleum arrangements. It is still the most widely used system.* Where legislation has been enacted to govern petroleum, it may be called a license or permit (exploration) or a lease (exploitation). Countries using this system are as varied as the United Kingdom, Norway, Thailand, the United States, and Australia. In the Middle East where there is minimal or no petroleum legislation, concessions are given through negotiations directly with governments.

The concession is an arrangement whereby the oil company receives the right—in exchange for its payment of all costs and specified taxes—to explore for petroleum and, if production is begun, to produce and market the oil or gas. The right to transport hydrocarbons that are discovered is usually included. In exchange, the company pays a royalty and income tax in addition to costs. Bonuses and minor taxes may be levied as well.

The company is usually given the right to export crude oil or gas produced, subject to various obligations. Such obligations are extensive. They include satisfying national consumption needs before export, employing nationals, and using local products.

The principal advantage of the concession system is that it is a tried-and-true system that works. It can be enacted as a corpus of legislation (as in the United Kingdom, the United States, France, and Australia), or it can be negotiated directly to incorporate the same requirements and achieve the same results.

The principal disadvantage of the concession is that in the past it gave the government less direct involvement and voice in managing

*Concessions, generally granted through a petroleum or mining law, are used in 121 countries. This does not mean they are used exclusively. Nigeria has concessions for most of its producing companies, production sharing for one (Ashland), and joint ventures in most through 60% government participation. Abu Dhabi has concessions with joint ventures through participation and a straight service contract with Total for developing Upper Zakum. The UK and Norway have concessions and, through obligatory participation, joint ventures via national oil companies.

Operator

Contractor

Minimum Obligations

The Contractor must have 150 km of seismic sections and must drill one well with a minimum expenditure of US\$3.2 million.

Taxes

Taxes are 52.5% of net income. Depletion allowance—15% of wellhead value. Maximum loss carry forward—10 years.

Royalty

Royalty is 12½% of wellhead value, creditable against income taxes.

Disposition of Production

The Contractor has an obligation to supply a pro rata share of the internal market subject to a maximum of 40% of the Contractor's share of production. The balance may be freely exported and proceeds may be retained abroad.

Price

Internal market oil is to be sold at the price of Saudi Light CIF Karachi, plus transportation to the point of sale in Pakistan, less the cost of transport from the field to the point of sale, less 10% discount.

Currency

Remittance of rupees on the current basis at the official rate of exchange for general commercial transactions prevailing on the date of the transaction.

Production Bonus

Bonus is US\$1 million upon commercial discovery; US\$3 million upon reaching 25,000 b/d production for 60 consecutive days; and US\$5 million upon reaching 50,000 b/d production for 60 consecutive days.

petroleum operations with less opportunity to enter into operations directly for vital objectives such as training national personnel and understanding the international energy industry. These advantages can be overcome, however, by incorporating in the concession document a provision for government participation through a joint venture and training programs.

Flexibility to accommodate rising or falling prices for oil is essential. This can be incorporated in the concession tax, as done in the UK by the special Petroleum Revenue Tax (PRT) that the government has raised with higher oil prices to skim off "windfall" profits. Norway has a similar tax.

Participation

The State may participate in the concession directly or through its own oil company. This is the system used extensively in the Middle East where participation was gradually raised from an original 25% in the early 1970s to 60% and, in most of the larger producing areas, subsequently to 100%. The most illustrative example of this is Saudi Arabia, which in 1981 completed payment for and received 100% of the Aramco concession holding. (For further discussion on this trend in participation, see the section on joint ventures.)

Sample Petroleum Concession Summary

As mentioned, the basic difference between a concession and a petroleum contract is that all production is acquired by the concessionaire. To even out the profitability of these arrangements requires a higher tax and royalty, as may be seen from the following example.

Pakistan

Duration

Exploration—eight years; production—20 years plus four renewal periods of five years each with the approval of the Government.

Disputes

Arbitration by the International Center for Settlement of Investment Disputes.

Import/Export Duties

The operator and its contractors may import and export duty free during the exploration phase. After commercial discovery, the import duty is fixed at 5¼% ad valorem for two years. Normal duties apply thereafter.

Fiscal Analysis for Risk Contracts

The following analysis is based on a petroleum concession in Norway granted in 1981 to an international oil company.

Fiscal Factors

Income tax	23% municipal, 27.8% federal, 15% dividend
Cost recovery limit	None
Royalty on production	8% to 40,000 b/d; 10% to 100,000 b/d; 12% to 225,000 b/d; 14% to 350,000 b/d; thereafter, 16%. Once 12% is reached, royalty cannot fall below
Depreciation rates	Six years, straight line from first production
Profit sharing	None
Interest on investment	None
Uplifts for income tax	10% development investment, straight line over 15 years against SPT only
Bonuses to be paid	US\$5,000 production bonus at 250,000 b/d, US \$10,000 at 400,000 b/d
Price controls	No, norm price assumed OMP
Special payments or conditions ...	35% special petroleum tax, nondeductible
Participation by government	50% to 50,000 b/d; 55% to 100,000 b/d; 60% to 150,000 b/d; 76% to 225,000 b/d; 70% to 300,000 b/d; 75% over 300,000 b/d; carried through exploration
Participation by local parties	50% of nongovernment participation
Right to export	Net working interest may be exported

Fiscal Analysis

Reserves (million bbl)	50	50	50	100	100	100	200	200	200
Well flow rates	Low	Med	High	Low	Med	High	Low	Med	High
Net cash flow (\$MM)	238	247	240	546	537	534	1,056	1,020	990
Deflation factor* (\$MM)	21	41	47	87	116	131	198	241	263
Present value, 15% (\$MM)	-24	-9	-2	-15	9	23	5	41	64
Net cash flow divided by maximum unrecovered investment	1.2	1.9	2.1	2.0	2.9	4.1	2.9	4.1	6.0
Deflation factor (\$/\$)	0.2	0.5	0.6	0.5	1.0	1.6	0.9	1.6	2.6
Discounted cash flow return	9.5	2.6	14.3	12.7	16.8	20.1	15.6	20.6	25.5
Deflation factor (%)	2.0	4.8	4.3	5.0	8.7	11.1	7.7	12.2	16.7
Company share of margin†	6.2	4.8	4.3	5.7	4.7	4.2	4.7	4.1	3.7
Company share of price increase‡	3.8	3.8	3.8	3.8	3.8	3.8	3.4	3.4	3.4

* Deflation factor is based on CPI (Consumer Price Index) deflator over entire period.

† Share of economic margin retained by company.

‡ Share of any increase in value of crude oil retained by company.

Australia

Petroleum Legislation

Onshore petroleum operations are separately controlled by the governments of the various Australian states and by the federal government in the territories.

Offshore

The Commonwealth government, under agreement with the states, on 16 October 1969 enacted the Petroleum (Submerged Lands) Act (Act 118 of 1967) to regulate the offshore.

Administration of the offshore legislation is in the hands of the states and territories, save only that the Commonwealth is consulted on all aspects that may affect its own special responsibilities under the constitution, e.g., external affairs.

The offshore law provides for awarding exploration permits and production licenses. Both Commonwealth and state approval is necessary before offshore rights are granted. The offshore act authorizes competitive bidding on either a cash bonus or a royalty basis, or a combination of both.

Area

An offshore exploration permit is 10,000 sq miles. There is no limit on the number of permits that may be granted to an individual entity. Onshore, each state has its own system for allocating rights.

Royalty*

The offshore royalty is 10% of the value of production. The royalty can be raised to 12½% when the Licensee has elected to include in his lease a larger-than-normal area surrounding his discovery. The Government may reduce the royalty to encourage recovery of petroleum that otherwise might not take place.

Tax*

The Company is subject to a corporate income tax of approximately 46%.

Duration*

Six years' offshore exploration with rights of renewal for successive

periods each of five years. Offshore production licenses have an initial duration of 21 years and may be renewed.

Work Obligations*

Companies holding permits are required to carry out exploration work in accordance with programs approved by the appropriate state or territory authority.

Conversion*

In the event of a permittee discovering payable petroleum, it has a preferential right to a production license.

Fees*

Exploration fee—US\$5/block/annum with a minimum of US\$100 for each permit. Production fee—US\$3,000/annum for each block in the license area. Pipeline fee—\$20/mile/annum. Registration fee—1% of the value of the transfer or of the interest created.

Onshore (Western Australia)

Petroleum development is governed by the Petroleum Act, 1967, the Petroleum (Registration Fees) Act, 1967, and the Petroleum Pipelines Act, 1969, as amended.

Administration

The Mines Department under the Minister of Mines is charged with administration of the acts.

The Petroleum Act of 1967 provides basically a two-title system of exploration permits and production licenses.

Exploration Permits

The Minister may invite applications for exploration permits by advertising blocks of available land by publication in the West Australian Government Gazette. A block is defined as a graticular section of 5 minutes longitude by 5 minutes latitude. In the northern part of the state, this results in a graticular block of about 30 sq miles reducing to about 25 sq miles in the southern part. The Minister has discretion in granting permits. A single application may be made for up to 200 blocks

and must be accompanied by an application fee of A\$1,000, particulars of:

- 1) The proposals of the applicant for work and expenditure in respect of the blocks specified in the application; for each of the five years of the first term a specific operational activity and minimum expenditure commitment should be stated
- 2) The technical qualifications of the applicant and of his employees
- 3) The technical advice available to the applicant
- 4) The financial resources available to the applicant; substantial evidence should be submitted regarding the ability of the applicant to fund the proposed work program

The permit is good for five years and entitles the holder to carry on all work necessary for exploration within the permit area. All petroleum discoveries must be reported to the Minister. There is an annual fee of A\$100 per permit or A\$5 per block, whichever is greater.

Production License

A production license entitles the holder to carry out operations for the recovery of petroleum. Any person holding an exploration permit may apply for a license. By a statutory formula, the holder of a permit may designate a location and apply for a production license that allows exploitation on a portion of the location. [See the discussion in Australia, Commonwealth, Petroleum (Submerged Lands) Act 1967.] Within two years of the granting of the primary license, the permittee may apply for a secondary license covering additional blocks within the location. The license term for all licenses is 21 years and may be renewed for additional 21-year periods.

During the first year of the license, the licensee is required to carry out a program of approved works, expending a minimum of A\$100,000 per block. The same expenditure must be made in subsequent years until petroleum is recovered. Then the above sum is reduced by the value of the petroleum produced. Additional work may be required at the discretion of the Minister.

There is an annual fee of A\$3,000 for each block included in the license. Any petroleum recovered under an exploration permit is subject to a royalty of 10% of the value at the wellhead. Royalties on production under a primary production license are to be determined by the Minister at between 5 and 10% of the value at the wellhead and under a secondary production license at between 10 and 12½% of the value at the

wellhead. If production from a well becomes uneconomic, the Minister has the discretion to reduce the royalty.

* Petroleum (Submerged Lands) Act of 1967 and parallel legislation of Australian states. Published in *Asia and Australasia—Basic Oil Laws and Concession Contracts*, supplement 57.

Austria

Petroleum Legislation

The General Mining Law of 13 May 1975 as amended by the Law of 1 February 1978 provides for the granting of exploration contracts and mining rights. Disposition of previously acquired oil rights (which includes all present production) was resolved in 1982.

Exploration

Exploration contracts may be awarded to qualified persons and entities. In the event of the discovery of a commercial deposit of petroleum, the Contractor is entitled to extract petroleum for 30 years.

Royalty

20%.

Taxes

The Company is subject to general corporation taxes. Nonresident companies (those having neither their principal office nor management in Austria) are subject to a corporate tax on their income from Austrian sources. The general corporation tax is 55%.

Rental

During exploration, an unspecified rent must be paid on each square kilometer covered by the contract and on those portions of the contract area separated from producing areas after discovery.

Cameroon

Petroleum Legislation

Law 64-LF-3 of 1964 as amended by Law 78/14 of 29 December 1978. Participation is established under Law 78/24 of 29 December 1978.*

These laws provide for prospecting licenses and exploration permits awarded by negotiation. Mining concessions are granted as a right to exploration permit holders who have discovered workable deposits.

Law 82/020 of 26 November 1982 provided the following: Petroleum companies that had not signed association contracts by 1 January 1983 immediately lost all rights to exploration and/or exploitation. All companies operating in Cameroon are obliged to declare any discoveries within three months from the date of the law, to develop any such discoveries under approved exploitation programs, and to convey all reports, data, and other information concerning same to the government. Any companies that have not, within the three-month-period, declared their discoveries or that have not placed discoveries on production within four years are to lose all rights to exploration and exploitation.

Duration

Prospecting licenses—two years, renewable for an additional two years. Exploration permit duration—four years, renewable three times for periods of four years each time. Mining concession duration—four years, renewable four times for a period of four years each time.

Surface Tax

Minimum granting fee for exploration is 15,000 francs/sq km. Mining concessions pay 18 million francs for an original grant. Income tax is 57.5%.

State Participation

Law 78/14 of 1978 places a 60% minimum on the State's share.

Royalty

None

*Published in *South and Central Africa—Basic Oil Laws and Concession Contracts*, supplement 59.

Canada

Petroleum Legislation

Subsoil ownership and title to hydrocarbons on public land in the provinces of Canada is vested in the provincial governments. The federal government holds the only title to hydrocarbons in the Northwest Territories, the Yukon, lands within Indian Reserves, and national parks. Some hydrocarbon deposits are owned privately as a result of either a former practice of granting mineral titles upon the completion of specified development work or outright grants of the subsurface estate to private landowners. Offshore jurisdiction is in dispute between the provinces and the federal government.

State Company

The Canadian government on 30 July 1975 established Petro-Canada, a Crown corporation. It has authority to explore for and develop hydrocarbon resources; carry out research and development projects; engage in production, distribution, refining, and marketing of fuels; and negotiate for and acquire petroleum products necessary to maintain Canadian supplies from abroad.

The Canada Oil and Gas Act (1982) gave the federal government a 25% retroactive interest in oil and gas fields on federal land, with companies already holding leases receiving some compensation. The Government's 25% interest would be held by Petro-Canada.

Other major provisions require a minimum 50% Canadian ownership by firms with petroleum production in frontier areas, companies to renegotiate exploration agreements on frontier lands and surrender some acreage to the federal government, and the federal Minister of Energy to have extensive discretionary powers in approving exploration agreements on federal lands.

Alberta Petroleum Legislation*

The province of Alberta produces most of Canada's oil and natural gas. It is therefore appropriate to select Alberta's petroleum legislation.

Duration and Area

Petroleum exploration in Canada is conducted under either a reservation or a permit, depending on the township involved. A reservation

has an initial term of four months. When drilling is undertaken, six further renewals of three months each may be given. A reservation holder may obtain a lease covering not more than 50% of the reservation area. (In certain instances, the lease for which the holder of a reservation is entitled to apply covers only one-fourth of the area subject to the reservation.)

A permit grants the same rights as a reservation but gives its holder the right to acquire leases over 100% of the permit area.

Leases are for production of oil and natural gas for a term of 10 years or so long as petroleum is produced thereunder. The maximum area of the lease is 5,760 acres.

Royalty

Albertan royalty on crude oil ranges from 8-16 $\frac{2}{3}$ %, depending on the rate of production. A flat 16 $\frac{2}{3}$ % royalty is levied on the production value of natural gas.

Tax

General corporate income taxes are imposed by both the federal and provincial governments with a combined rate of approximately 50%.

*Text of all Canadian legislation is published in *North America-Basic Oil Laws and Concession Contracts*.

Cayman Islands

Petroleum Legislation

The Petroleum Law of 1978 provides for exploration licenses and petroleum agreements with private companies. Many points are unspecified under the law and are left to negotiation.

Duration*

Total duration (exploration and exploitation) of 30 years.

Asia and Australasia—Basic Oil Laws and Concession Contracts, supplement 63.

Duration

Exploration license duration is five years with one renewal permitted (providing obligations have been met) of three years.

Production license duration is 21 years. One renewal of 21 years is authorized. A second renewal may be given at the Minister's discretion up to 21 years.

On conversion to production, the license area must be reduced by approximately 50% of the original area.

Drilling Obligation

Not specified in law. To be established by negotiation on grant of license.

Royalty

Crude oil royalty, maximum 12.5%.

Tax

Subject to general corporate tax.

France

Petroleum Legislation

The Mining Code of 1810 was replaced in 1956 by Executive Decrees 56/833 and 56/1327, as amended, which became the basic legislation for petroleum. Offshore continental shelf operations are governed by Law 68-1181, as modified by Law 77-485 of 11 May 1977.*

Exploration and Development Rights

The law provides for exploration permits, which entitle holders to carry out exclusive exploration operations within designated areas.

Upon discovering petroleum, the exploration permit holder is entitled to either an exploitation permit or a concession.

An exploitation permit is issued when cumulative production from the designated area will not exceed 300,000 tons.

Application

An applicant for an exploration permit must demonstrate his technical and financial capacity. Minimum sums for exploratory operations are not specified in law but are set out in a permit grant. Minimum exploration expenditure is 1,000 to 3,000 francs/sq km.

Duration

Maximum initial term of an exploration permit covering onshore areas is five years; it may be extended twice for a maximum of five years each time. A continental shelf exploration permit has a maximum term of 18 years, inclusive of all applicable extensions. The French government has an option to reduce the area included within the permit (except producing areas) upon the granting of each extension.

Exploitation permits have a maximum term of five years, subject to a maximum of two five-year extensions. Concessions may be granted for a period of up to 50 years.

Royalty

On a continental shelf exploitation permit, holders pay a specific royalty per ton of production. Onshore, only concessionaires pay royalties.

Decree 81-372 of 15 April 1981 changed royalties effective 1 January 1981. New oil is that produced from wells that came onstream after 1 January 1980. Old oil is that from wells onstream before that date.

<i>Crude Oil</i>	<i>Percent Value at Wellhead</i>	
	<i>Production, Old Oil</i>	<i>Production, New Oil</i>
<i>Production Level, Annual Metric Tons</i>		
0-50,000	8	0
50,000-100,000	14	6
100,000-300,000	17	9
over 300,000	20	12
<i>Gas</i>		
below 300,000 MM cu m	0	0
over 300,000 MM cu m	20	5

Tax

No taxes are imposed on exploration permit holders. Concessionaires are subject to a general French corporation tax.

Percentage depletion allowance is 23.5% of gross income up to 50% of net income only if the Company reinvests the amount of the allowance in oil exploration activities, whether conducted by itself or by another company.

Participation

Government policy prohibits permits to companies without substantial French private or public participation.

*All legislation cited is published in *Europe-Basic Oil Laws and Concession Contracts*. For an excellent summary of French petroleum legislation, see *Petroleum Legislation*, supplement 37.

French Guiana

Petroleum Legislation

Mining Code, Decree 55-586 of 20 May 1955, refers to changes in regulation of minerals for departments of Guadeloupe, French Guiana, Martinique, and Reunion. Decree 56-1039 of 5 October 1956 regulates the above Decree of 20 May 1955. Decree 70-988 of 29 October 1970 relates to procedures for requesting minerals licenses and the relinquishment of such licenses. Decree 65-1049 of 29 November 1965 publishes the 29 April 1958 Continental Shelf Convention. Law 68-1131 of 30 December 1968 pertains to exploration on the continental shelf and exploitation of its natural resources, together with Decrees 71-360 and 71-361 of 6 May 1971 regulating that Decree.

Contract terms, including drilling obligations and fiscal elements, are negotiated in each individual permit or concession.

Duration*

An exploration permit is five years. It may be renewed three times, each time for at least three years.

Germany, West

Petroleum Legislation

On 13 August 1980, the Federal Mining act was passed.* It replaced the Prussian Petroleum Act as well as all federal and state legislation in opposition to the Federal Mining Act of 1980. Certain portions of the 1980 act were effective immediately, but it was generally applicable 1 January 1982. This law was also replaced by the 1980 Federal Mining Act.

In 1982, the Act of Interim Regulation of Deep Sea Mining of 16 August 1980 (BGBI. I1457/1980) was amended by an act called Act for Modification of the Act of Interim Regulation of Deep Sea Mining of 12 February 1982 BGBI. I136/1982.

In late 1982, the state of Lower Saxony enacted two mining regulations to be applied to all offshore wells in the German part of the North Sea:

- 1) The Mining Regulation for deep drilling, deep reservoirs, and for the production of natural resources by drilling in the State of Lower Saxony (BVOT) of 15 December 1982, Lower Saxonian Ministerial Gazette (Niedersächsisches Ministerialblatt) 1385/1981.
- 2) The Mining Regulation for electrical equipment (BVE) of 9 December 1981, Lower Saxonian Ministerial Gazette (Nds. MB1. 1369/1981).

Type of Grant

The 1980 Act provides for permits and concessions only with no special offshore authority.

Duration and Area

Under the 1980 Act, permits are five years with three-year extensions, no area limit. Concessions are for a 50-year maximum with no area limit.

Royalty

Royalty is dealt with under Articles 31 and 32 of the Federal Mining

Act of 1980. The act sets the maximum royalty at 40% with exact rates to be set by the State authorities. In 1982, the royalty was 32%.

Tax

Nonresident corporations are subject to German income tax at a flat rate of 50%.

Rental

Other than royalties, no other fees or taxes (other and income) are to be charged under the 1980 Act.

*Published in *Europe-Basic Oil Laws and Concession Contracts*, supplement 39.

Greece

Petroleum Legislation

Petroleum Code (Act No. 468/1975) promulgated 10 November 1976, as amended. Model Offshore License Agreement of 1979 contains specifications for future grants with Government participation.

The code provides for prospecting licenses, production sharing agreements, and license agreements. Rights are offered either by public tender or by invitation to a limited number of parties. Production sharing contracts are awarded according to criteria that include the percentage of production and the size of royalties offered to the State. In general, the law provides that awards shall be based on "considerations of public interest."

Duration

Prospecting licenses are issued for six months but can be renewed for a like term. An exploration license is four years. A concession or contract is 26 years.

Royalty

Royalty under a license agreement may not be less than 12.5%,

payable in cash or in kind at the State's option. The royalty rate may accelerate according to the level of production from each commercial deposit. While the amount of production accruing to the State under a production sharing agreement is stipulated in the contract and not in the law, the portion of output to be retained by the Contractor must always be sufficient to cover total current operating expenditures, together with any unrecovered balance from previous years and the amount of annual depreciation charged toward recovery of exploration costs.

Tax

Contractors under license agreements or production sharing agreements pay an income tax of 50% of net taxable income. In the case of production sharing contracts, permissible deductions include the following: fixed asset costs, current production outlays, overhead, and the value of the State's share of production. In addition to the above, royalties are deductible under license agreements.

Duration*

An exploration license is for a four-year term, renewable for an additional six months to complete or abandon a well drilled during the initial four-year period. After the exploration period, the concessionaire relinquishes all areas except those subject to development licenses. Upon commercial discovery of petroleum, the concessionaire has the right to a development license, which has a term of 26 years, extendable for another 10.

Drilling Obligation*

The concessionaire is obligated to drill six wells during the exploration period.

Production Sharing*

The law provides for production sharing. Generally, for the first five years of a development license, the Contractor can retain up to 70% of production to recoup petroleum costs, after which the Contractor (Prinos contract) can retain up to 40% for such purpose. In the last year of each development license, however, the concessionaire can retain as much production as is necessary to recover all of its petroleum costs.

The remainder of production is divided according to the following formula:

<i>Average Crude Oil Production, b/d</i>	<i>State's Total Share after Taxes %</i>	<i>State's Participation Share, %</i>
0-30,000	65	30
30,001-80,000	70	40
80,001-200,000	75	50
over 200,000	80	60

Rental and Bonus*

None

Participation*

The Government reserves the right to 51% participation.

*Concession contract granted to Oceanic/Hellenic/Wintershall/White Shield, 14 June 1975, over the Prinos offshore contract area. Published in *Europe-Basic Oil Laws and Concession Contracts*, supplement 36.

Greenland

Petroleum Legislation

Act 166 of 12 May 1965, as amended by Act 203 of 21 May 1969. The law authorizes exploration licenses and concessions to joint stock companies registered in Greenland.

Subsoil

Reserved to the State. Priority for concessions is given to those entities that have worked under exploration licenses.

Duration

Concession duration is up to 50 years.

former at the rate of 30%. (An open company is one that satisfies the following conditions: voting stock is held by more than 100 persons, and shares carrying at least 25% of the voting power and amounting to at least 25% of the paid-up share capital are beneficially held by persons other than principal members and are also quoted or dealt in on a recognized stock exchange.) The rate of additional company profits tax at that same time was 15%.

Joint Venture or Production Sharing*

Not applicable

*Esso/Amerada/Texaco offshore concessions as granted by Decree 21 of 10 January 1978. Published in *Central America-Basic Oil Laws Concession Contracts*, supplement 28.

Hong Kong

Petroleum Legislation*

Chapter 285 of the Laws of Hong Kong (revised edition 1964) contains the government legislation for petroleum as contained in the Mining Ordinance and the Mining (General) Regulations.

Part II of the mining ordinance declares that control of mineral oils is vested in the Crown.

Rights are divided into prospecting licenses, mining licenses, and mining leases.

Duration

Prospecting licenses have a duration of six months, renewable up to five years in successive six-month periods. Mining license duration is not stated. Mining lease duration is 21 years and may be renewed for the same period.

Taxes

A mining lease is subject to general corporate taxation. Rentals are HK\$5/acre/six-month period on mining licenses and HK\$5/acre/year on mining leases.

Royalty

Royalty is 5% of sales value.

*Published in *Petroleum Legislation*, supplement 1.

India

Petroleum Legislation

Petroleum exploration and development onshore are subject to the Petroleum and Natural Gas Rules, 1959. Offshore operations are through contract with the Oil and Natural Gas Commission (ONGC), the official government agency for petroleum.

Petroleum transport is regulated by the Petroleum Pipelines (Acquisition of Rights of User in Land) Act of 1962.

The 1959 rules contain two stages for exploration and production of mineral oils: the exploration license and the mining lease.

Offshore operations are governed by a single contract governing exploration and exploitation.

Since the 1959 rules appear to no longer represent the Government's requirements for exploration and exploitation, the following requirements are based on the 1981 model contract put out by the Government with interpolations from an actual contract—the offshore Saurashtra II contract in the vicinity of the Bombay High producing area, signed March 1982 between the Government's ONGC and Chevron Oil.

Duration

Total duration is 22 years.‡ Exploration period is four years divided into Phase I of two years and Phase II of two years (offshore Phase II is expected to be one year).

Duration of the Chevron Saurashtra II contract is 22 years: Phase I (exploration), three years; Phase II (exploration), two years.†

Drilling and Expenditure Obligation

The model contract leaves obligations to be negotiated. The Chev-

ron contract calls for \$29 million and three wells drilled in Phase I, two more wells and \$18 million minimum in Phase II.

Bonus

Signature bonus of \$1 million.†† No production bonus is specified.‡

Management

The management committee will be equally staffed by the Contractor and ONGC.‡ ONGC will be on the operating committee.‡ The Contractor will be the Operator and will make all major decisions in consultation with the Government.†

ONGC will have the right to be the Operator after five years' commercial production or after all costs have been recovered by the Contractor.††

Foreign Exchange

The Contractor may remit amounts due out of India and may import currencies necessary for operations without restriction.††

Participation

ONGC carried interest of 50% will be exercised after a commercial discovery, with payment for its share but not to include payment of its share of the exploration costs.††

Cost Recovery

Exploration and development costs are to be recovered by the Contractor in five yearly installments, with production costs recovered completely in the year incurred.†† All cost oil will be offered to the Government at international price.

Production Sharing

Oil remaining after cost recovery is designated as profit oil. It will be divided between the Contractor and the Government on a sliding scale. The Contractor's share of the profit oil will be sold to the Government at an international price until self-sufficiency is achieved by India.†

****Production sharing** is 35% of the Contractor and 65% on the Government on 50,000 to 75,000 b/d; 30-70 on 75,000 to 100,000 b/d; 27.5-72.5 on 100,000 to 150,000 b/d; 25-75 on 150,000 to 250,000 b/d; and 20-80 on production over 250,000 b/d.

Gas

Associated gas belongs to the Government free of charge. A separate agreement will be negotiated for nonassociated gas.††

Technical Assistance

The Contractor will render technical assistance and will make technology available in areas such as exploration, production, refining, and petrochemicals through a separate agreement.††

Subsoil**

Title to the subsoil is vested in the Government.

Royalty**

Onshore royalty for petroleum is 10% of gross value at the wellhead. Offshore contracts do not contain royalty provisions.

Taxes**

Onshore exploration license application fee is 2,000 rupees. Exploitation lease onshore application fee is 5,000 rupees.

Onshore security deposit is 20 rupees/sq mile with a minimum of 6,000 rupees during exploration.

Offshore and onshore operations are subject to general corporate income tax.

Area**

Exploration license onshore is for a maximum area of 3,000 sq miles. Exploitation lease area is a maximum of 100 sq miles. There is no maximum offshore.

Duration

Exploration license duration—four years. It may be extended for

two further periods of one year each. Exploitation lease duration—20 years.**

Production sharing does not apply to onshore operations.

Cost Recovery**

Cost recovery offshore is 40%. Cost recovery provisions do not apply onshore.

Bonus**

Bonuses are US\$1 million on signature and US\$1 million on commercial discovery. A production bonus is US\$3 million at 40,000 b/d and US\$3 million at each multiple of 40,000 b/d over the initial 40,000 b/d.

*Petroleum and Natural Gas Rules, 1959, and the Petroleum Pipelines (Acquisition of Rights of User in Land) Act of 1962 published in *Asia and Australasia—Basic Oil Laws and Concession Contracts*.

†1981 model contract released to bidding companies by the Indian government. Published in the *Petroleum Taxation/Legislation Report*, a monthly review of world oil law changes and new contracts for exploration.

‡Chevron offshore Saurashtra II contract signed March 1982, summarized in *Petroleum Concession Handbook*, supplement 54.

**Offshore exploration/exploitation contract of 25 May 1974 between Reading & Bates/Terra Resources/Mapco and the Oil and Natural Gas Commission. Published in *Asia and Australasia—Basic Oil Laws and Concession Contracts*, supplement 53.

Indonesia

Petroleum Legislation

Indonesian Mining Law 44 of 1960 ended the concession system. The national oil company, Pertamina, was established by Law 8 of 1971 and was given power to enter into production sharing contracts with private companies.

Duration*

Duration is 30 years. The contract terminates if, after 10 years, no petroleum has been discovered.

Production Split*

The split is 75% Government, 25% Company. Israeli taxes are paid by the Government.

Costs*

The Government is to pay development costs. Other costs are recovered from 60% of production.

*This agreement has been published in *Middle East-Basic Oil Laws and Concession Contracts*, supplement 54.

Italy

Petroleum Legislation

Onshore petroleum operations are governed by the Petroleum Law of 1957.* Law 613 of 21 July 1967 amended Law 6 of 1957, which governs offshore.*

The law provides for exploration permits and exploitation concessions to Italian nationals or companies having their registered office in Italy.

Offshore, the law provides for nonexclusive prospecting permits that do not entitle their holders to drill exploratory wells, as well as exclusive exploration permits and concessions.

Exploration permits for onshore areas are acquired principally through a public auction system, which allows the Government to set minimum bids.

Area (Onshore)

Exploration permits may not cover more than 70,000 hectares. A single entity may not acquire permits covering more than 300,000 hectares. The maximum area of a concession is 3,000 hectares. Exploration permit holders can, upon making multiple discoveries, obtain multiple concessions.

Government Preference

Ente Nazionale Idrocarburi (ENI), the Italian national oil company, was granted the right to conduct exclusive surveys on the Italian continental shelf and to select 25% of the total area thereof for exploration and development. After selecting its initial acreage, ENI had to wait for two years before it could select additional acreage. Resource rights to other areas are granted to applicants who submit exploration and development programs. If two or more applicants are judged to be of equal caliber, a first-in-time rule prevails. The size of exploration permits may not be greater than 100,000 hectares.

Drilling and Work Obligations

Holders of exploration permits covering offshore areas must commence geological and geophysical surveys within 12 months of the effective date of the permit and must drill within 48 months of the start of surveying work. Offshore concessions are granted for 30 years but may be extended for an additional 10 years.

The holder of an exploration permit covering onshore areas must drill an exploratory well within 30 months of receiving its permit and report on geophysical work and discoveries. A concession is granted for 20 years but may be renewed for an additional 10 years.

Offshore Royalties

Royalties are 8% on crude and 5% on gas. A royalty does not apply to crude oil production under 50,000 tons yearly (1,000 b/d) and 200 MM cu meters (approximately 7 billion cu ft) of gas. Royalty payable in kind or in cash is based on the value at the wellhead. One-third of royalty produced from the territorial sea adjacent to the special charter regions is to be assigned to such regions for use in development of their economic and industrial activities.

Depletion

By Decree 601 of 29 September 1973, 50% of taxable profit deriving from the exploitation in the territorial sea and the continental shelf is exempted from local income tax (*imposta locale sui redditi*) for 20 years from the date the above-mentioned decree comes into force. This exemption is granted on the condition that the profit so exempted is invested in prospecting and/or exploration in the territorial sea, in the continental shelf, or in the concessional area inland.

Tax

The offshore law provides for a complex tax structure generally following this formula:

- 1) A tax of 6.8% of book profits plus a sliding scale tax on the first 100 million lire of book profits and 25% thereafter
- 2) 6.5% of remaining profits after deducting 1
- 3) 1.38% on the aggregate amount of tax payable under 1 and 2
- 4) An additional tax of 7.6% of book profits. However, up to 50% of sums accounted for as book profits may be deducted as a credit toward future exploration work

Rental

Rent on an onshore exploration permit is 200 lire/hectare/year. Rent on an onshore concession is 1,500 lire/hectare/year.

Offshore exploration permit rental is 10 lire/hectare for the first six years. This escalates to 20 lire/hectare for the first three-year extension and to 30 lire/hectare for the second three-year extension.

*Text published in *Europe-Basic Oil Law and Concession Contracts*, volume II and supplement 12.

Ivory Coast

Petroleum Legislation

Law No. 70-489 of 1970 created a Petroleum Code for the Ivory Coast. Under the 1970 law the State can undertake petroleum operations itself or can grant exploration permits and concessions to private firms (Article 2) through concessions awarded on a negotiated basis, subject to minimum values in the Petroleum Code.

Since the Government has adopted a policy of only granting new rights on a production sharing basis in partnership with its State oil company, Petroci, this review is focused on the Government's requirements as expressed in 1982 concession grants and the model contract.

Duration

Exclusive exploration permits are granted for not more than three

Export Tax*

Licensees are exempted from any tax on the export of petroleum until after either seven years from the first export or until all loans approved by the Government are repaid in full.

Assignment*

Licensees shall not assign any interest without previous consent in writing of the Minister, whose consent shall not be unreasonably withheld.

Conversion*

Licensees having established a commercial discovery will be granted an oil mining lease in terms attached to the license.

Arbitration*

Any dispute is settled by arbitration in accordance with the provisions of the Arbitration Act (Cap. 49 of the laws of Kenya) or within the meaning of the Convention on the Settlement of Investment Disputes between States and Nationals or Other States of 18 March 1965.

*Special oil prospecting license of 8 August 1979 granted to Kenya-Cities Service Inc., Marathon Petroleum Kenya Ltd., and Unionoil Kenya Ltd. Published in *South and Central Africa-Basic Oil Laws and Concession Contracts*, supplement 61.

Korea, South

Petroleum Legislation

The basic petroleum legislation is the Mining Business Law (Law 234 of 1951, as amended by Law 1961 of 1962); the Sea-Bottom Mineral Resources Development Law (Law 2184 of 1970); and Presidential Decree No. 5020 of 1970. The legislation provides for exploration permits and concessions.

Applications

Exploration rights are granted on a noncompetitive basis to applicants who have the financial means, technical capabilities, and equipment sufficient to perform submitted exploration plans.

Upon making a commercial discovery, a company that fulfills its exploratory obligation may be granted a concession for development.

Royalty

Of the value of petroleum produced, 12.5%.

Other

There is no joint venture, production sharing, rental, or bonus specified.

Duration*

The exploration period is eight years. This may be extended for an additional two years. Production period is 30 years from the expiration of the exploration period.

Drilling Obligation*

The Company is to spend a stipulated minimum on exploratory operations. In event of force majeure due to offshore boundary difficulties, Company obligations are postponed.

Tax*

A Company is subject to a corporate tax equal to 50% of its taxable income. All other taxes, duties, or other charges are waived.

Bonus*

Signature bonus—US\$500,000; discovery bonus—US\$1 million; production bonus—US\$5 million.

Rental*

During exploratory period, US\$90/sq km less exploratory expenses.

Scholarships*

The Company is to provide US\$50,000 during each year of the exploratory period for scholarships for Korean nationals and similar education.

Other

There is no joint venture, production sharing, rental, or bonus specified.

*Agreement of 24 September 1970 between the Government of Korea and Wendell Phillips Oil Company (Korea) Ltd. covering offshore areas. Published in *Asia and Australasia-Basic Oil Laws and Concession Contracts*, supplement 33.

Kuwait

Petroleum Legislation

There is no petroleum law. Historically, Kuwait regulates petroleum through the terms of its concessions, the most important concession being that granted to the Kuwait Oil Company (KOC), a company jointly owned by British Petroleum (BP) and Gulf Oil. Takeover of 100% nationalization of KOC's assets was carried out by an agreement of 1 December 1975 between the Government of Kuwait, BP (Kuwait) Ltd., and Gulf Kuwait Company. As compensation, the Government paid the companies the book value plus interest and agreed to enter into supply arrangements. Since nationalization, the Kuwaiti government manages the former concession areas.

Contracts*

Future crude oil supply arrangements between the Government, BP, and Gulf Oil were set forth in separate letter agreements with each company. Price to be paid by the companies for their crude oil purchases will be the Government's notified price, defined as "the FOB price per barrel established by the government or government entity and notified by it from time to time as the price at which it is willing to sell Kuwait crude oil to purchasers generally," minus US\$15/bbl. Both companies

ence price was set at US\$38.25/bbl for 37°API Bonny Light as from 1 July 1982. On the basis of a production cost of US\$1.60/bbl, 20% royalty, and 85% tax, the resulting tax-paid cost calculation worked out at US\$33.90/bbl. The difference between the tax-paid cost and the official Government sales price of US\$35.50/bbl is US\$1.60, which represents the deemed margin of profit on equity crude. Most of the foreign equity holders had a 40% stake in their producing ventures with NNPC, with the exception is Shell, which had 20% (the other 20% partner, Bf, was nationalized).

*21 July 1979 Nigerian National Petroleum Company (NNPC) bidding announcement. Published in *South and Central Africa-Basic Oil Laws and Concession Contracts*. Text of legislation and cited contract same source, supplement 59.

Norway

Petroleum Legislation*

The Act of 4 May 1973 governs onshore petroleum operations. Offshore petroleum exploration and development are regulated by the Continental Shelf Act of 21 June 1963 and pursuant thereto by Royal Decree of 8 December 1972, as amended. The following deals with the offshore petroleum system. Offshore taxation is levied under the Act of 13 June 1975.†

Types of Grants

Nonexclusive reconnaissance licenses are granted, which may cover all or part of the Norwegian North Sea. Exclusive production licenses are granted. Rights to petroleum development are granted on a partly negotiated basis.

Duration

Reconnaissance licenses are issued for three years. Data obtained by the Licensee must be transmitted to the Government, which will treat such information as confidential for five years and for so long thereafter as no production license has been granted for the area.

Production licenses are issued for six years, although a 30-year extension will be granted for up to 50% of the area covered by the license as well as for all areas containing deposits of petroleum. Grant of a production license may be conditional upon state participation. Licensees may be required in times of crisis to satisfy domestic petroleum needs.

Royalty

Royalty is 12.5% on natural gas produced under a license. Royalty on crude oil ranges from 8% for production of less than 40,000 b/d to 16% for production of 350,000 b/d.

Taxes

Income derived from petroleum production is subject to the general corporate tax rate and municipal taxes and tax equalization dues, totaling 50.8%. In addition, a special petroleum tax is payable at the rate of 35%.

Joint Venture

Grant of a production license is generally conditional upon 51% minimum State participation in the production enterprise, rising with production to 80%.

Bonus

Grant of a production license may be conditioned upon a bonus being paid to the State as well as other terms to be determined at the time of the grant.

Special Provisions

The Norwegian system provides, first, that the Ministry will take into account "(t)he extent to which the applicant has contributed or will contribute to the strengthening of the Norwegian economy, industrial growth and employment." Second, it provides that the Ministry of Industry will demand State participation and, with respect to some blocks, a production bonus. The Licensee, upon reaching a specified production level, will assign an agreed-upon percentage of its rights and

duties to a State oil company, which will obtain a carried working interest (which in this context means that the State will obtain a share of exploration and development costs, provided that 50% of such costs may be recouped by the oil company from the State's share of production). Participation by Statoil, the Government company, has been on a sliding scale rising with production and has approached 85% in some blocks.

1982 Safety Regulations

In 1982 Norway proposed tighter safety standards for semisubmersibles operating as drilling rigs or accommodation vessels in the country's sector of the North Sea.

Loss of the Pentagone-style semisubmersible *Alexander L. Kielland* in March 1980 produced the more stringent standards that went into effect 1 July 1982.

The regulations from the Norwegian Maritime Directorate imposed rules for anchoring systems stability, emergency power supplies, and lighting and life-saving equipment.

Effective 1 July 1982, Norwegian-owned or -registered rigs and vessels operating in Norwegian waters must be capable of staying afloat with a list of no more than 35° after losing one leg.

Power generation and emergency lighting must be effective in a list of as much as 35°. Rigs also have to have double the number of life boats. Existing rigs were required to undergo alterations to meet these requirements.

*Published in *Petroleum Legislation*, supplement 35.

†Text of legislation and nonconfidential concession contracts is published in *Europe-Basic Oil Laws and Concession Contracts*.

Oman

Petroleum Legislation

The Petroleum and Minerals Law of 1975 is very general. Petroleum regulation is mainly carried out through negotiated production sharing contracts.

Duration*

An exploration period is six years. An exploitation period is 18 to 25 years, depending upon when production starts.

Drilling Obligation*

Two wells must be drilled during the exploratory period.

Production Sharing*

There is no cost recovery from a particular production percentage. Rather, production is simply divided as follows:

Production, b/d	Government's Share, %	Company's Share, %
0-50,000	60	40
50,000-100,000	65	35
100,000-150,000	70	30
Over 150,000	75	25

Natural Gas*

If natural gas is discovered in commercial quantities, the parties are to negotiate a new contract for gas.

*Government of Trinidad production sharing contract, signed 1975 with Mobil and Deminex. Published in *Central America and Caribbean-Basic Oil Laws and Concession Contracts*, supplement 19.

Tunisia

Petroleum Legislation

Basic petroleum laws are the Decree of 13 December 1948 and the General Mining Code contained in the Decree of 1 January 1973 on Mines, amended by several other decrees.*

The mentioned laws provide for exploration permits by negotiation. If under an exploration permit a discovery is made that is capable

of producing specified quantities of petroleum, a portion of the permit must be converted into an exploitation concession.

Each petroleum permit or concession granted is the subject of a special legislative enactment approving it, and each permit or concession varies in some respect from the general law.

Duration

The exploratory initial period is three years. It can be renewed, under certain stipulated conditions, for 3 three-year periods. Exploitation duration is 50 years.

Investment Obligation*

The Company must invest US\$6 million the first three-year period and each three-year period thereafter, plus inflation index.

Royalty*

Royalty is 12½% of the value of petroleum produced.

Tax*

The Company's maximum tax liability is 80% of its annual net profits. The Company is exempt from all other taxes.

*Petroleum concession granted 1978 to Pecten Tunisia Corporation. Published in *North Africa-Basic Oil Laws and Concession Contracts*, supplement 46. Decree of 13 December 1948 and the General Mining Code of 1973 also are published in *North Africa-Basic Oil Laws and Concession Contracts*.

Turkey

Petroleum Legislation*

Petroleum law 6326, dated 7 March 1964, as amended by Law 6558 of 13 May 1965, Law 6987 of 29 May 1967, and Law 1702 of 5 April 1973.* Two decrees of 25 January 1980 guarantee the export right and international price for domestic sales.

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The law provides for the granting of nonexclusive permits for geological investigation; licenses giving their holders the right to drill wells; and leases that may be acquired either as of right by license holders who have made discoveries or, for areas not under license, by competitive bidding.

Area

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A leased area covers at most 25,000 hectares, and an entity may not hold areas amounting to more than 150,000 hectares in any one district at once.

Drilling Obligation

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Lessees must commence a development well within six months of the effective date of the lease.

Royalty

For petroleum produced, 12.5%.

Tax

net

Petroleum rights are subject to the general corporate tax regime. The Company may deduct rentals, royalties, exploration expenses, depletion allowances, and intangible drilling losses.

No provision for joint venture or production sharing.

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Oil

Rental

Lessees and licensees pay rentals.

Incentive Decrees

The Turkish Government passed decrees No. 8/172 and No. 8/178 of 24 January 1980 and Decree No. 8/910 of 28 May 1980 to clarify uncertainties in the application of Turkish petroleum policy and to create more favorable conditions for exploration.

Improvements by the decrees are as follows:

- 1) Benefiting from every domestic and foreign means was adopted as the national policy (Decree No. 8/178, Art. No. 1).

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- 2) Measures to reopen all promising areas to domestic and foreign exploration activities were undertaken (Decree No. 8/178, Art. 2).
- 3) The 25% fund share that was previously taken was abolished for newly discovered oil. Sales price of domestic oil was raised to world market prices (Decree No. 8/172, Art. 1/4 B-aa).
- 4) An amount of 35% of produced oil was permitted to be exported (Decree No. 8/910, Art. 3).
- 5) The national petroleum company, TPAO, was authorized to establish partnerships with domestic and/or foreign companies for up exploration and was also entitled to accept international arbitration procedures in agreements for joint exploration activities (Decree No. 8/178, Art. 6).
- 6) The Monetary and Credit Board was established (Decree No. 8/166) for high-level coordination and speed in solving problems related to petroleum policy and its implementation. The undersecretary of the Ministry of Energy and Natural Resources and the Director General of Petroleum Affairs participate in meetings held by this board in connection with such operations (Decree 8/178, Art. 4).

* Published in *Middle East-Basic Oil Laws and Concession Contracts*, supplements 42 and 66.

Umm al-Qaiwain

Petroleum Legislation*

Because there is no petroleum law, all rights are awarded by negotiated contract.

Duration

Twenty-five years.

Drilling Obligation

The Company is to begin to explore within six months and within 12 months to complete initial geophysical operations.

EIC SALES

Sale 43/43A Beaufort Sea/Colville River Delta/Prudhoe Bay Uplands May 22, 1984

Tracts

EIC

43A-70 - 78
43A-79 - 84

\$ 1,200/ft drilled to 30% of well costs, 1st well/tract, 10 yr limit
\$375/ft drilled to 30% of well costs, 1st well/tract, 10 yr limit

Sale 65 Beaufort Sea June 4, 1991
All tracts \$1,000/ft drilled up to 15% of well costs, 1st well/tract, 5yr limit

Sale 67A Cook Inlet Exempt January 29, 1991
All tracts \$200/ft drilled to 20% of well costs, 1 well /tract, 3 yr limit

Sale 70A Kuparuk Uplands Exempt January 29, 1991
All tracts \$300/ft drilled to 20% of well costs, 1 well /tract, 5 yr limit

Sale 74 Cook Inlet September 24, 1991
All tracts \$200/ft drilled to 20% of well costs, 1 well /tract, 3 yr limit

allow c. to grant

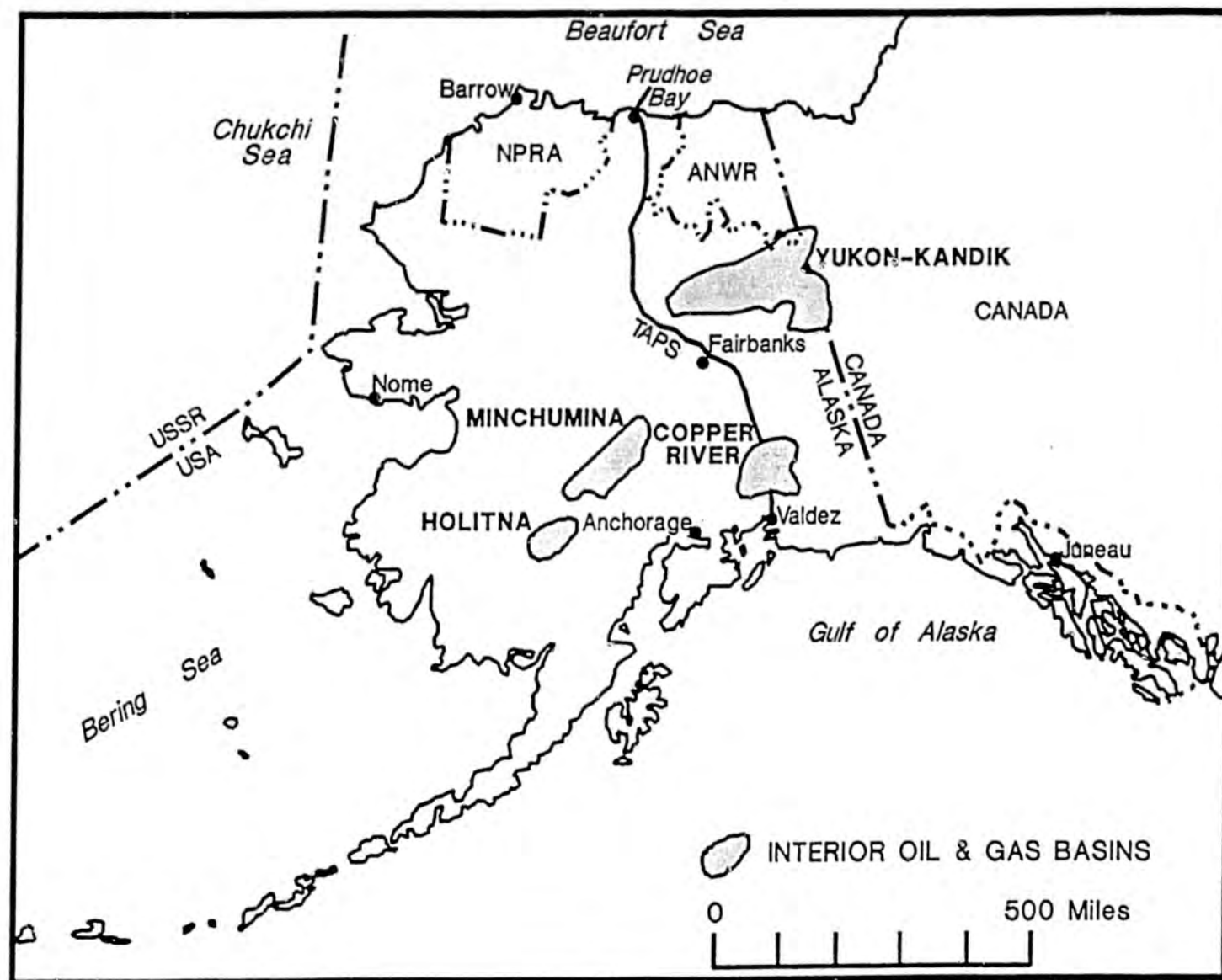


EXPLORATION INCENTIVE CREDITS
Report Month: February 1992

ADL	WELL	COMPANY	CERTIFICATION DATE	TOTAL AMOUNT
343109	G-2 Well	Exxon	10/05/83	\$6,197,625.00
		Standard Alaska	12/27/83	4,152,408.75
		BPAAE	10/05/83	2,045,216.25
344010	Leffingwell	Arco	10/02/84	3,706,000.00
		Union	10/02/84	3,706,000.00
344033	J-1 Well	Exxon	10/31/84	5,119,500.00
355005	Long Island Well	Exxon	11/14/84	1,378,076.00
		Standard Alaska	11/14/84	1,378,076.00
245126	Totek Hills	Arco Alaska	08/02/85	715,530.81
355037	Colville Delta #1	Texaco	07/09/86	637,500.00
		Amerada Hess	07/09/86	888,594.00
		Diamond Shamrock (A)	07/09/86	100,128.00
		Mobil	02/05/87	432,511.00
		Placid Oil (C)	07/09/86	314,679.00
		Union Texas (B)	07/09/86	475,631.00
		Rosewood Resources	07/09/86	12,662.00
		Hunt Pet Co.	07/09/86	11,213.00
364478	Colville Delta Area AHC 25-13-6 #1 Well	Amerada Hess	10/12/87	677,853.00
		Union Texas (G)	10/12/87	508,390.00
		Texaco	10/12/87	225,951.00
		Maxus Expl. (G)	10/12/87	146,757.41
		Placid Oil	10/12/87	129,115.00
		Rosewood Res.	10/12/87	21,360.00
		Hunt Pet Co. (G)	10/12/87	18,987.00
		Texaco (E)	02/01/88	79,193.59
355038	Colville Delta #2	Amerada Hess	10/28/87	757,731.46
		Union Texas (G)	10/28/87	205,106.95
		Texaco	10/28/87	273,475.93
		Maxus Expl. (F)	10/28/87	273,475.93
		Placid Oil (H)	10/28/87	423,982.26
		Rosewood Res. (D)	10/28/87	77,561.49
		Hut Pet Co. (G)	10/28/87	68,943.50
355039	Colville Delta #3	Amerada Hess	10/28/87	364,048.13
		Union Texas (G)	10/28/87	91,012.03
		Texaco	10/28/87	364,048.13
		Maxus Expl. (G)	10/28/87	364,048.13
		Placid Oil (H)	10/28/87	178,918.37
		Rosewood Res. (D)	10/28/87	34,416.31
		Hut Pet Co. (G)	10/28/87	30,592.28
344176	Gyr #1	Arco Alaska, Inc.	11/ /90	719,560.56
		Conoco	11/ /90	761,481.20
		Amerada Hess	11/ /90	761,481.20
		Arco Alaska, Inc.	01/92	16,151.00
		Conoco	01/92	9,479.94
		Amerada Hess	01/92	9,479.93
GRAND TOTAL				\$38,863,952.54

- (A) Assigned \$432,511 of EIC to Mobil Oil Corp. effective 02/05/87
 (B) Assigned entire EIC to BP Alaska effective 02/03/87
 (C) Assigned entire EIC to Texaco Inc. effective 03/31/87
 (D) Assigned entire EIC to Texaco Producing Inc. effective 01/01/88
 (E) Assigned \$79,193.59 of EIC to Texaco Producing Inc. effective 02/01/88
 (F) Assigned entire EIC to Texaco Producing Inc. effective 02/01/88
 (G) Assigned entire EIC to Texaco Producing Inc. effective 05/17/88
 (H) Assigned entire EIC to Standard Alaska effective 05/17/88

Source: Alaska Department of Natural Resources, Division of Oil and Gas



**TESTIMONY ON
EXPLORATION LICENSE BILL
SB 460
Presented to Senate Oil & Gas
April 7, 1992**

Mr. Chairman, for the record, my name is George R. Findling. I am the Manager of Government and Public Relations for ARCO Alaska, Inc. I am here to testify on SB 460.

Mr. Chairman, you will recall that Jim Davis, our Vice President of Exploration, testified Feb. 4th on the situation of oil and gas exploration in Alaska. He noted the general decline in industry activity and pointed out ways in which the State might be able to encourage more exploration. To summarize, anyone exploring for oil and gas must assume the significant risks and costs of exploration and, if successful, development. Uncertainty of future oil prices is a further major risk. Now, the state can somewhat enhance the prospects for exploration in Alaska by reducing the risks and costs of oil and gas leasing. This can be accomplished by authorizing issuance of exploration licenses that may be converted to leases.

We are pleased to see the introduction of this legislation. It shows the willingness of the legislature to consider important options that can be of real benefit to the State of Alaska. As you may know, ARCO has the most active exploration program in Alaska. We have continued our commitment despite industry retraction and the continuation of the recent weak oil prices.

The current version of SB 460 provides an excellent frame work within which a good exploration incentives program can be developed. We point out that this initial legislation could be improved mainly by incorporating concepts that provide earlier certainty of title and lease terms. The following features are recommended in order for the legislation to better fulfill its objectives. Some of these points could be covered by regulations; however, many, in our view, should be addressed directly in the legislation.

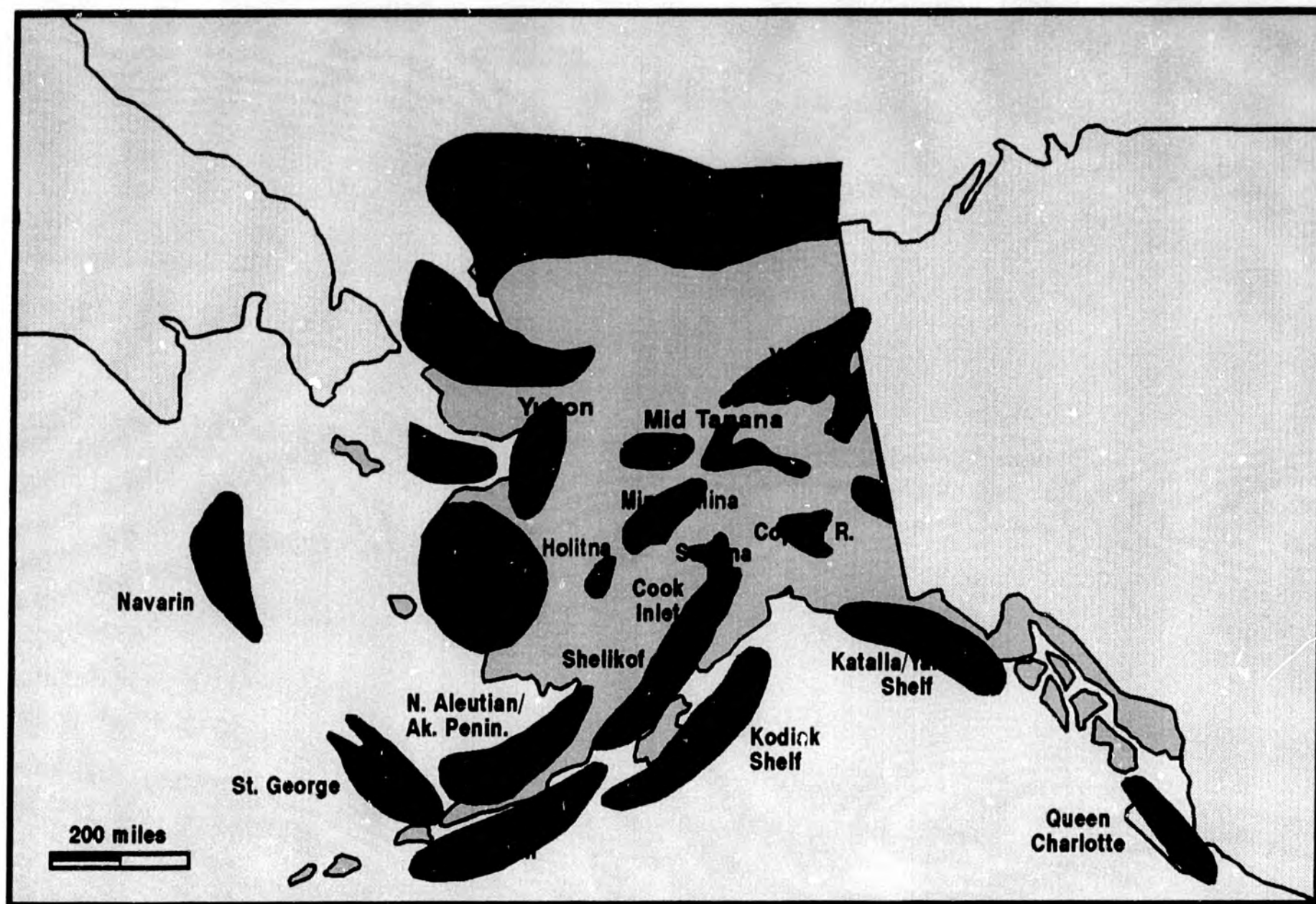
- License award procedures. Procedures should be enumerated for the award of exploration licenses. The license process should have four stages: (1) prospective licensees initiate the process with DNR by proposing a specific exploration license; (2) DNR publicly notices the proposal and solicits competing proposals and comment from governmental agencies and the public; (3) DNR makes a written best interest finding; and (4) the license is awarded (to the highest bidder at oral auction if more than one party is interested). Some of these steps will be more fully discussed in a moment.

- Work commitments. The consideration for receipt of a license should be a work commitment, expressed in dollars of auditable exploration costs. The licensee would control the exploration targets and methods, and commensurately commit to do a certain dollar value of acceptable forms of exploration activity. If more than one party were interested in an area, the bidding should be in terms of dollars of work commitment obligation.
- Public notice and public interest review. The licensee must have assurance that public notice and public interest review will not prevent conversion to lease. This means that the public notice and public interest review must precede issuance of the license. The legislature could substitute a streamlined notice and review process for that prescribed under AS 38.05.035(g). However, whatever procedures and standards apply, they must be satisfied before the license is issued.
- Lease terms. Lease terms must be set before the license is issued. The licensee must know, before it is bound by a work commitment, the terms that will govern such key obligations and rights as rent and royalty rates, royalty valuation, the primary term, extension beyond the primary term, unitization, force majeure, royalty reduction, and discovery royalty. This could be accomplished by attaching to the license, the form of lease that would be used.
- Conversion to lease. The granting of the license should vest the right to convert all or part of the area to lease based upon satisfaction of the work commitment. In essence, the exploration license should be viewed as an option to lease, and its issuance viewed as a disposal of an interest in land.

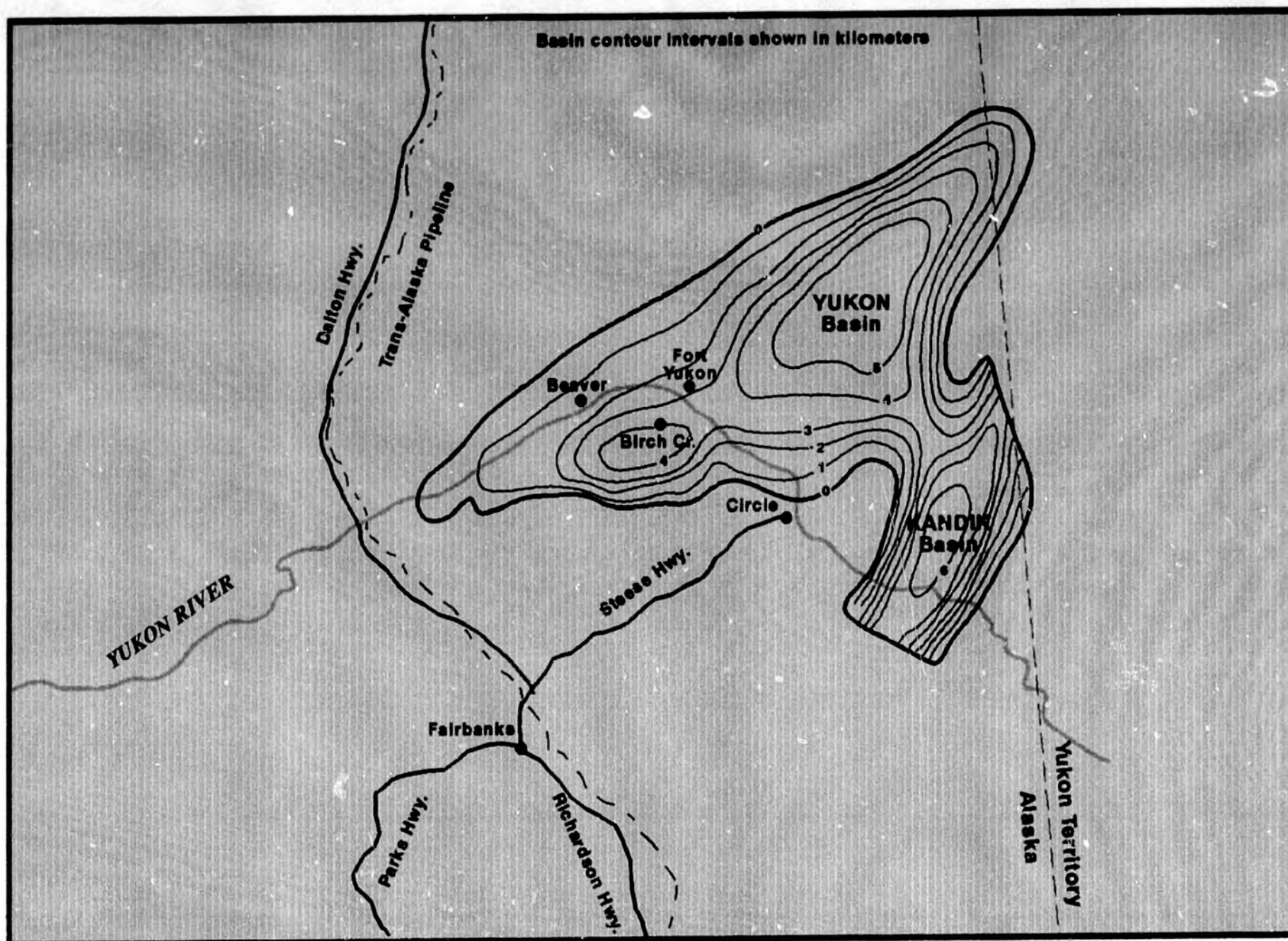
The area converted to lease need not be a single lease, but could be divided into and administered as individual, standard-size leases. Conversion to a lease, however, cannot be dependent upon the exercise of subjective discretion.
- Bond and Bond forfeiture. The legislature may wish to consider allowing alternative forms of security in place of surety bonds. However, we agree that the bond obligation must be genuine to avoid abuses of the licensing process. In addition, before a license could be forfeited, the licensee should have the right to notice and an opportunity to cure the alleged default. Forfeiture of the surety should require a judicial finding of material breach of the license obligations.

These comments are fairly specific and technical. I would be happy to try to answer any questions you may have.

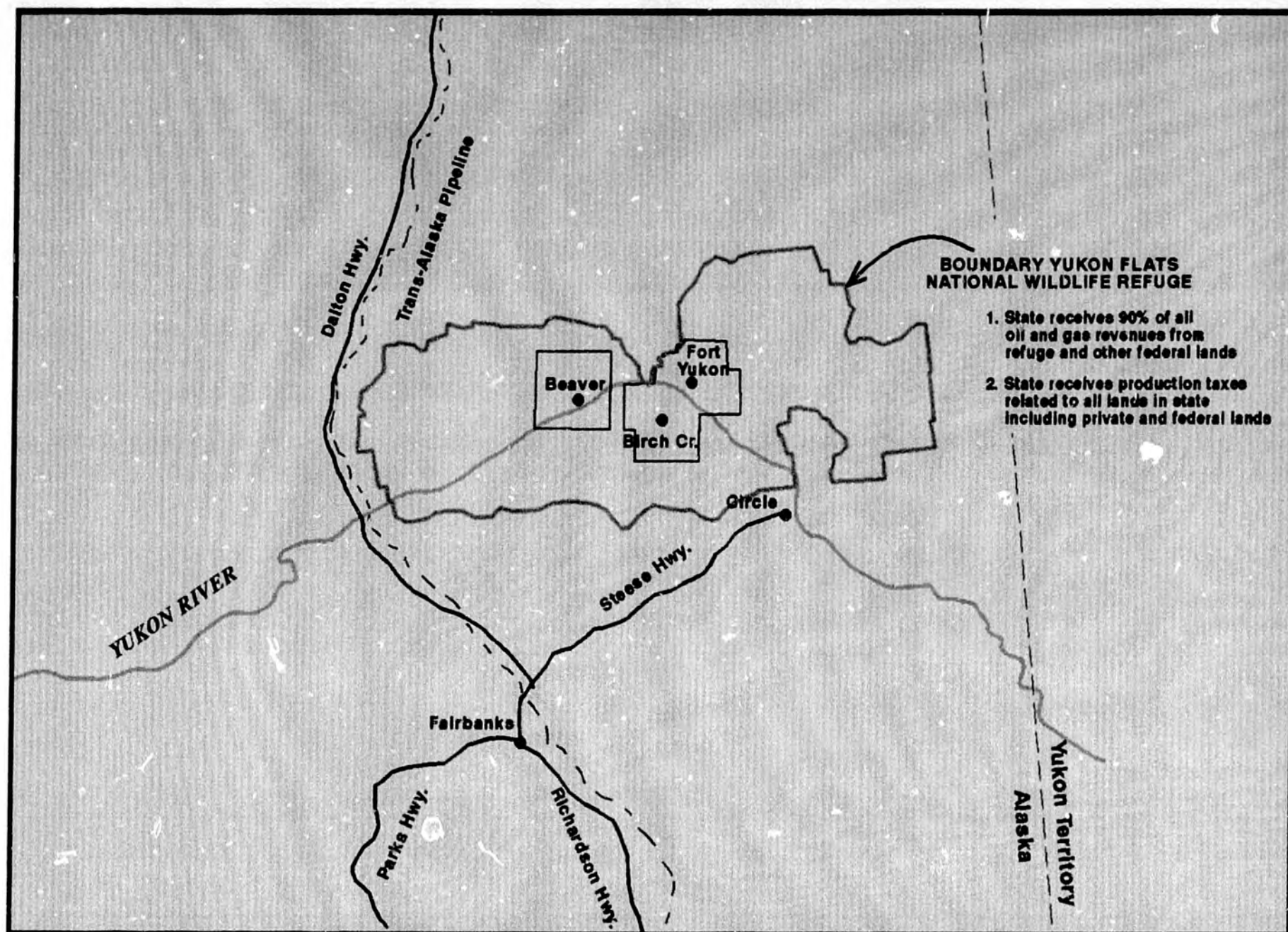
EXAMPLE OF STATE OF ALASKA'S
ECONOMIC INTERESTS IN PETROLEUM PRODUCTION
FROM PRIVATE AND FEDERAL LANDS



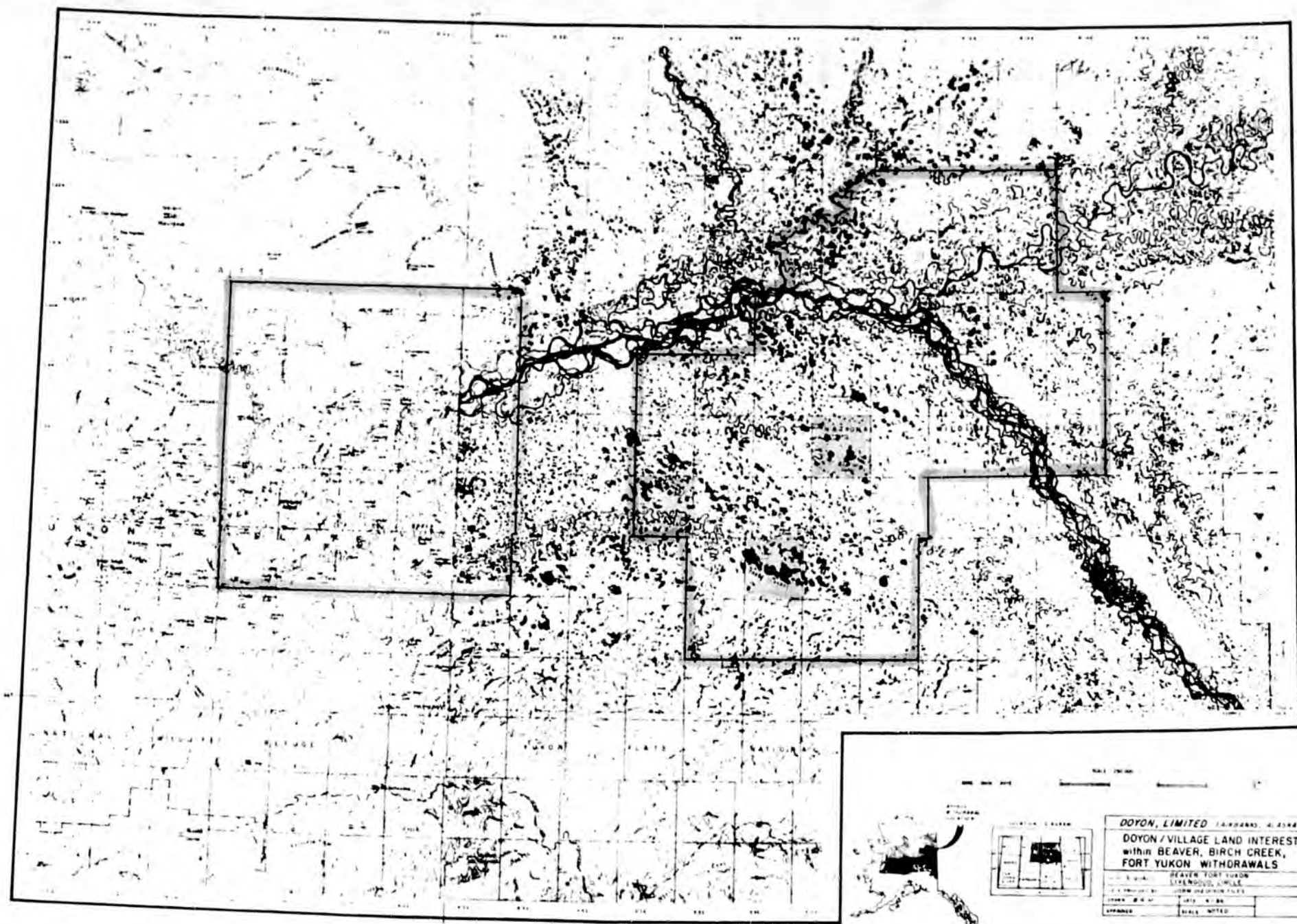
SEDIMENTARY BASINS

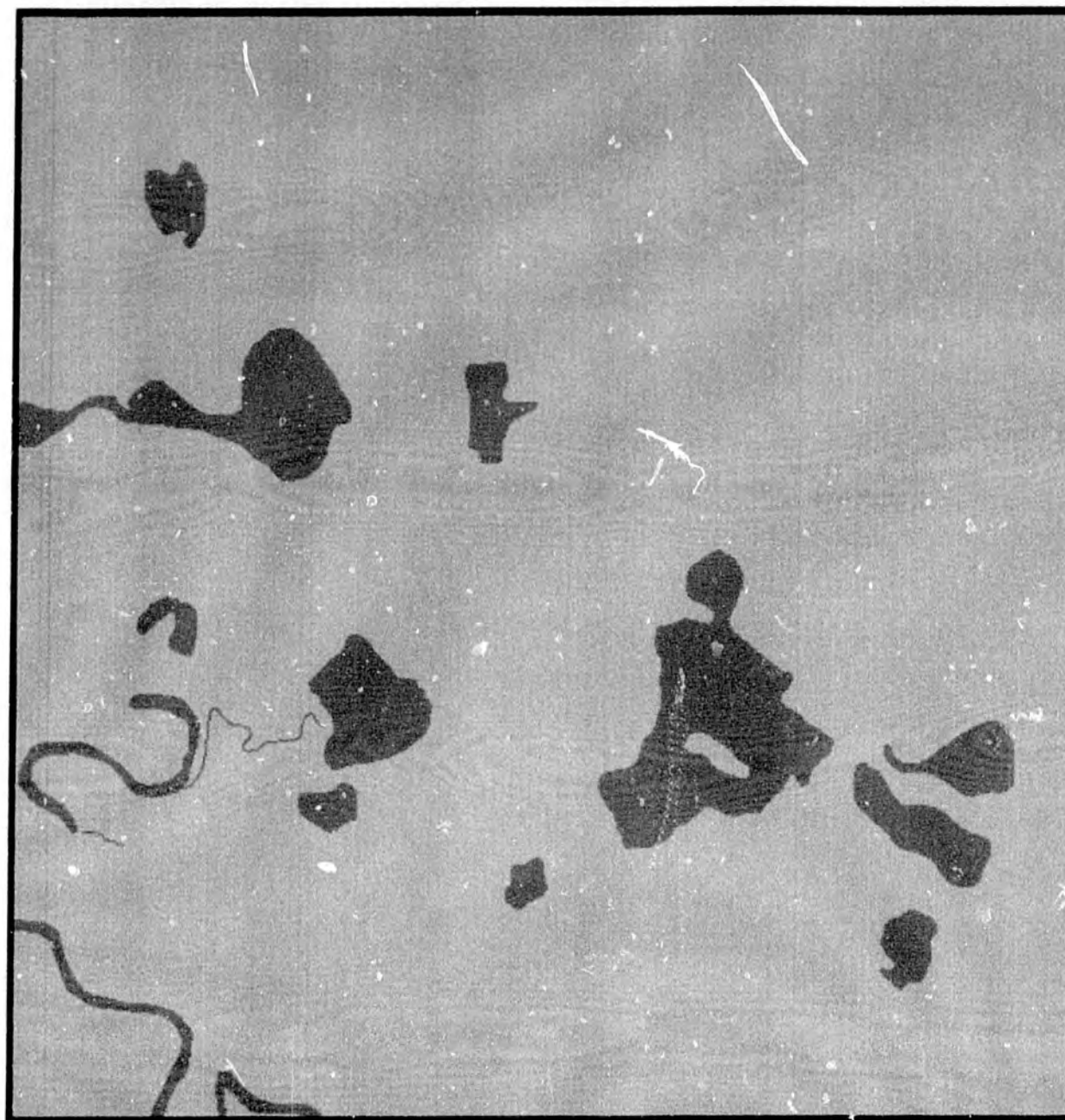


YUKON / KANDIK BASINS



CERTAIN PRIVATE LANDS WITHIN YUKON FLATS N.W.R. AND YUKON KANDIK BASINS





**FORT YUKON
BIRCH CREEK BLOCK**



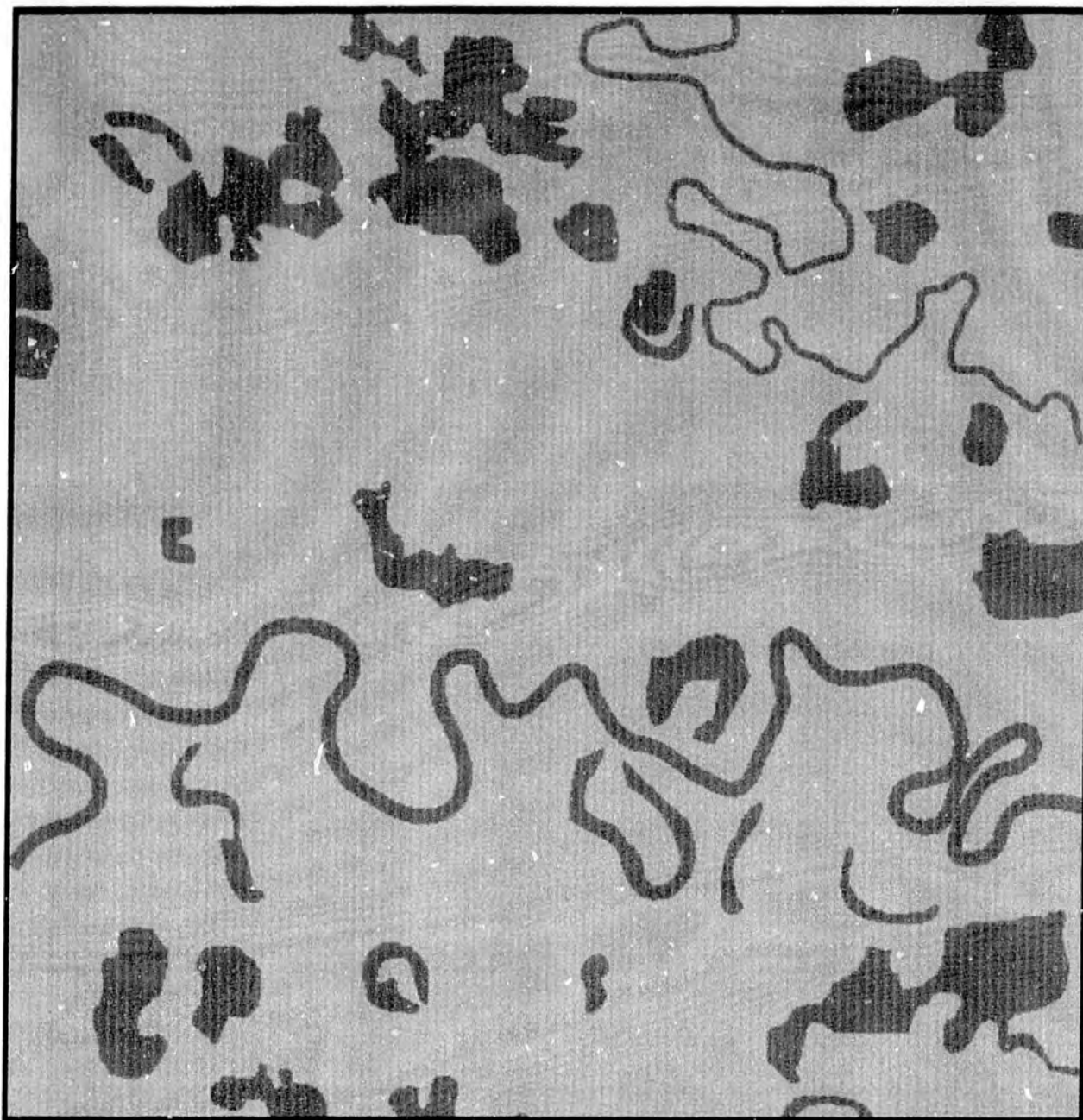
Total Area	22,853
Uplands	21,047
Aquatic Lands	1,806

RATIO:

Upland	92%
Aquatic Land	8%



Township T. 18 N. R. 10 E.



**FORT YUKON
BIRCH CREEK BLOCK**



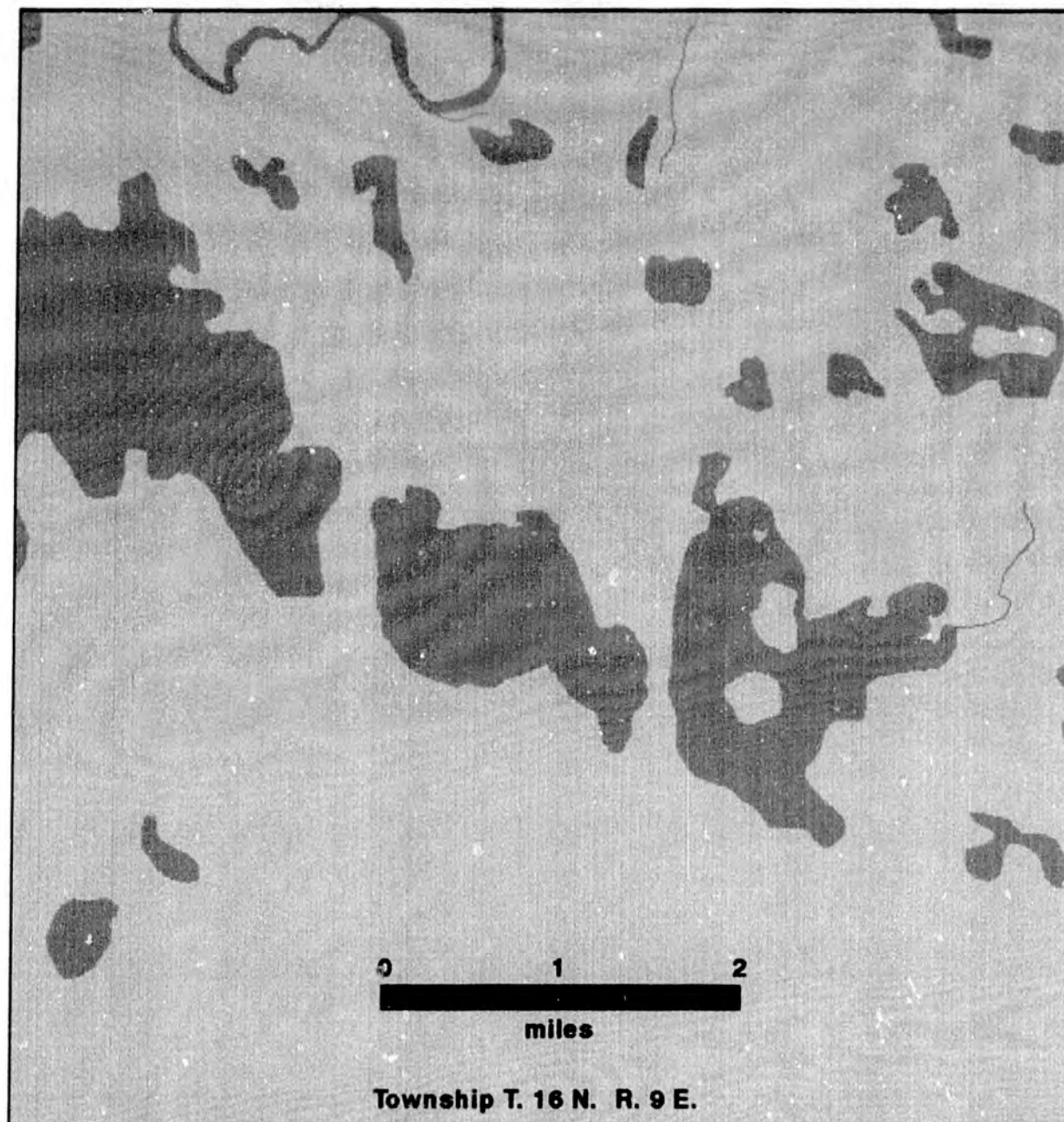
Total Area	22,950
Uplands	19,138
Aquatic Lands	3,812

RATIO:

Upland	83%
Aquatic Land	17%



Township T. 17 N. R. 7 E.



**FORT YUKON
BIRCH CREEK BLOCK**



Total Area	22,919
Uplands	19,113
Aquatic Lands	3,801

RATIO:

Upland	83%
Aquatic Land	17%

ANALYSIS OF AQUATIC LANDS IN SAMPLE TOWNSHIPS

(AREAS ARE IN ACRES)

TOWNSHIP	RANGE	TOTAL AREA	UPLAND AREA	AQUATIC LAND AREA	PERCENTAGE OF UPLANDS	PERCENTAGE OF AQUATIC LANDS
T16	R9	22,919	19,118	3,801	83%	17%
T17	R7	22,950	19,138	3,812	83%	17%
T18	R10	22,853	21,047	1,806	92%	8%

CRITERIA:

- WATER BODIES GREATER THAN 20 ACRES
- FLOWING RIVERS AND STREAMS

HYPOTHETICAL REVENUE CALCULATIONS

Location:

Yukon Flats Basin, approximately 70-90 miles from TAPS.

Ownership:

Productive acreage is a combination of (1) federal and Native corporation uplands and submerged lands beneath non-navigable waterbodies, and (2) State of Alaska submerged lands beneath navigable waters. The state would own 100% of the oil and attendant revenues associated with the submerged lands beneath all navigable waters within both the federal and private lands. The State also would receive 90% of all bonuses, rentals and royalties from the federal uplands; for this reason, the remaining 10% federal interest will be ignored in the calculations below.

Because of the large number of waterbodies on federal and private lands in the Yukon Flats Basin and because of the 90% federal sharing requirement, assume that each of the State of Alaska and the Native corporations would receive 50% of all royalty revenues. Current upland ownership status, when overlaid by DNR's own oil and gas basin map, would seem to validate the reasonableness of this order of magnitude example. Other examples, some even more favorable to the state, could be applied to the Yukon Flats, Central Arctic and other Interior basins.

Production:

100,000 barrels per day, 36.5 million barrels per year. As a frame of reference, Endicott produces about 100,000 barrels per day.

Royalty Rate:

12.5%; no calculation of bonuses or rentals, or state income taxes or multiplier values, though possibly substantial.

Wellhead or Gross Value:

\$12 per barrel.

Revenues:

Millions of \$ per year

	<u>State</u>	<u>Private</u>	<u>Producers</u>
Royalty	27.4	27.4	(54.8)
Production Tax	41	(2.7)	(38.3)
Cons. Surcharge	1.7	(.1)	(1.6)
EP&PTP Taxes	10	-0-	(10)
Cons. Tax	.2	(.01)	(.2)
Yearly Totals	80.3	24.6	(104.9)

Notes:

1. Native corporations and state royalty shares of yearly production: 2,281,250 barrels each (6.25% x 36,500,000 barrels)
2. State royalty share free of production, conservation surcharge and conservation taxes; AS 43.55.900(13)
3. Yearly shares of production (private and producers) not exempt from production, conservation surcharge and conservation taxes: 34,218,750 barrels (2,281,250 private barrels plus 31,937,500 producers barrels)
4. Production tax at 10% of wellhead value, representing application of an economic limit factor similar to the one used at Endicott; AS 43.55.011, AS 43.55.013
5. Conservation surcharge at \$0.05 per barrel; AS 43.55.200
6. EP&PTP taxes at 20 mills on facilities of \$500 million; AS 43.56.018
7. Conservation tax at 5 mills per barrel; AS 43.57.010