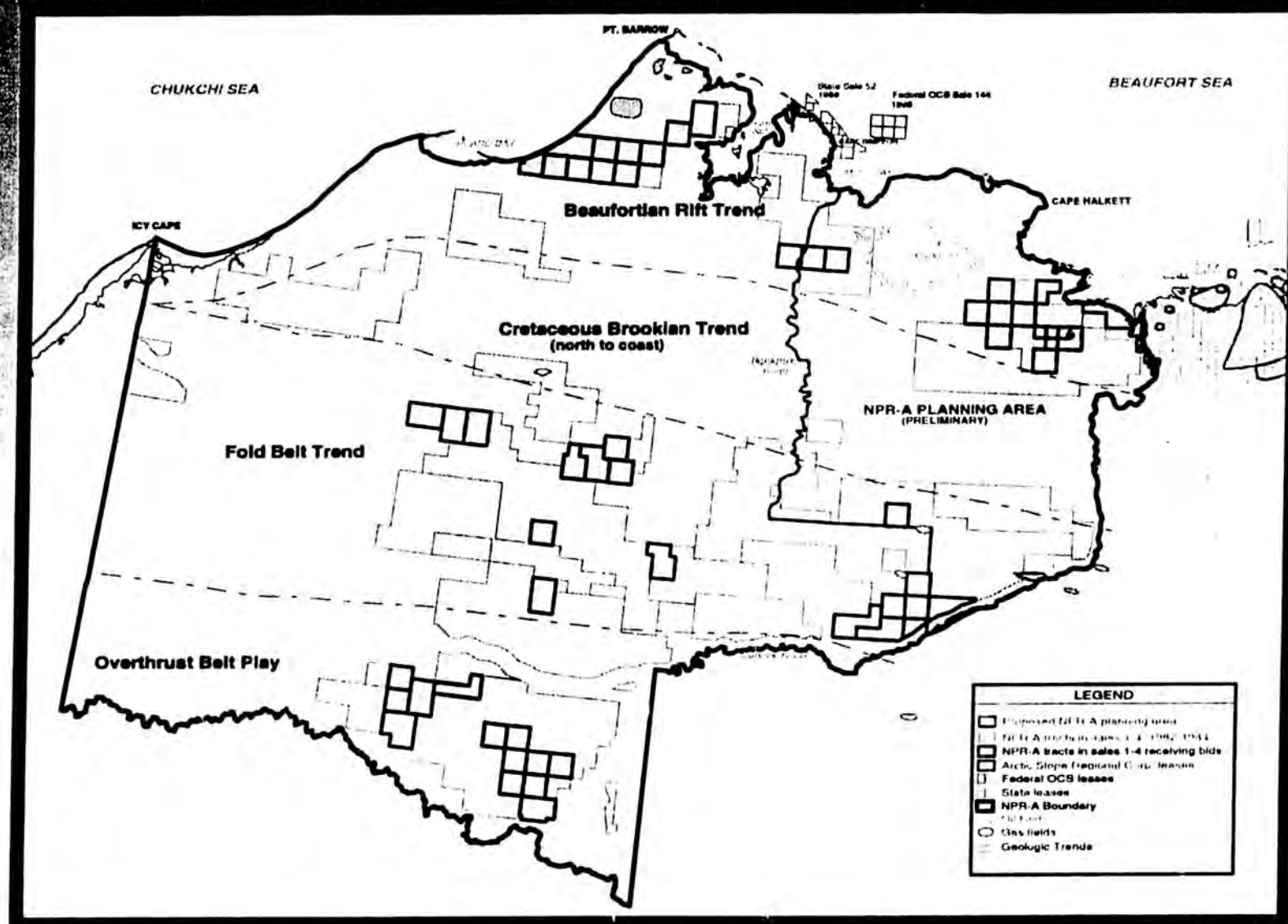


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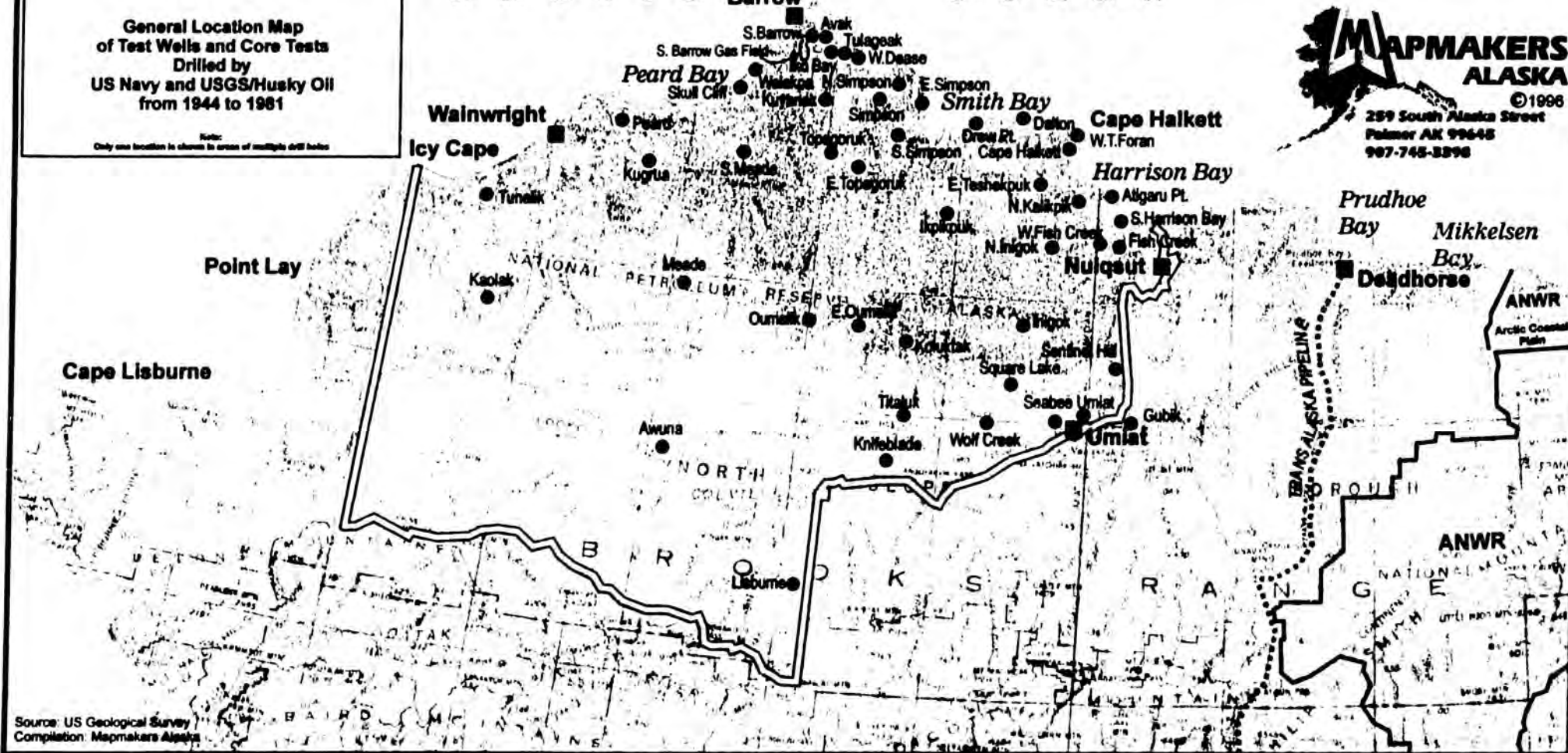


NATIONAL PETROLEUM RESERVE IN ALASKA

General Location Map
of Test Wells and Core Tests
Drilled by
US Navy and USGS/Husky Oil
from 1944 to 1981

Note:
Only one location is shown in areas of multiple drill holes

A R C T I C O C E A N



Source: US Geological Survey
Compilation: Mapmakers Alaska

Sec. 37.05.520. Railbelt energy fund. There is established in the general fund the Railbelt energy fund. The fund consists of money appropriated to it by the legislature. The Department of Revenue shall manage the fund. Interest received on money in the fund shall be accounted for separately and may be appropriated into the fund annually. The legislature may appropriate money from the fund for programs, projects, and other expenditures to assist in meeting Railbelt energy needs, including projects for retrofitting state-owned buildings and facilities for energy conservation. (§ 1 ch 29 SLA 1986; am § 2 ch 18 SLA 1993)

Revisor's notes. — Enacted as AS 44.25.050. Renumbered as AS 37.05.153 in 1986. Renumbered again in 1988.

Cross references. — For railbelt energy council formed to review railbelt energy problems and needs,

see ch. 30, SLA 1986, in the Temporary and Special Acts.

Effect of amendments. — The 1993 amendment, effective August 11, 1993, rewrote the last sentence

NOTES TO DECISIONS

Constitutional availability for appropriation. — Funds which require further legislative appropriation before expenditures can be made against them are available for appropriation: thus the Railbelt energy fund, AS 37.05.520, the Alaska marine highway system vessel replacement fund, AS 37.05.550,

and the educational facilities maintenance and construction fund, AS 37.05.560, remain "available for appropriation," within the meaning of article IX, section 17(b), of the Alaska Constitution. *Hickel v. Cowper*, 874 P.2d 922 (Alaska 1994).

Sec. 37.05.530. National Petroleum Reserve — Alaska special revenue fund. (a) The National Petroleum Reserve — Alaska special revenue fund is established. The fund consists of all money disbursed to the state by the federal government under 42 U.S.C. 6508 (P.L. 96-514) since December 12, 1980, less the amount deposited in the general fund and expended by the state by general fund appropriations before June 9, 1984.

(b) The commissioner of revenue shall manage the National Petroleum Reserve — Alaska special revenue fund.

(c) The Department of Community and Regional Affairs shall adopt regulations under which municipalities impacted by National Petroleum Reserve — Alaska oil and gas development under 42 U.S.C. 6508 may apply for and be eligible to receive grants to alleviate the impact. The department shall give priority in the allocation of grants to municipalities that are experiencing or will experience the most direct or severe impact from oil and gas development under 42 U.S.C. 6508 within the National Petroleum Reserve — Alaska. The department shall fund all meritorious grant applications out of the money appropriated to it each year. Within 10 days after the convening of each regular session of the legislature, the department shall submit to the legislature a list of all municipalities that have received grants, a list of all municipalities determined by the department to be eligible for further grants, a recommendation of the amount of money to be granted for those additional applications, and written justification of each past and potential grant.

(d) It is the intent of the legislature that each year all of the money in the National Petroleum Reserve — Alaska special revenue fund be made available for appropriation by the legislature to municipalities that demonstrate under (c) of this section present impact, or the need to determine or plan for future impact, from oil and gas development under 42 U.S.C. 6508. It is the intent of the legislature that an initial appropriation be made to the Department of Community and Regional Affairs to cover anticipated impact grants, and that additional funds be made available through supplemental appropriations if the impact is greater than anticipated and the legislature considers the additional grants proposed by the department to be meritorious.

(e) A municipality may use the funds received under (d) of this section only for the following activities and services to alleviate the impact of the oil and gas development

under 42 U.S.C. 6508 within the National Petroleum Reserve — Alaska:

- (1) planning;
 - (2) construction, maintenance, and operation of essential public facilities by the municipality; and
 - (3) other necessary public services provided by the municipality.
- (f) Funds appropriated under (d) of this section may not be used for the retirement of municipal debt.

(g) Amounts received by the state under 42 U.S.C. 6508 and not appropriated for grants to municipalities under (d) of this section lapse at the end of each fiscal year as follows:

- (1) 50 percent to the principal of the Alaska permanent fund;
- (2) .5 percent to the public school fund (AS 37.14.110); and
- (3) the remainder to the general fund for use by the state for the following facilities and services:

- (A) planning;
 - (B) construction, maintenance, and operation of essential public facilities; and
 - (C) other necessary public services.
- (h) Notwithstanding other provisions of law and unless expressly provided by the legislature in the appropriation item making the appropriation, an appropriation from the National Petroleum Reserve — Alaska special revenue fund shall, for the purposes of determining the funding sources for the appropriation be treated as though the appropriation takes effect in the fiscal year in which the appropriation passes the legislature. The authorization to expend funds appropriated from the fund shall take effect as otherwise provided by law. (§ 2 ch 94 SLA 1984; am §§ 2, 3 ch 53 SLA 1986; am § 2 ch 59 SLA 1992)

Revisor's notes. — Formerly AS 37.25.040. Renumbered in 1988.

Cross references. — For legislative findings in connection with the 1984 and 1986 Acts, see § 1, ch 94, SLA 1984, and § 1, ch 53, SLA 1986, respectively, in the Temporary and Special Acts; for legislative purpose in connection with the enactment of (h) of this

section, see § 1, ch. 59, SLA 1992 in the Temporary and Special Acts.

Effect of amendments. — The 1992 amendment, effective June 12, 1992, added subsection (h).

Editor's notes. — Section 3, ch. 59, SLA 1992 provides that the addition of (h) of this section is retroactive to May 31, 1986.

Sec. 37.05.540. Budget reserve fund; appropriation limit. (a) There is established as a separate fund in the state treasury the budget reserve fund. The budget reserve fund consists of appropriations to the fund. Money received by the state that is subject to the appropriation limit under (b) of this section and that exceeds that limit, may be appropriated to the budget reserve fund.

(b) Except for appropriations to the permanent fund or for Alaska permanent fund dividends, appropriations to the budget reserve fund, appropriations of revenue bond proceeds, appropriations required to pay the principal and interest on general obligation bonds, and appropriations of money received from a nonstate source in trust for a specific purpose, including revenue of a public enterprise or public corporation of the state that issues revenue bonds, appropriations from the mental health trust settlement income account (AS 37.14.036), and appropriations made to the mental health trust fund (AS 37.14.031), appropriations from the treasury made in a fiscal year may not exceed appropriations made in the preceding fiscal year by more than five percent plus the change in population and inflation since the beginning of the preceding fiscal year. For purposes of applying this limit an appropriation is considered to be made in the fiscal year in which it is enacted and a reappropriation remains attributed to the fiscal year in which the original appropriation is enacted. The determination of the change in population for purposes of this subsection shall be based on an annual estimate of population by the Department of Labor. The determination of the change in inflation for purposes of this subsection shall be based on the Consumer Price Index for all urban



National Petroleum Reserve Alaska



NPR-A Timeline

1917 - Petroleum exploration in Arctic Alaska began with the reporting of oil seeps in the Cape Simpson area near the northernmost tip of Alaska by the U.S. Geological Survey.

1923 - Prompted by fuel shortages in World War I, President Warren Harding established Naval Petroleum Reserve No. 4 in Alaska - an area of about 37,000 square miles.

1944 - 1953 - Fuel shortages during World War II prompted the first intensive, publicly funded exploration program in NPR-4, resulting in the discovery of several sub-commercial oil and gas fields.

1973 - In response to concerns about oil shortages related to the 1973 OPEC embargo of the United States, federal government-sponsored exploration of NPR-4 resumed in 1975. This second exploration program resulted in 28 wells and 14,800 miles of seismic data, but no significant discoveries.

1976 - Renamed NPR-4 as the National Petroleum Reserve-Alaska (NPR-A)

1980 - Federal law created to provide for lease sales within NPR-A. Stipulations of the law included the following:

"(9) all receipts from sales, rentals, bonuses, and royalties on leases issued pursuant to this section shall be paid into the Treasury of the United States: *provided*, That 50 per centum thereof shall be paid by the Secretary of the Treasury semiannually, as soon as practicable after March 30 and September 30 each year, to the State of Alaska for (a) planning, (b) construction, maintenance, and operation of essential public facilities, and (c) other necessary provisions of public service: *provided further*, That in the allocation of such funds, **the State shall give priority to use by subdivisions of the State most directly or severely impacted by development of oil and gas leased under this section."**

1981 - The first offerings of leases for private exploration — a single well drilled and abandoned in 1985. This well concluded the most recent cycle of petroleum exploration in NPR-A.

1984 - Alaska law passed establishing the NPR-A, Special Revenue Fund, with provisions for allocation to "subdivisions" from that fund (SLA 1984, Chapter 94). [Attachment A] The stated intent of the Legislature was that the amount of payment be equal to 50 percent of the amount received from the federal government (subject to annual review by the Legislature). This legislation was reviewed by the State's Attorney General (June 7, 1984, Gorsuch) who found the legislation generally acceptable so long as half the funding coming to the state went into the Permanent Fund. Additionally, the Attorney General stated that, of the remaining half, 50 percent should go to the subdivisions and the other 50 percent should go to the state for statewide purposes.

1985 - Of the \$48.6 million received from the federal government, about \$18 million was placed in the general fund, about \$24.5 million was put in the Permanent Fund, \$182,000 was put in the Public School Fund, and the remainder, about \$6.1 million was put in the NPR-A special Revenue Fund. About \$5.9 million of that latter amount was appropriated for grants to local governments over the next two years. (e.g., Barrow residential care, alcohol treatment facilities).

1985 - Barrow, Wainwright and the North Slope Borough sued the state over its handling of the NPR-A funds. The Court decided against the state and found that:

- 1) The state was mandated to distribute the funds under the terms of federal law, and must separate and account for all NPR-A funds received.
- 2) The state may not deposit 50 percent (or any amount) of the NPR-A funds into the Permanent Fund until "it has given priority to use of the funds by impacted subdivisions."
- 3) The state was not required to return that portion of the NPR-A funds already expended for the general use of the state.
- 4) The state was required to reconstitute the NPR-A fund by returning funds improperly deposited directly into the Permanent Fund and elsewhere.

1986 - In response to the court case, the Alaska Legislature amended the NPR-A statutes (SLA 1986, Chapter 53) [Attachment B] with provisions that:

- All NPR-A funds received from the federal government would go into the NPR-A Special Revenue Fund.
- The Department of Community and Regional Affairs was mandated to adopt regulations establishing a grant application and award process to distribute these funds to eligible municipalities impacted by NPR-A development.
- Any NPR-A funds remaining after grant awards would be deposited into the Permanent Fund (50%), the Public School Fund (0.5%) and the general fund (49.5%).
- Intent language was included stating that "an initial appropriation be made to the Department of Community and Regional Affairs to cover anticipated impact grants, and that additional funds be made available through supplemental appropriations if the impact is greater than anticipated and the legislature considers the additional grants proposed by the department to be meritorious."

The Legislature appropriated \$24.5 million to DCRA to reconstitute the NPR-A Fund.

1986 - DCRA adopted emergency regulations in July with public hearings in September. Permanent regulations were filed in November [Attachment C]. Based on the emergency

regulations, applications were sent to every municipality in the state on July 31, with September 15 as the application deadline. Applicants were required to demonstrate impacts from NPR-A development, demonstrate that proposed projects would mitigate these impacts, and demonstrate that other means for mitigating impacts were not available. Seventeen municipalities applied. A DCRA review team found five applicants to be eligible: Atkasuk, Barrow, North Slope Borough, Nuiqsut and Wainwright. The DCRA review team then further assessed each proposed project and determined an appropriate grant amount, in some cases less than the amount requested. The total award amount was \$7.2 million. The remaining \$17.3 million was returned to the various state funds as per AS 37.05.530. [See attached Table 1 for summary of DCRA grants to each municipality for FY 87 through FY 93. Table 2 indicates the total disposition of all federal NPR-A receipts from FY 83 to FY 93]

1987/1988 - Apparently through miscommunication between the U.S. Department of Interior and the state, the state was to receive about \$900,000 in federal NPR-A funding, but DCRA was not made aware of this. DCRA was operating under the understanding that NPR-A federal payments to the state were completed (i.e., that the grant program was a "one time" opportunity). Believing there was no NPR-A funding available that year, DCRA did not send out applications in 1987 for FY 1988 grants. In the end, the entire funding for that year (\$937,000) was distributed in FY 89 to the North Slope Borough to supplement an earlier grant for a residential care center in Barrow.

1989-FY 90 applications were sent to the five municipalities that had been determined as eligible in 1986. Public notices were placed in publications with statewide circulation inviting any other municipality to participate in a new application round. No municipalities responded to the public notices.

1990/1992- In each of these three years (FY 91,92,93), applications were sent only to the five municipalities that had been determined as eligible in previous years. Due to declining federal receipts, the eligible grant award amounts were greater than NPR-A funds available. Consequently, grant awards were decreased on a pro rata basis.

1992 - Based on research by Legislative Audit, the Alaska Legislature amended NPR-A program statutes to clarify the chronological relationship between federal payments to the state and allocations to municipalities. This re-calibration of payments required a \$1.8 million dollar repayment to the NPR-A fund from the Permanent Fund and School Trust Fund. Surplus funds were included in grant awards for the FY 93 application cycle.

1993/1994 - In FY 94 and FY 95, only a small amount of NPR-A funding was available. It was distributed to eligible municipalities on a pro-rated basis.

1995/1996 - DCRA was notified that all NPR-A leases were terminated and no further NPR-A funds would be released.

Table 1. DCRA NPR-A Grant Program: FY 87 to FY 97

Fiscal Year	Community	Grant Amount	Fiscal Year	Community	Grant Amount
FY 87	Atkasuk	\$689,000	FY 93	Atkasuk	\$50,000
	Barrow	\$825,000		Barrow	\$200,000
	North Slope Borough	\$3,772,137		North Slope Borough	\$0
	Nuiqsut	\$1,342,720		Nuiqsut	\$90,000
	Wainwright	\$611,380		Wainwright	\$107,126
	total	\$7,240,237		total	\$447,126
FY 88	Atkasuk	\$0	FY 94	Atkasuk	\$4,167
	Barrow	\$0		Barrow	\$6,440
	North Slope Borough	\$0		North Slope Borough	\$0
	Nuiqsut	\$0		Nuiqsut	\$4,167
	Wainwright	\$0		Wainwright	\$4,167
	total	\$0		total	\$18,941
FY 89	Atkasuk	\$0	FY 95	Atkasuk	\$8,172
	Barrow	\$0		Barrow	\$7,662
	North Slope Borough	\$937,000		North Slope Borough	\$0
	Nuiqsut	\$0		Nuiqsut	\$3,320
	Wainwright	\$0		Wainwright	\$6,384
	total	\$937,000		total	\$25,538
FY 90	Atkasuk	\$176,113	FY 96	Atkasuk	\$0
	Barrow	\$361,881		Barrow	\$0
	North Slope Borough	\$0		North Slope Borough	\$0
	Nuiqsut	\$57,900		Nuiqsut	\$0
	Wainwright	\$240,852		Wainwright	\$0
	total	\$836,746		total	\$0
FY 91	Atkasuk	\$21,181	FY 97	Atkasuk	\$0
	Barrow	\$287,299		Barrow	\$0
	North Slope Borough	\$200,000		North Slope Borough	\$0
	Nuiqsut	\$30,500		Nuiqsut	\$0
	Wainwright	\$51,020		Wainwright	\$0
	total	\$590,000		total	\$0
FY 92	Atkasuk	\$84,130	Totals	Atkasuk	\$1,032,763
	Barrow	\$146,951		Barrow	\$1,835,233
	North Slope Borough	\$0		All	\$4,909,137
	Nuiqsut	\$55,841		Fiscal	\$1,584,448
	Wainwright	\$80,456		Years	\$1,101,385
	total	\$367,378		total	\$10,462,966

**Table 2. Account of total NPR-A Federal Receipts to Alaska:
FY 83 to FY 97**

NPR-A Federal Receipts*:	\$53,121,909
Grant Funds Expended by Municipalities**:	\$14,201,186
Remainder to State Accounts	\$38,920,723
Permanent Fund (50%)	\$19,460,362
Public School Fund (0.5%)	\$194,604
General Fund (49.5%)	\$19,265,758

* Approximate

** includes grants to North Slope communities in FY 86 and
FY 87 prior to implementation of DCRA grant program.



LAWS OF ALASKA

1984

Source

SCS CSMB 298(Fin)

Chapter No.

94

AN ACT

Establishing a National Petroleum Reserve, Alaska, special revenue fund; and providing for an effective date.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

THE ACT FOLLOWS ON PAGE 1, LINE 10

Approved by the Governor: June 8, 1984
Actual Effective Date: June 9, 1984

AN ACT

Establishing a National Petroleum Reserve, Alaska,
special revenue fund; and providing for an effective
date.

* Section 1. FINDINGS. The legislature finds that

(1) the United States Congress, by 43 U.S.C. 1337 (P.L. 96-514),
provided that the state shall receive 50 percent of receipts derived from
competitive leasing of oil and gas in the National Petroleum Reserve in
Alaska;

(2) virtually all of the National Petroleum Reserve in Alaska
lies within the corporate limits of the North Slope Borough, a home rule
political subdivision of the state; and

(3) because of the continuing nature of the congressional appro-
priation a special revenue fund should be established to comply with the
directive of the federal Act.

* Sec. 2. NATIONAL PETROLEUM RESERVE, ALASKA, SPECIAL REVENUE FUND.

(a) The National Petroleum Reserve, Alaska, special revenue fund is estab-
lished. The fund shall consist of money received by the state from the
federal government under 43 U.S.C. 1337 (P.L. 96-514).

(b) The commissioner of revenue shall manage the special revenue fund
in accordance with AS 37.10.070.

(c) The commissioner of revenue shall pay to the subdivisions of the
state that are most directly or severely impacted by development of oil and
gas leased under 43 U.S.C. 1337 the amount appropriated by the legislature

Chapter 94

1 from the fund for that purpose. It is the intent of the legislature that
2 the amount appropriated for payment to subdivisions equal 50 percent of the
3 amount received from the federal government under 43 U.S.C. 1337 and that
4 this percentage be reviewed annually by the legislature.

5 (d) Amounts received by the state under (a) of this section and not
6 paid under (c) of this section shall be used by the state for the following
7 activities and services:

8 (1) planning;

9 (2) construction, maintenance, and operation of essential public
10 facilities; and

11 (3) other necessary public services.

12 (e) Amounts paid to subdivisions of the state under (c) of this
13 section shall be used by the subdivisions only for the following activities
14 and services in conjunction with development of the National Petroleum
15 Reserve in Alaska and a program of competitive leasing of oil and gas from
16 that reserve:

17 (1) planning;

18 (2) construction, maintenance, and operation of essential public
19 facilities by the subdivisions; and

20 (3) other necessary public services provided by the subdivi-
21 sions.

22 * Sec. 3. This Act takes effect immediately in accordance with AS 01.-
23 10.070(c).

Sec. 37.05.530. National Petroleum Reserve - Alaska special revenue fund.

(a) The National Petroleum Reserve - Alaska special revenue fund is established. The fund consists of all money disbursed to the state by the federal government under 42 U.S.C. 6508 (P.L. 96-514) since December 12, 1980, less the amount deposited in the general fund and expended by the state by general fund appropriations before June 9, 1984.

(b) The commissioner of revenue shall manage the National Petroleum Reserve - Alaska special revenue fund.

(c) The Department of Community and Regional Affairs shall adopt regulations under which municipalities impacted by National Petroleum Reserve - Alaska oil and gas development under 42 U.S.C. 6508 may apply for and be eligible to receive grants to alleviate the impact. The department shall give priority in the allocation of grants to municipalities that are experiencing or will experience the most direct or severe impact from oil and gas development under 42 U.S.C. 6508 within the National Petroleum Reserve - Alaska. The department shall fund all meritorious grant applications out of the money appropriated to it each year. Within 10 days after the convening of each regular session of the legislature, the department shall submit to the legislature a list of all municipalities that have received grants, a list of all municipalities determined by the department to be eligible for further grants, a recommendation of the amount of money to be granted for those additional applications, and written justification of each past and potential grant.

(d) It is the intent of the legislature that each year all of the money in the National Petroleum Reserve - Alaska special revenue fund be made available for appropriation by the legislature to municipalities that demonstrate under (c) of this section present impact, or the need to determine or plan for future impact, from oil and gas development under 42 U.S.C. 6508. It is the intent of the legislature that an initial appropriation be made to the Department of Community and Regional Affairs to cover anticipated impact grants, and that additional funds be made available through supplemental appropriations if the impact is greater than anticipated and the legislature considers the additional grants proposed by the department to be meritorious.

(e) A municipality may use the funds received under (d) of this section only for the following activities and services to alleviate the impact of the oil and gas development under 42 U.S.C. 6508 within the National Petroleum Reserve - Alaska:

- (1) planning;
- (2) construction, maintenance, and operation of essential public facilities by the municipality; and
- (3) other necessary public services provided by the municipality.

(f) Funds appropriated under (d) of this section may not be used for the retirement of municipal debt.

(g) Amounts received by the state under 42 U.S.C. 6508 and not appropriated for grants to municipalities under (d) of this section lapse at the end of each fiscal year as follows:

- (1) 50 percent to the principal of the Alaska permanent fund;
- (2) .5 percent to the public school fund (AS 37.14.110); and

DCRA NPR-A Statutes

(3) the remainder to the general fund for use by the state for the following facilities and services:

(A) planning;

(B) construction, maintenance, and operation of essential public facilities; and

(C) other necessary public services.

(h) Notwithstanding other provisions of law and unless expressly provided by the legislature in the appropriation item making the appropriation, an appropriation from the National Petroleum Reserve - Alaska special revenue fund shall, for the purposes of determining the funding sources for the appropriation be treated as though the appropriation takes effect in the fiscal year in which the appropriation passes the legislature. The authorization to expend funds appropriated from the fund shall take effect as otherwise provided by law.

History -

(sec. 2 ch 94 SLA 1984; am sec. 2, 3 ch 53 SLA 1986; am sec. 2 ch 59 SLA 1992)

Revisors Notes -

Formerly AS 37.25.040. Renumbered in 1988.

Cross References -

For legislative findings in connection with the 1984 and 1986 Acts, see sec. 1, ch. 94, SLA 1984, and sec. 1, ch. 53, SLA 1986, respectively, in the Temporary and Special Acts; for legislative purpose in connection with the enactment of (h) of this section, see sec. 1, ch. 59, SLA 1992 in the Temporary and Special Acts.

Amendment Notes -

The 1992 amendment, effective June 12, 1992, added subsection (h).

Editors Notes -

Section 3, ch. 59, SLA 1992 provides that the addition of (h) of this section is retroactive to May 31, 1986.

DCRA NPR-A Regulations**CHAPTER 050****NATIONAL PETROLEUM RESERVE - ALASKA IMPACT PROGRAM****ARTICLE 01****INTRODUCTORY PROVISIONS****19 AAC 50.010****GENERAL OBJECTIVES.**

The primary objective of the National Petroleum Reserve-Alaska (NPR-A) Impact Program is to provide municipalities with financial assistance to help mitigate significantly adverse impacts related to oil or gas leasing within the NPR-A, including exploration, production, and oil or gas transportation activities, conducted under the authority of 42 U.S.C. 6508. Financial assistance may be available for

- (1) planning;
- (2) construction, maintenance, and operation of essential public facilities; and
- (3) other necessary public services.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 52, SLA 1986

19 AAC 50.020**ADMINISTRATION OF NPR-A IMPACT PROGRAM.**

Under sec. 2, ch. 53, SLA 1986, the legislature will appropriate each year the balance remaining in the National Petroleum Reserve-Alaska special revenue fund to the Department of Community and Regional Affairs. The department will, in accordance with this chapter, receive, review, and evaluate applications from eligible municipalities each year, and will fund qualified grant requests up to the amount of the appropriation. Money not allocated to eligible municipalities each year lapses in accordance with sec. 3, ch. 53, SLA 1986. If the total amount of money requested by eligible municipalities in a year exceeds the appropriation for that year, the department will allocate the available grant money in accordance with the criteria for priority set out in 19 AAC 50.060 - 19 AAC 50.080. Additional money might be made available through supplemental appropriations if the impact is greater than anticipated and the legislature considers the additional grants proposed by the department to be meritorious.

DCRA NPR-A Regulations

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

ARTICLE 02

ELIGIBILITY FOR NPR-A IMPACT ASSISTANCE

19 AAC 50.030

ELIGIBILITY IN GENERAL.

Eligibility for NPR-A impact assistance has two main components: applicant eligibility and project eligibility.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

19 AAC 50.040

APPLICANT ELIGIBILITY.

To be eligible to receive assistance under the NPR-A Impact program, the applicant

(1) must be a municipality under state law; and

(2) must demonstrate present impact, regardless of date of initial occurrence, or foreseeable future impact, on the applicant or the applicant's residents from oil or gas exploration, production, or transportation activities in the NPR-A under 42 U.S.C. 6508.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

19 AAC 50.050

PROJECT ELIGIBILITY.

(a) To be eligible for funding under the NPR-A impact program, a project must be related to present, continuing, or reasonably foreseeable impact on the applicant or the

DCRA NPR-A Regulations

applicant's residents from oil or gas exploration, production, or transportation activities in the NPR-A under 42 U.S.C. 6508.

(b) To be eligible for funding, a project also must be for the purpose of

- (1) planning;
- (2) construction, maintenance, and operation of essential public facilities; or
- (3) other necessary public services.

(c) In this section, "impact" means an effect reasonably attributable to NPR-A oil and gas activities under 42 U.S.C. 6508 on

- (1) population;
- (2) employment;
- (3) finances;
- (4) social and cultural values;
- (5) air and water quality;
- (6) fish and wildlife habitats;
- (7) the ability to provide essential public services, including health care, public safety, education, transportation, utilities, and government administration; and
- (8) other things of demonstrable importance to the applicant or the applicant's residents.

(d) Examples of needs that eligible projects may address include the following:

- (1) resource protection to ensure the continued viability of fish, wildlife, and other natural resources on which the applicant's residents rely for subsistence needs;
- (2) alleviation or mitigation of adverse social or cultural impacts;
- (3) health needs, including hospitals, clinics, emergency medical facilities, alcohol and drug abuse facilities, mental health facilities, waste disposal systems, and water quality improvement systems;
- (4) public safety needs, including police protection, search and rescue, and fire protection;
- (5) utility needs, including electric generating plants and distribution systems, water supply systems, telephone systems, and other fuel distribution systems;
- (6) housing needs;
- (7) recreational needs.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

19 AAC 50.060

PROJECT CRITERIA.

(a) If the total amount of money requested by eligible applicants for eligible projects in meritorious applications exceeds the amount appropriated for grants that year, the department will rank applications for the purpose of establishing priority for funding.

DCRA NPR-A Regulations

- (b) In determining the merit of an application, the department will consider
- (1) the degree to which the project proposed in the grant application alleviates the impact caused by development in the NPR-A under 42 U.S.C. 6508;
 - (2) the ability of the applicant to accommodate or absorb the impacts through existing facilities or programs; and
 - (3) other criteria the department identifies as critical to determination of the merit of the application.
- (c) In ranking the applications, the department will consider
- (1) the severity of the impact caused by the development in the NPR-A under 42 U.S.C. 6508 on the municipality; and
 - (2) the degree to which the impact on the municipality is directly caused by development in the NPR-A under 42 U.S.C. 6508.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

ARTICLE 03

PROCEDURES FOR ALLOCATION OF NPR-A IMPACT ASSISTANCE

19 AAC 50.070

SUBMISSION OF APPLICATIONS.

(a) Application must be made on forms provided by the department. The forms will be such that they may be easily filled out by small communities without technical staff. The department will, upon request, provide assistance to applicants to the extent possible based upon the availability of financial and human resources.

(b) Applicants must submit applications postmarked no later than September 15 of each year to the department. The commissioner will, in his or her discretion, extend the filing deadline for applications submitted in 1986.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

DCRA NPR-A Regulations

19 AAC 50.080

REVIEW OF APPLICATIONS AND AWARD OF GRANTS.

(a) The department will review applications for eligibility for NPR-A impact assistance and place applications in order of priority in accordance with 19 AAC 50.060.

(b) The department will review each application determined to be eligible for NPR-A impact assistance to determine whether the amount requested for a project is reasonably necessary for the project to alleviate impacts from oil and gas development in the NPR-A under 42 U.S.C. 6508, the department will deduct from the amount requested any amounts that are not reasonably necessary for that purpose.

(c) If, after making necessary adjustments to grant requests under (b) of this section, the department determines that the total amount for eligible projects requested by all eligible applicants that year is equal to or less than the amount appropriated for that year, the department will fund all meritorious requests. If the total amounts requested are greater than the amount appropriated, the department will fund requests in accordance with the priorities established in 19 AAC 50.060 until the appropriation is spent. The department will, in its discretion, recommend to the legislature that additional money be made available through supplemental appropriations.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986

ARTICLE 04

APPEAL PROCEDURES

19 AAC 50.090

RECONSIDERATION AND JUDICIAL REVIEW.

A municipality aggrieved by a decision made under this chapter may request reconsideration by the commissioner of community and regional affairs, and must seek such reconsideration before seeking judicial review. A final decision of the department is subject to judicial review in accordance with Rule 602 of the Alaska Rules of Appellate Procedure.

History -

Eff. 7/30/86, Register 99

Authority -

AS 44.47.050(14)

Subsec. (c), Sec. 2, ch. 94, SLA 1984 am. by Sec. 2, ch. 53, SLA 1986



HOUSE OIL AND GAS

DATE: March 20, 1997

SIGN - IN

NATIONAL PETROLEUM RESERVE AK
OVERVIEW OF GRANT PROGRAM: DEPT. OF COMMUNITY
AND REGIONAL AFFAIRS

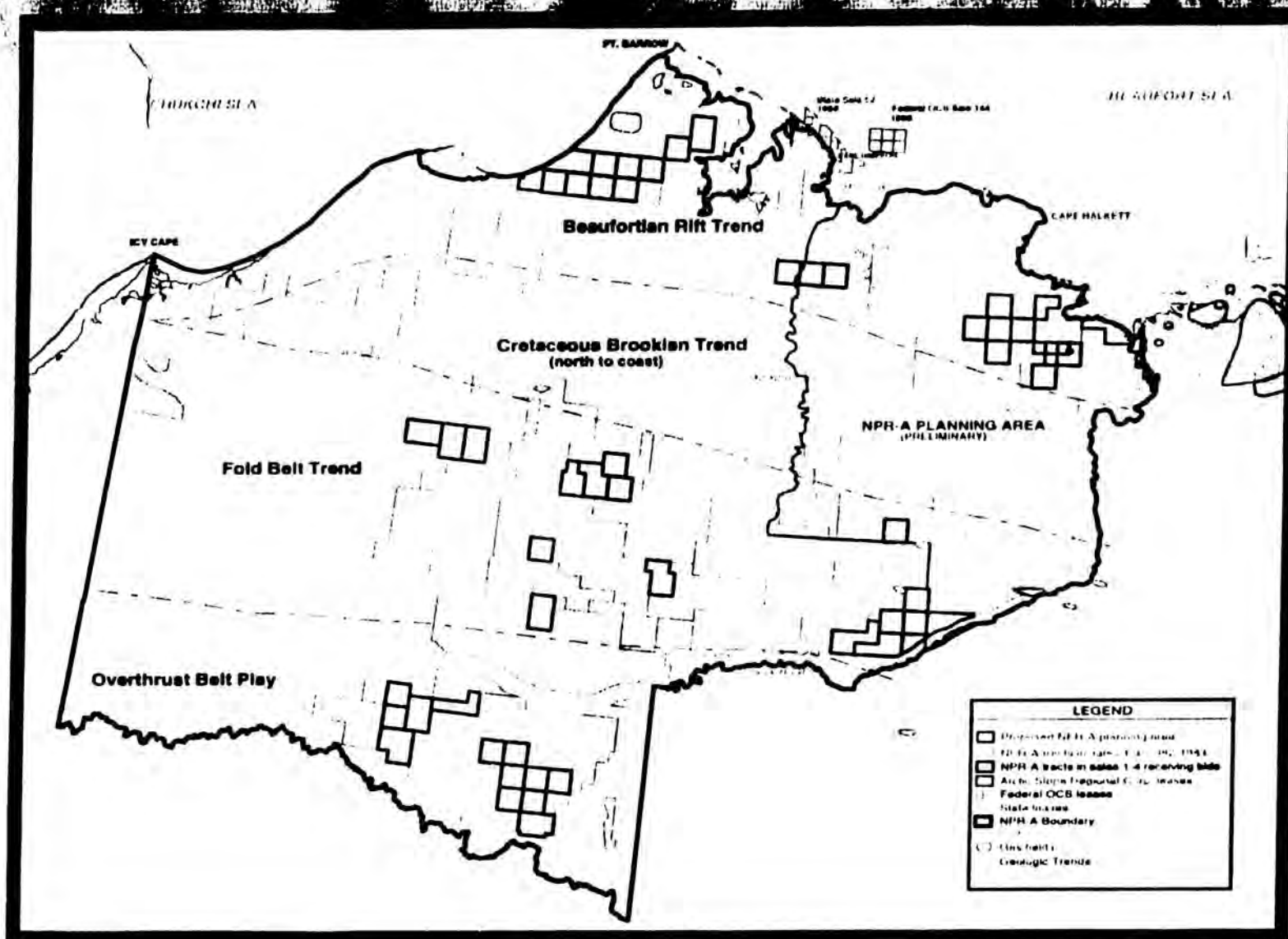
NAME**ADDRESS****PHONE**

REPRESENTING

DO YOU WANT TO TESTIFY?

[illegible]

North Slope of Alaska Region A (NPR-A)



**NATIONAL PETROLEUM RESERVE
IN ALASKA**

**General Location Map
of Test Wells and Core Tests
Drilled by
US Navy and USGS/Husky Oil
from 1944 to 1981**

Note:
Only one location is shown in areas of multiple drill holes

Note:
Only one location is shown in areas of multiple oval holes



**MAPMAKERS
ALASKA**
©1996
299 South Alaska Street
Palmer AK 99645
907-748-3398

Source US Geological Survey
Compilation Mapmakers Alaska

STATE OF ALASKA
1997 LEGISLATIVE SESSION

NO. _____
BILL VERSION: HJR 12
PUBLISH DATE: _____

Revision Date: _____
Title: Urging the Secretary of the Interior to
conduct competitive oil and gas lease sales....
Sponsor: Representative Green
Requestor: Representative Green

Department Affected: Legislative Affairs Agency
BRU: All
Component: All

COMPONENT SERIAL NO:

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0

CAPITAL	0	0	0	0	0	0
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REVENUE FUND SOURCE	0	0	0	0	0	0
---------------------	---	---	---	---	---	---

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS						
OTHER FUND SOURCE						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year impact: _____

ANALYSIS: (Attach a separate page if necessary)

Zero fiscal impact.

Prepared By: Karla Schofield, Deputy Director
Division: Administrative Services

Phone: 465-3852

Date: 1/17/97

Approved By: Pamela A. Varni, Executive Director
Agency: Legislative Affairs Agency

Date: 1/17/97

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

Alaska State Legislature



Representative Joe Green

District 10

Sponsor Statement

HJR 12

Supporting oil & gas lease sales in the National Petroleum Reserve Alaska

HJR 12 is a statement by the 20th Alaska Legislature urging the Secretary of the U.S. Department of the Interior to **re-institute an oil and gas leasing program** in the National Petroleum Reserve Alaska (NPRA).

Leasing in the NPRA is in the state's best interest for three reasons: 1) The economic activity associated with oil and gas leasing, exploration, and production benefits Alaskans; 2) oil produced in the NPRA would be transported through the Trans-Alaska Pipeline, helping to keep the pipeline open, and potentially enhancing the commercial viability of existing and future oil development projects on the North Slope; 3) the State of Alaska will receive 50% of the revenues from oil and gas production in the NPRA.

There were four oil and gas lease sales in the NPRA during the early 1980's. In January 1982 Sale # 821 offered 59 tracts. 52 bids were submitted on 29 tracts for a total of \$86,575,537. In May of 1982 Sale # 822 offered 212 tracts. 14 bids were submitted on 12 tracts for a total of \$11,747,131. In July of 1983 Sale # 831 offered 84 tracts. 23 bids were submitted on 18 tracts for a total of \$20,309,208. In July of 1984 Sale # 841 offered 64 tracts but no bids were submitted. Sale # 841 scheduled for August 1985 was canceled due to lack of interest.

With advances in technology **new interpretations are being developed from the data collected during the past several decades** by both the private sector and the federal government. These new evaluations are generating renewed interest, and oil companies with considerable experience in Alaska have indicated that they would like to utilize new interpretations of it to resume exploration.

I believe the **federal government should resume lease sales** and allow - no, encourage - the industry to explore for oil and gas in the NPRA. I also believe it is important that the Alaska Legislature send a unified message to the Department of the Interior that we support a lease sale being scheduled. I would appreciate your support of this measure.

What and where is the NPRA—and how was it established?

FROM: USGS PROFESSIONAL
PAPER 1240-C

NPRA established

In 1923, President Warren G. Harding set aside, by Executive Order, a Naval Petroleum Reserve, later designated No. 4, in Arctic Alaska. His Executive Order reads, in part:

"Whereas there are large seepages of petroleum along the Arctic Coast of Alaska and conditions favorable to the occurrence of valuable petroleum fields on the Arctic Coast and,

WHEREAS the present laws designed to promote development seem imperfectly applicable in the region because of its distance, difficulties, and large expense of development and,

WHEREAS the future supply of oil for the Navy is at all times a matter of national concern,

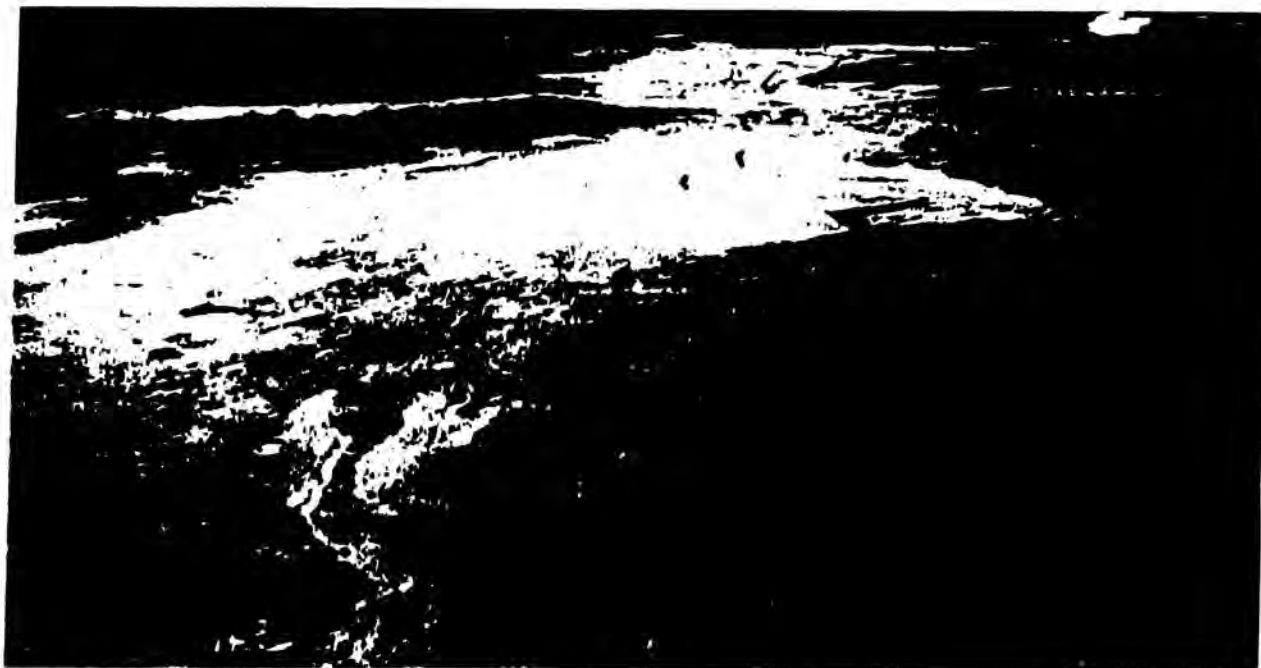
Now, THEREFORE, I, WARREN G. HARDING, President of the United States of America, by virtue of the power in me vested by the laws of the United States, do hereby set apart as a Naval Petroleum Reserve all of the public lands within the following described area not now covered by valid entry, lease or application: * * *

WARREN G. HARDING

The White House,
Feb. 27, 1923.

No. 3797-A.

The first description of oil seepages at Cape Simpson by A. H. Brooks was published in 1909 in USGS Bulletin 379. Eskimos had known of these seepages, as well as of oil shales that burned like wood, they had used both for fuel long before recorded history. Although these leads were in a remote and isolated region of the then Territory of Alaska, oil prospectors were already following up on them. Crude oil had been discovered and produced in the conterminous United States, but experts, including some prominent geologists, were predicting that resources were limited and soon could be in short supply. Oil was rapidly replacing other sources of energy (coal and whale oil), and oil for ships was considered critical to the Nation's welfare and defense. Thus, the establishment of a Naval Petroleum Reserve in Arctic Alaska was fitting.



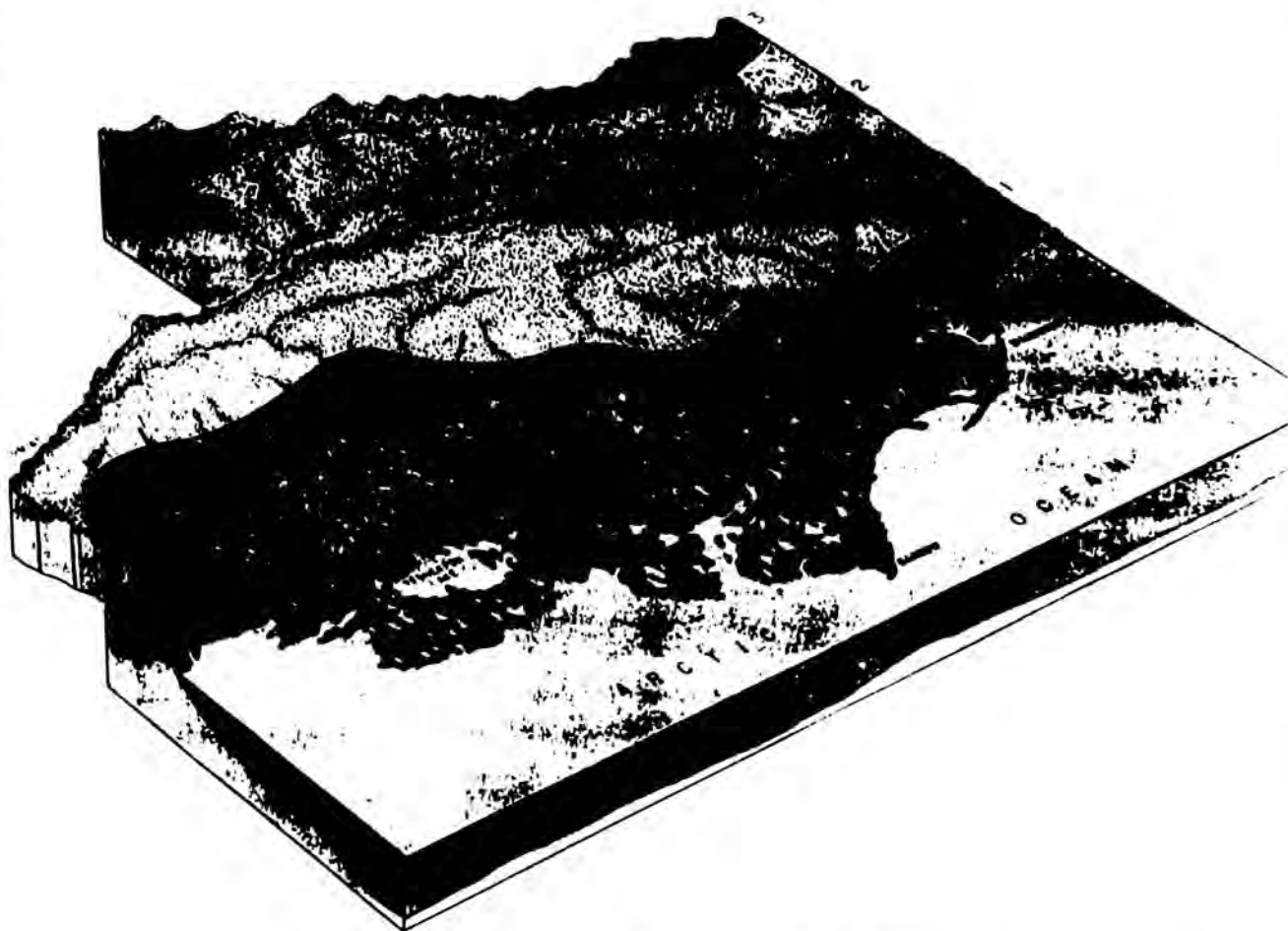
Oil seeps, such as this one near Simpson, provided clear evidence to early explorers that petroleum-rich rocks were present beneath the Arctic tundra. Photograph by George Cox.

Geographic setting

The entire NPRA is north of the Arctic Circle. It occupies an area about the size of the State of Indiana—some 37,000 square miles. Its north boundary is the Arctic Ocean, and about half of its south boundary follows the watershed divide of the western Brooks Range, thence northward to the Colville River, and along that river to the Arctic coast.

Northern Alaska and the NPRA are divided into three major physiographic provinces: the Arctic Coastal Plain, the foothills, and the east-west-trending Brooks Range that cuts off this Arctic region from the rest of Alaska. The Brooks Range forms a major watershed, the north slope of which drains into the Arctic Ocean—thus the terms "Arctic Slope" and "North Slope" of Alaska. The mountains form an arc, concave northward, of complexly folded and faulted rocks. Peaks range in elevation from 3,000–4,000 feet in the west to more than 9,000 feet in the east. The foothills immediately to the north consist of low synclinal mountains separated by broad anticlinal lowlands that give way to long, continuous, east-west-trending ridges covered by a green tundra mat. These ridges gradually blend into the vast, nearly treeless coastal plain dotted with literally thousands of shallow north-west-oriented lakes.

Typical scenes in the three physiographic provinces of northern Alaska



From north to south, the NPRA consists of (1) the Arctic Coastal Plain, a broad, flat expanse dotted with lakes, (2) the foothills, an area of rolling hills, and (3) the Brooks Range, a rugged mountain range with elevations as high as 5,020 feet within the NPRA and peaks of 8,000 to 9,000 feet near the United States-Canadian border.

When, by whom, and how was the NPRA explored?

Early exploration

Between 1800 and 1900, several hardy explorers sailed along the Arctic coast and described and named the major geographic features. Much of the sealane traffic, however, was by enterprising traders and whalers. It is interesting to note that the oil business, in one form or another, has had the greatest impact on the North Slope and its inhabitants.

The first big push to the Arctic was in search of whale oil, which, in the years before the Civil War, was the principal fuel for lamps and a common lubricant. The premium grade of fuel came from sperm whales, and the regular grade from bowhead and other species of whales. The rising industrialization of the United States and the heightened emphasis on education (requiring better light for evening study) created a rapid increase in demand. In 1823, sperm oil sold for 45 cents a gallon, but by 1866 the price rose to \$2.55 a gallon—the first “oil shortage.” The relief for this shortage came through the discovery and development of a more abundant and cheaper source of fuel, petroleum. Ironically, the next several waves of exploration and development in Arctic Alaska focused on a search for “rock oil.”

In winter 1885–86, Lt. George M. Stoney participated in expeditions sponsored by the U.S. Naval Institute that explored the Brooks Range from the south. Ens. W. L. Howard of the U.S. Navy crossed the Brooks Range in 1886, and continued overland across the Colville River valley and thence down the Chipp River by skin boat to Point Barrow. He described what were undoubtedly lumps and pebbles of oil shale along the Etivluk River. His report, published in 1900, may have been the first recorded suggestion of the oil potential of northern Alaska. However, this material and seepage tars had been known and used by the Eskimos before recorded history.

Frank C. Schrader, 1910. The first systematic survey of the North Slope was made in 1901 with Schrader as geologist and W. J. Peters, an experienced topographer and explorer, in charge. The geography and geology of an entirely new section of northern Alaska were studied by Peters and Schrader, much of it in the NPRA area.

Geologic and topographic surveys, 1923–26

The first systematic topographic and geologic survey across the Brooks Range and the North Slope was by F. C. Schrader and W. J. Peters of the USGS in 1901; the results were published in 1904 in Professional Paper 20. Schrader described thick marine sequences and noted broad anticlinal structures—both of prime importance in the search for oil. Thus, by 1923, when the lands were set apart, three of the prerequisites for the occurrence of petroleum were already known to be present: source rocks, such as organic marine deposits, including oil shale; potential reservoir rocks, including limestone and sandstone; and favorable structures, such as anticlines. In addition, oil



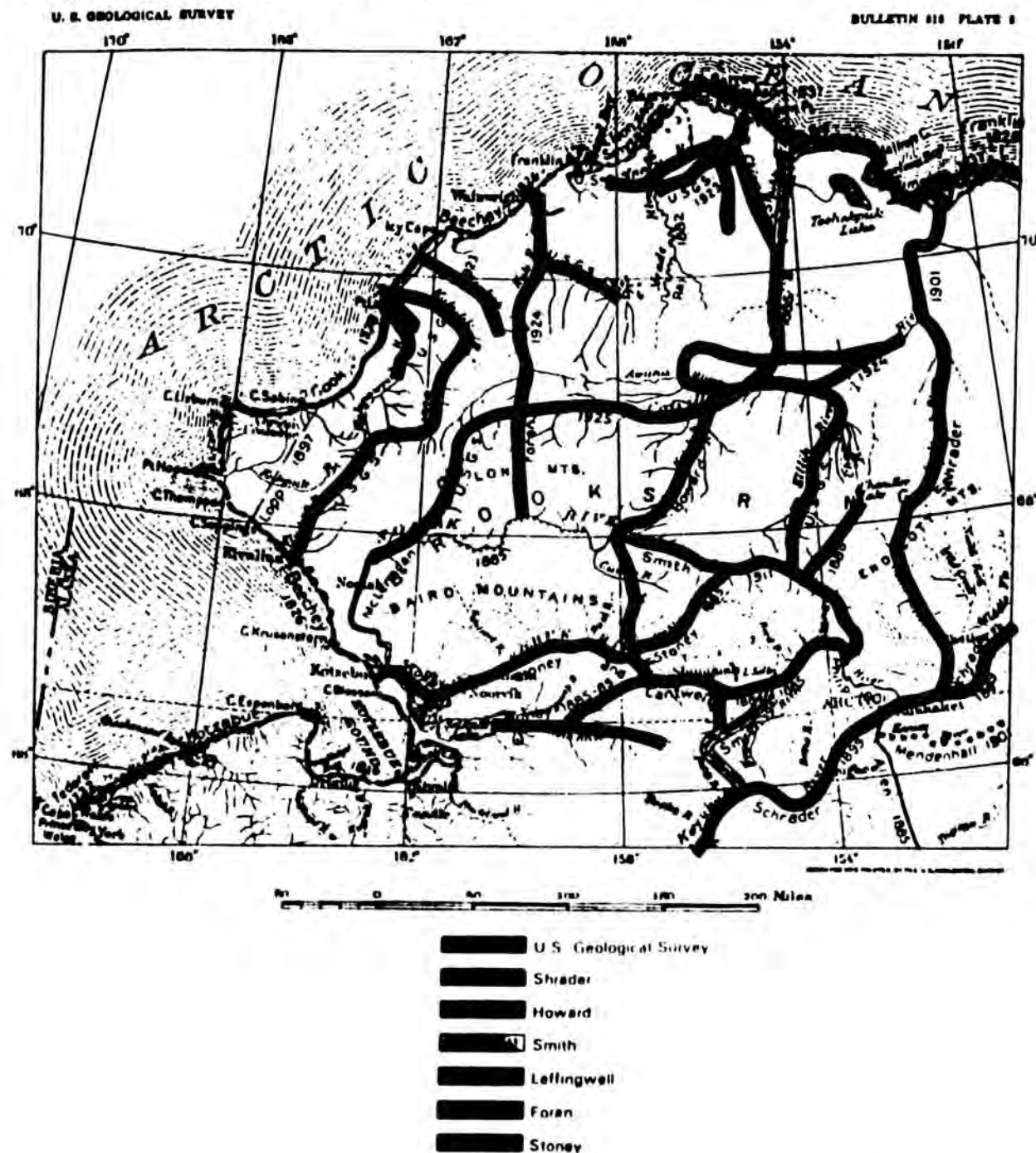
seepages were found along the Arctic coast. The region had already attracted the attention of the new oil industry, and several applications for prospecting permits were filed under the old mining laws on claims near Cape Simpson, Peard Bay, and along the Meade, Kukpowruk, and Kokolik Rivers.

About 150 miles east of NPR-4, E. de K. Leflingwell completed his classic work in the Canning River region. From 1906 to 1914, Leflingwell mapped the Arctic coast from Barrow to the United States-Canadian border. He named and described the now-famous Sadlerochit Group, which includes the primary oil reservoir of the Prudhoe Bay field. His report, published in 1919 as USGS Professional Paper 109, is now a collector's item. The region mapped by Leflingwell from the Canning River to the border was set aside in 1960 as the Arctic National Wildlife Refuge (ANWR).



Ernest de K. Leflingwell. Between 1906 and 1914 Leflingwell mapped the Canning River region from Barrow to the United States-Canadian border. His expedition was privately funded, half by his father. Toward the close of his fieldwork, the USGS provided him with office space to write and compile his maps, and eventually published his work in 1919. Photograph by George Cox.

Sketch map showing the progress of mapping, seismic surveying, and drilling from 1914 to 1953 (modified from Reed, 1958).



The International Boundary Commission completed locating and marking the border between the United States and Canada in 1912, and additional geologic information was collected along it by USGS geologists attached to the mapping party.

Thus, the geology and geography of the east edge of this potential petroleum province were known and mapped in a general way before the establishment of the Reserve. However, there remained a virtually unknown gap, 130 miles wide, between the Canning and Colville Rivers. That area included the Prudhoe Bay oil and gas fields.

NPR-4 was defined, and its boundaries described, on the basis of explorations carried out before 1923. In delineating the Reserve, account was taken of the observations of oil seepages at Cape Simpson, the early explorations by the U.S. Navy (particularly Howard's traverses in the western area), and the traverse by Schrader and Peters along the Colville River—the east boundary of the Reserve. Although some detailed surveys had been made by Leffingwell and the United States-Canadian-boundary survey teams, their information was not considered to warrant a change in delineation of the boundary. Furthermore, the northwest coast of Arctic Alaska was more accessible by sea than the northeast coast.



USGS surveying camp on the banks of the Canning River where Leffingwell worked. Photograph by George Gipe.



Smith and Mearns party resting with dog teams along the Colville River, 1924. The first expedition started from Tanana on February 17, but it was not until April 2 that all supplies, including four specially built canoes, were safe to the first camp on the Arctic drainage, and it was May 30 before the streams were open enough to

In 1923, little was known of the interior of the new Reserve. The U.S. Navy recognized that more geologic and geographic information would be required for proper management, and so the USGS was asked to survey the region. From 1923 through 1926, USGS parties traversed the Reserve along the major rivers and crossed the Brooks Range through Howard Pass and at the head of the Colville River. In 1930, the results of these field studies and surveys by P. S. Smith, J. B. Mertie, Jr., and others were published in USGS Bulletin 815. This classic report includes the first topographic and geologic maps of the Reserve, as well as descriptions of the rock sequences and structures, and an analysis of the mineral potential of the region, including petroleum and coal. Although the authors could not identify the precise age or distribution of the oil shales, they concluded that these rocks were the most likely source of crude oil. They left that sources in Paleozoic rocks were "extremely problematic" and that, because the Cretaceous rocks were of shallow marine and terrestrial origin, oil deposits derived from them were "likely to be small and of extremely sparse distribution." Smith and Mertie noted the numerous anticlinal structures in the Cretaceous sequences, as well as the faulted and overthrust structures in the Paleozoic rocks of the Brooks Range, and concluded that the regional dip of the older rocks was monoclinal to the north. Thus, pre-Cretaceous rocks at Cape Simpson and along the Arctic coast would be below practical drilling depth. They recommended that the next steps in evaluating the petroleum possibilities should be drilling for stratigraphic and structural information in the vicinity of Cape Simpson, followed by geologic field studies, and then drilling in other areas that these studies might indicate to be favorable.



Philip S. Smith, about 1915. Smith was Chief Alaskan geologist from 1925 until he retired in 1946. At the request of the Department of the Navy, the USGS was included in the first explorations of the newly established NPR-1.



John Beaver Mertie, 1915. Mertie began his long geologic career with the USGS in 1908 and finished his last publication, a professional paper, in 1979. Along with Philip S. Smith, Mertie led the expedition into NPR-1.

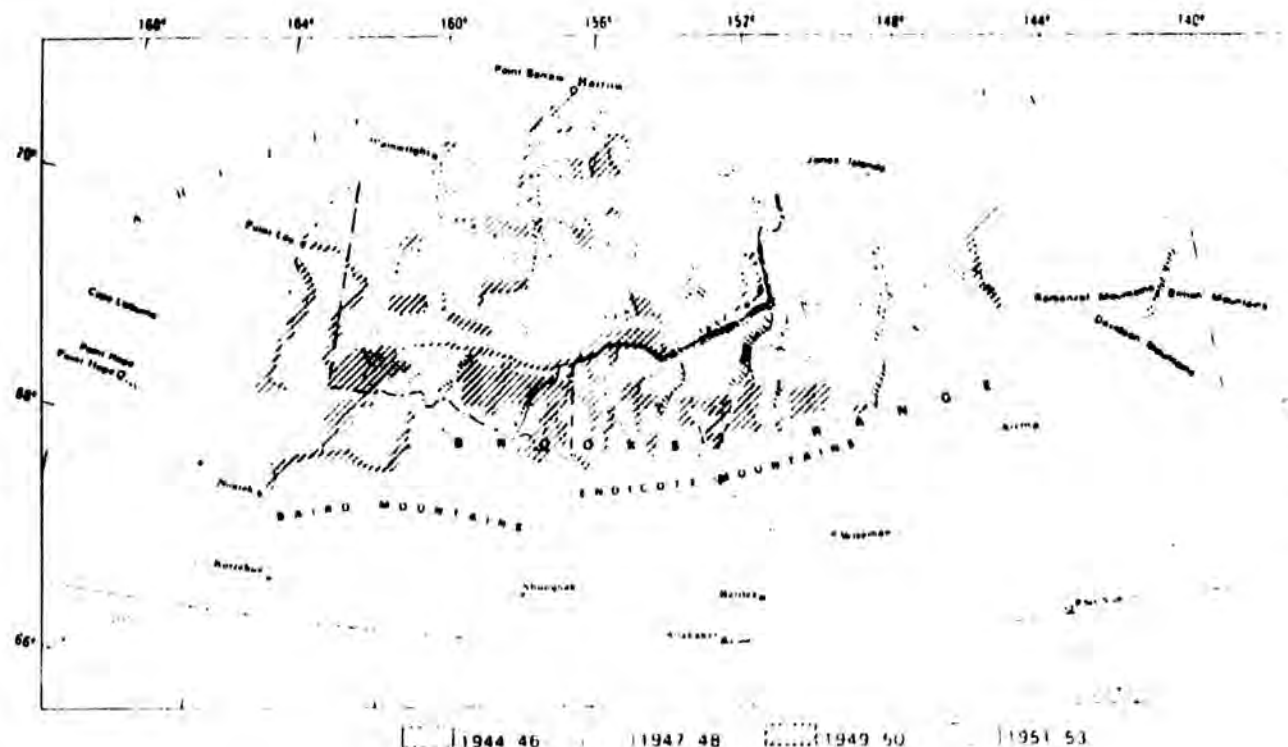
W. F. Fourn field party in Noatak, about 1924. From left to right: F. W. Helgard, W. F. Fourn, D. E. Wix, and H. G. Hughes. In 1933, F. Fourn called attention to the petroleum potential of NPR-1 as World War II brought an increasing demand for petroleum. Sparked by his encouragement, the first modern systematic oil exploration program began in NPR-1 (1944 until 1953).



The Pet-4 exploration program, 1943-53

From 1926 to 1943, little interest was shown in the petroleum potential of NPR-4. There was then no shortage of petroleum either for the U.S. Navy or for industry, and the remote and frigid Arctic was not an attractive target for commercial exploration. However, World War II brought a new perspective and an increasing demand for petroleum products to fight a highly mechanized war. In 1943, Lt. W. T. Foran, a former USGS geologist and a Naval Reserve officer, prepared a memorandum to the U.S. Bureau of the Budget, calling attention to the petroleum potential of NPR-4. Consequently, in 1943 the Secretary of the Interior issued Public Land Order 82, which withdrew from further entry all the possible petroleum areas of Alaska, including lands north of the drainage divide of the Brooks Range. Later in 1943, the U.S. Bureau of Mines fielded a party to investigate and sample the known oil seepages and to check on reported seepages elsewhere in northern Alaska, including those on the Colville River at the base of Umiat Mountain. In early spring 1944, Lt. Foran made a quick reconnaissance of the Reserve, including the Umiat anticline, and reported that in his opinion a petroleum potential of major importance existed in NPR-4. On the basis of Foran's enthusiastic report and the perceived need for additional domestic oil supplies, a major exploration program, commonly called Pet-4, was started. This program had a tremendous impact on not only the future of petroleum exploration but also many aspects of life in the North American Arctic.

The Pet-4 program established the feasibility and practicality of carrying out large-scale modern oil exploration operations in the Arctic, and developed many new techniques for such operations. During the period 1945 through 1952, 45 shallow core tests and 36 test wells were drilled in and adjacent to NPR-4. Public Land Order 82 and the addition of enabling appropriation language permitted exploration in adjacent areas. This drilling resulted in the discovery of oil deposits at



Progress of geologic investigations in northwestern Alaska (modified from Smith and Meade, 1930)

Umiat, Cape Simpson, and Fish Creek, gas deposits at Umiat, Barrow, and Gubik, and prospective gas deposits at Meade, Square Lake, and Wolf Creek. Operating bases were established (and still exist) at Barrow and Umiat; the gas deposit at Barrow was developed, and gas was produced for use originally by the U.S. Navy base and other Government installations and, in 1964, by the entire Barrow community. The Pet-4 Barrow camp facility evolved into the Naval Arctic Research Laboratory, which was the hub of U.S. Arctic scientific investigations until it was decommissioned in 1981.

The USGS contribution to this program included surface geologic mapping of the Reserve and adjoining areas, study of subsurface samples and

geophysical data, an airborne magnetic survey, interpretation of the geologic framework, assessment of potential resources, and production of the first complete set of planimetric maps of all of northern Alaska.

A series of reports on the Pet-4 program were prepared and published by the USGS as Professional Papers 301 through 305. They include a historical account, description of logistics and operations, well histories and descriptions, a geophysical report, and geologic maps and descriptions of the extensive surface mapping. Thus, a general geologic framework for all of northern Alaska became available for the first time.

The 1974-82 exploration of NPR-4/NPRA

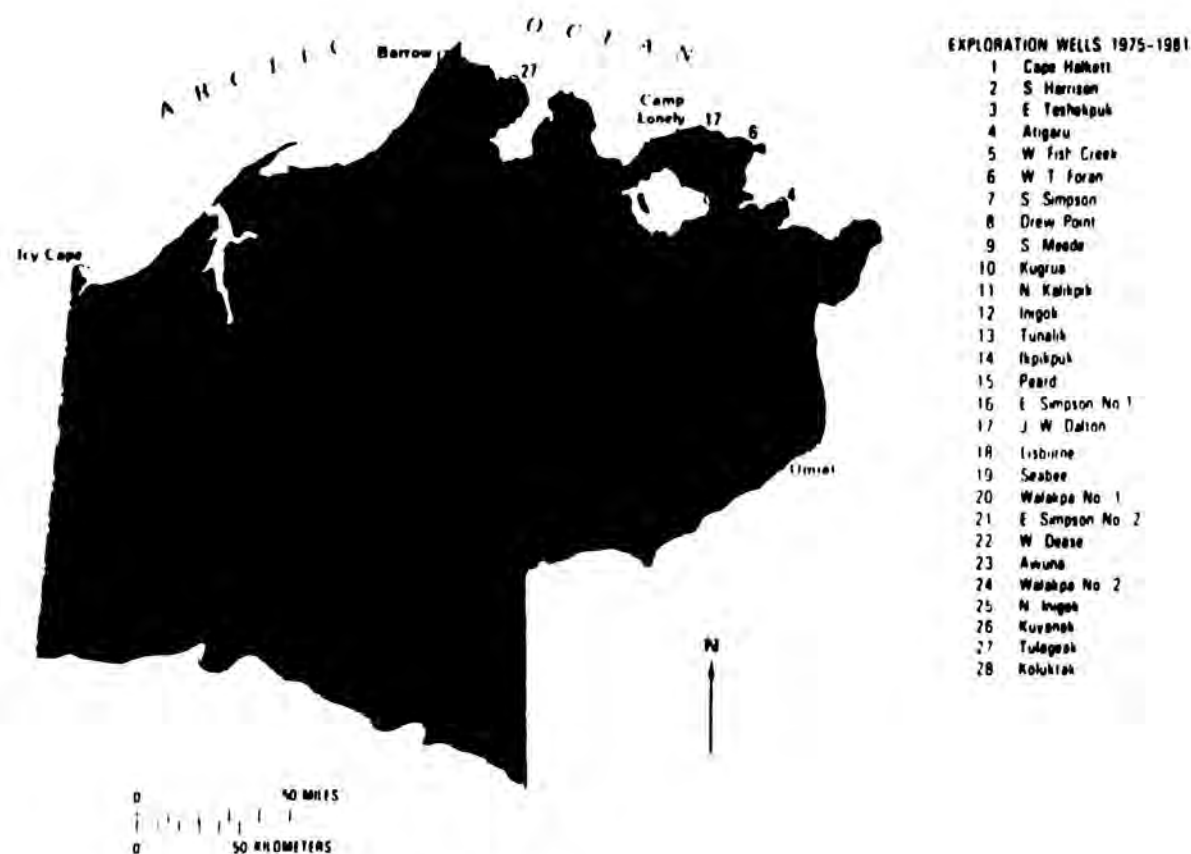
The discovery of oil and gas at Prudhoe Bay in 1968, in combination with the Arab oil embargo of 1974, stimulated the U.S. Navy to propose, and the Congress to approve, the next exploration program in the Reserve. Between 1974 and 1977, the Navy drilled seven test wells in the northeast corner of the Reserve, following the Prudhoe trend and hoping for similar results. The Navy also drilled four wells in the Barrow area and discovered the East Barrow gas field, thus providing an additional supply of gas for local use.

In 1975, the U.S. Navy signed a 5-year contract with Husky Oil NPR Operations, Inc., to manage and supervise all aspects of the exploration program.

In 1976, the Naval Petroleum Reserves Production Act (Public Law 94-258) authorized further development and actual production for sale of crude oil from NPR Nos. 1, 2, and 3 in California and Wyoming, and redesignated NPR-4 as the NPRA. Thus, the purpose of these Reserves was redirected to augment domestic supplies of crude oil. The act also required studies of other resources and alternative management systems for NPRA. Responsibility for these studies and for continuation of the NPRA exploration program was transferred to the Secretary of the Interior, who, in turn, assigned to the USGS three duties: (1) furthering of the exploration program, (2) continuation of the operation, maintenance, and production of the gas fields at Barrow, and (3) cleanup of debris left from previous activities in and adjacent to the NPRA.

The USGS took over management of the program, including all contracts and facilities, on June 1, 1977. The primary objective of the exploration program was defined as an assessment of the oil and gas potential of the entire Reserve. A secondary objective was the discovery of commercially producible deposits. Thus, all tests were drilled "on structure," to the extent that this could be determined. A total of 28 test wells were drilled in the

period 1974 to 1982, of which 7 were under U.S. Navy management. One, the W. T. Foran test well, and a followup, the J. W. Dalton test well, penetrated a section of favorable rock similar to that at Prudhoe Bay, but only shows (indications) of oil were found. Apparently, oil had accumulated in quantity at these localities but had subsequently migrated elsewhere.

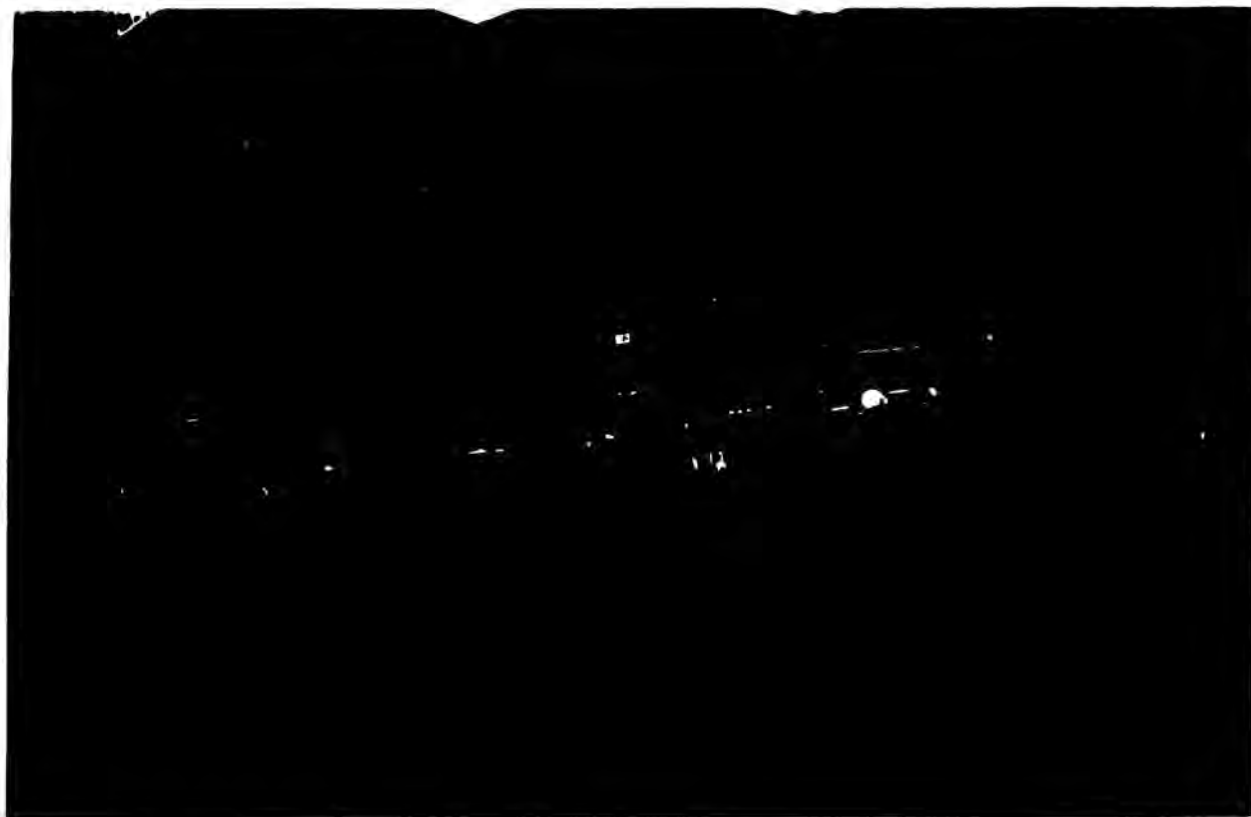


Exploration wells in the NPRA drilled from 1975 to 1981 (from Mitchell, 1983)

Several test wells were drilled on the flank of the Barrow structure, and a new gas field was discovered at Walakpa, 14 miles southwest of Barrow. This deposit may be useful to the Barrow community but probably is of insufficient size to warrant development for export to the "South 48." Farther south on the downslope of the Prudhoe-Barrow trend, test wells were drilled to explore the wedge edge of potential reservoir rocks, and two deep test wells were drilled near the center of the northern Alaska depositional trough. Additional test wells were drilled on anticlinal structures in the foothills, an area that had been drilled extensively in the Pet-4 program, but only for shallow horizons. One test well was drilled in the overthrust belt near the front of the Brooks Range. Nearly all these test wells produced shows of oil or gas, but no commercial deposits were discovered.

The congressional mandate to continue supplying gas to the Barrow community required drilling additional production wells in that area. Six wells were drilled, and four were completed for production.

The third duty of the USGS was to complete cleanup of the debris from earlier work within or adjacent to the Reserve. In addition, all the sites or "areas of operations" of the current program, as defined in a memorandum of understanding (MOU) with the U.S. Bureau of Land Management (BLM), had to be rehabilitated and revegetated. A cleanup program was started by the U.S. Navy in 1971 and was completed by the USGS in 1984. These sites have recently been returned to management by the BLM.



The Eashburn No. 1 test well, located in the southern part of the NPRA, was spudded in June 1979 and completed in June 1980 at a total depth of 17,000 feet.

THE ALASKA JOURNAL OF COMMERCE

FOCUS

Alpine discovery brings renewed interest in reserve

By Tim Bradner
Alaska Journal of Commerce

ARCO Alaska Inc.'s Alpine oil discovery on the Colville River Delta west of Prudhoe Bay has brought renewed interest in the National Petroleum Reserve — Alaska, the huge 23.4 million acre federal land reserve on the western Arctic Slope that covers an area the size of Indiana.

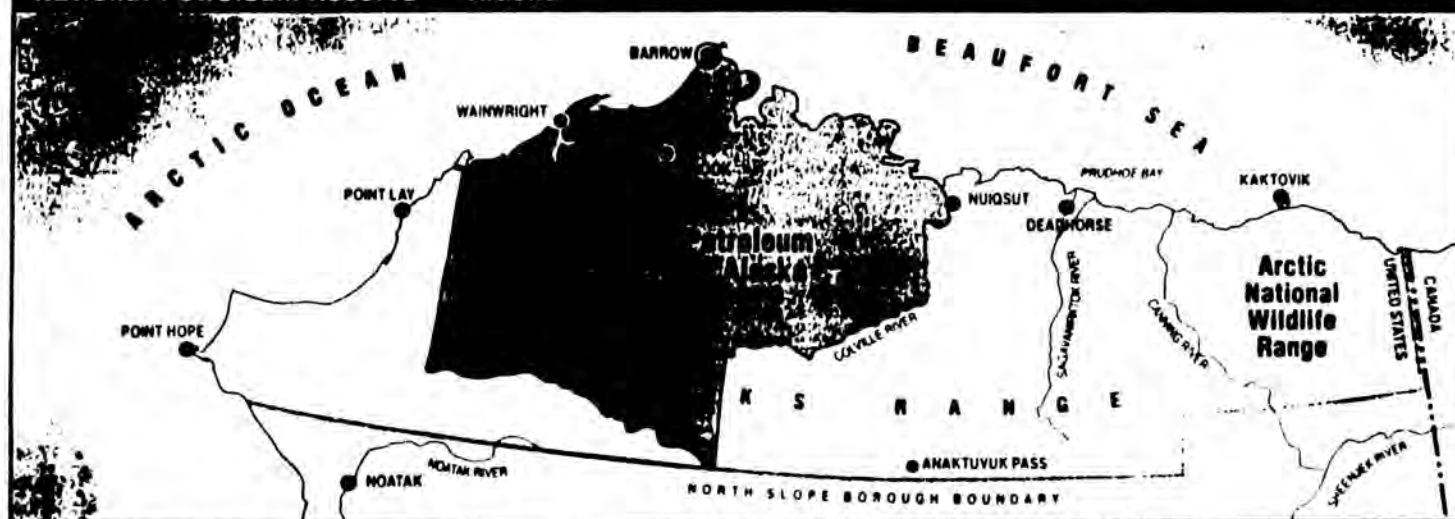
Gov. Tony Knowles and the Alaska congressional delegation are pushing Interior Secretary Bruce Babbitt to reopen the area to private oil and gas leasing, but Babbitt has made no commitments.

The Arctic Slope Regional Corp. also has been working to get additional mineral rights in NPR-A through exchanges of other ASRC-owned lands with the government.

The Barrow-based Native regional corporation already owns some mineral rights within the reserve, underneath surface lands selected by the village of Nuiqsut. But an expansion of ASRC holdings would likely speed exploration.

The reserve has seen three rounds of oil and gas exploration, two by the federal government and one by private industry.

National Petroleum Reserve — Alaska



SOURCE: The Arctic Coastal Zone Management Newsletter

AJOC/NOLAN

Oil and gas was found, but not in amounts that would justify development in the remote area. For many years, the industry considered NPR-A to be too remote, with little potential.

Alpine has changed that perception, for at least the northeastern part of the reserve near the Colville River.

"The good news is that NPR-A is back on peoples' radar screen because of the Alpine discovery," said Mike Richter, ARCO's exploration vice president.

A lot of the NPR-A acreage considered marginal in the earlier rounds of exploration may now be worth a second look because of advances in technology and the industry's new, lower-cost methods of exploring and developing North Slope oil, Richter said.

The Colville Delta, where ARCO discovered oil at Alpine and Texaco made a nearby, earlier discovery that was uneconomic, is at the eastern border of NPR-A. ARCO's Richter declined to comment, but most geologists feel

it's likely that oil-bearing geologic strata extends to the west into NPR-A.

The construction of a pipeline into the region from the east also will make it possible to develop small oil and gas discoveries in nearby NPR-A lands that were considered previously uneconomic.

The oil potential of the reserve long has been known, and it was actually this that first

Continued on Page 11

National Petroleum Reserve may now be worth new c

Continued from Page 9

attracted private industry to the North Slope, although the first commercial discoveries were made to the east near Prudhoe Bay.

Inupiat Eskimo people of the North Slope were the first to tap the oil potential of what is now the National Petroleum Reserve — Alaska.

There are oil seeps throughout the region, and Native hunters would cut oil-saturated tundra into blocks for home heating and cooking, using the pitch-laden bricks in much the same way that urban homeowners use artificial particle logs.

Local tradition has it that Charles Brower, a well-known early resident of Barrow, was the first person to lead U.S. government geologists to oil seeps in the early part of the century.

In the following years, federal geologists made surveys of river drainages in what is now NPR-A. In 1923, President Warren Harding signed legislation creating Naval Petroleum Reserve No. 4, covering 23.4 million acres, as a source of oil for the U.S. Navy.

World War II stimulated more interest in the region, and from 1943 to 1953 the Navy sponsored an exploration program that was to result in two small oil and two small gas discoveries, none of them commercial in the modern sense.

The U.S. Geological Survey handled geological and geophysical aspects of the program, contracting with United Geophysical Co. for seismic services.

Over nine years, 37 exploratory wells and 45 core holes were drilled in NPR-4, with an aggregate footage of 175,000 feet. About \$45 million was spent on the program before it was halted by the Eisenhower administration.

One oil discovery is at Umiat, on the Colville River in the southeastern part of NPR-A, where a shallow deposit with about 300

million barrels of reserves was discovered. The find was noncommercial due to its remoteness, but the oil was of sufficient high quality that it could be run without refining through diesel engines at the site.

An airfield was built at Umiat and it became a logistics support base for exploration in that part of the reserve. Umiat still is used today as a base for geological and scientific research.

A significant gas field also was discovered near Barrow, in the northern part of the reserve. The Walakpa Gas Field was developed to

serve government installations in Barrow and later the local Inupiat community of Barrow.

Because reserves in the Walakpa field were limited, the North Slope Borough, the regional municipal government, later invested in further exploration and was successful in finding additional reserves.

Nothing much happened in NPR-4

for the next 20 years, but in 1975, following the discovery of the large Prudhoe Bay field east of NPR-4, the OPEC oil embargo, the first "oil crisis" and the runup in oil prices, the federal government decided to take another look at the area.

Under the Naval Oil Reserve Production Act of 1976, the area was transferred from the Navy to the Department of the Interior and given a new name, the National Petroleum Reserve — Alaska.

Local communities in the region, particularly the North Slope Borough and the City of Barrow, were to play a major part in passage of this legislation. The city needed land for expansion, but was blocked by restrictions on access to lands managed by the Navy.

Under the Department of the Interior, more conventional federal land regulations were applied to NPR-A, and Barrow was allowed access to adjacent land for new subdivisions.

The responsibility for exploring and develop-

ing NPR-A was given to the U.S. Geological Survey, which contracted for drilling and exploration services with Husky Oil, a Canadian firm.

Under the USGS, Husky drilled 28 exploration wells and gathered 14,770 miles of seismic data before the program of government-sponsored exploration was halted by the Reagan administration in 1981.

NPR-A exploration continued under President Reagan, but it was led by private industry in a more conventional fashion. Reagan's Secretary of the Interior James Watt held four lease sales between 1982 and 1985.

Industry interest in the area was lukewarm. At the time, the companies were more focused on offshore prospects in the Beaufort Sea. Two sales were held in 1982, netting the government \$66.8 million in

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oil exploration

high bids.

In the third sale, in July 1983, bids were made on only 18 of 84 tracts offered, with \$16.7 million in high bids collected by the government. A fifth sale, planned for 1985,

was canceled due to lack of industry interest.

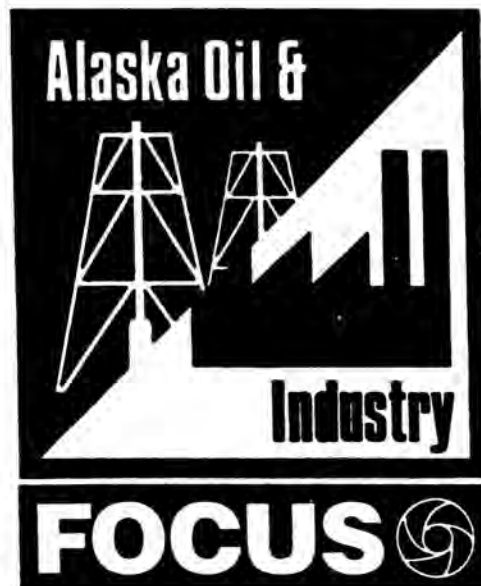
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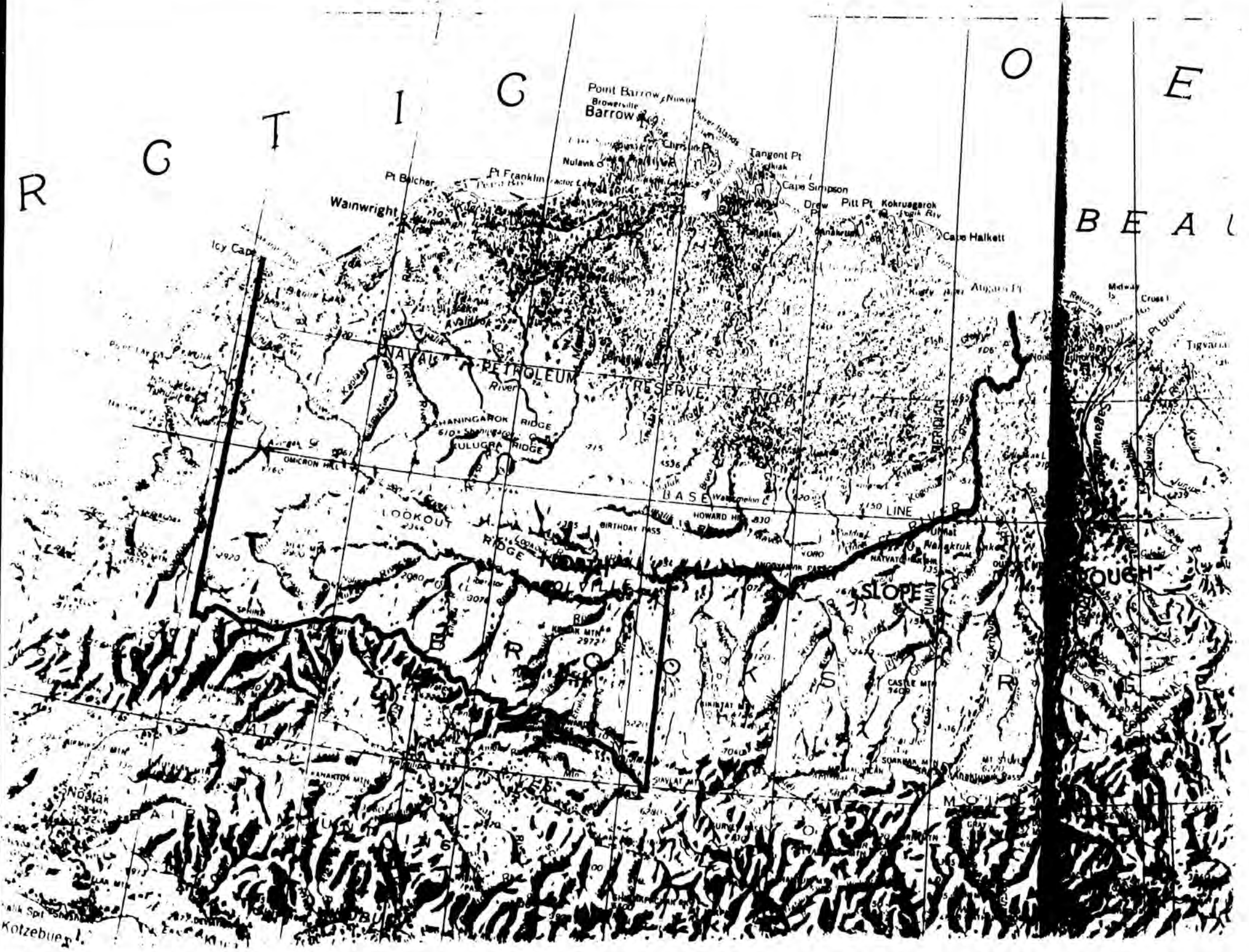
Of all the companies working on the North Slope, ARCO has had the most sustained in-

terest in the area. ARCO was the big player in the 1983 sale, paying out \$9.4 million in high bids including a \$2.9 million bid for a tract south of Barrow.

ARCO also drilled the only exploration well drilled by private industry on NPR-A under the Reagan-era leasing program. ARCO's Brontosaurus No. 1 well south of Barrow encountered oil shows in the Sadlerochit formation, but was not economic.

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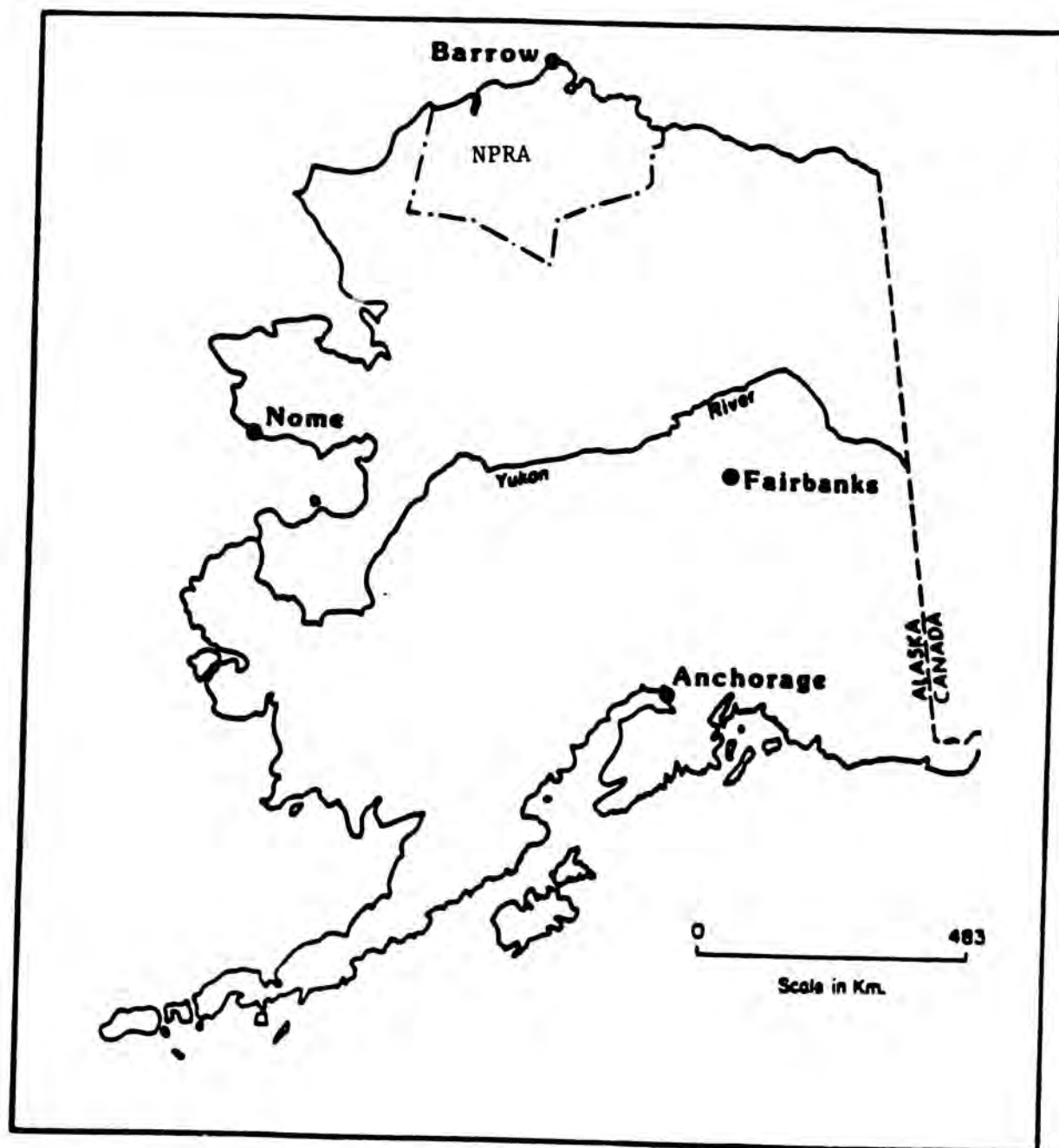
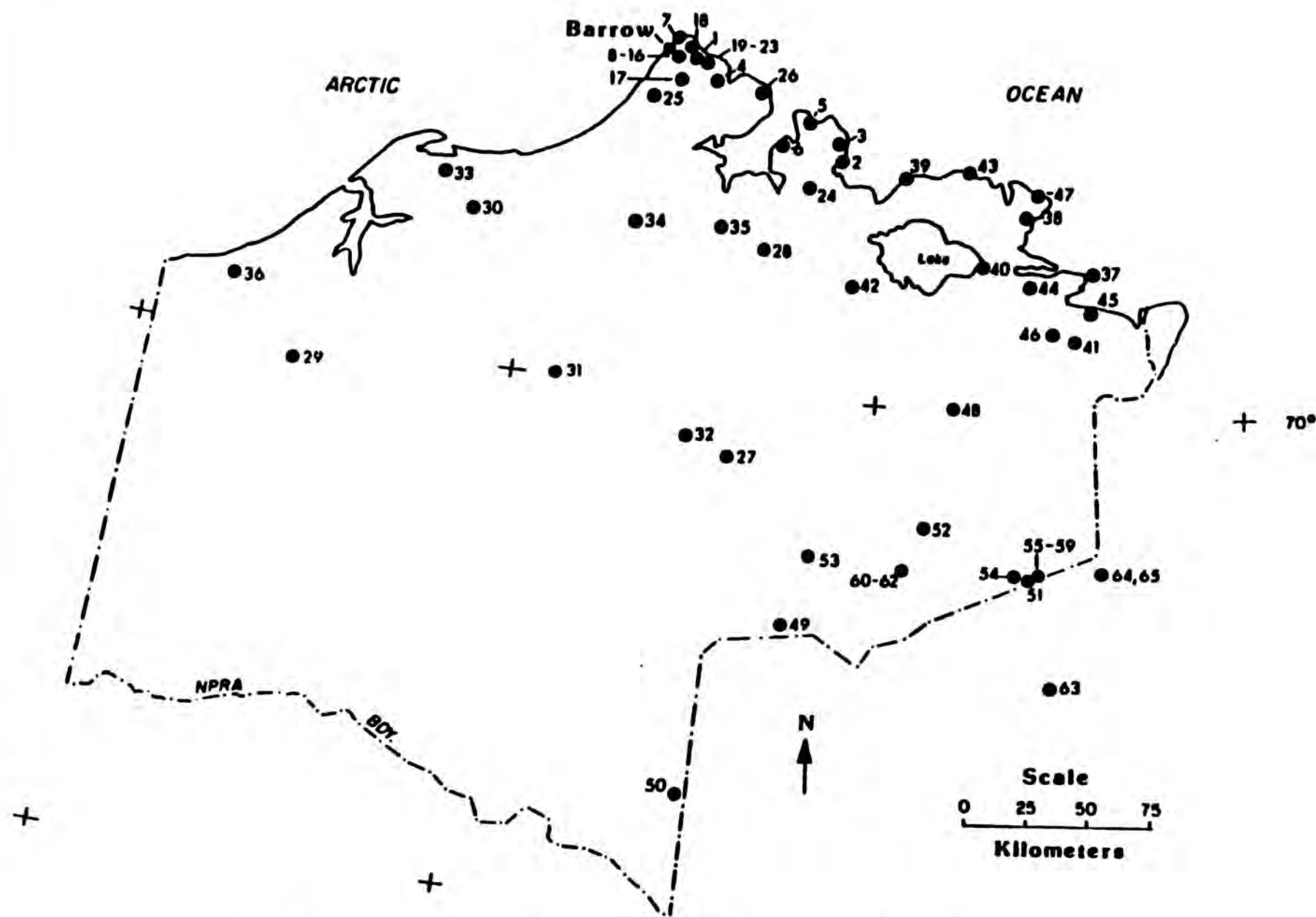


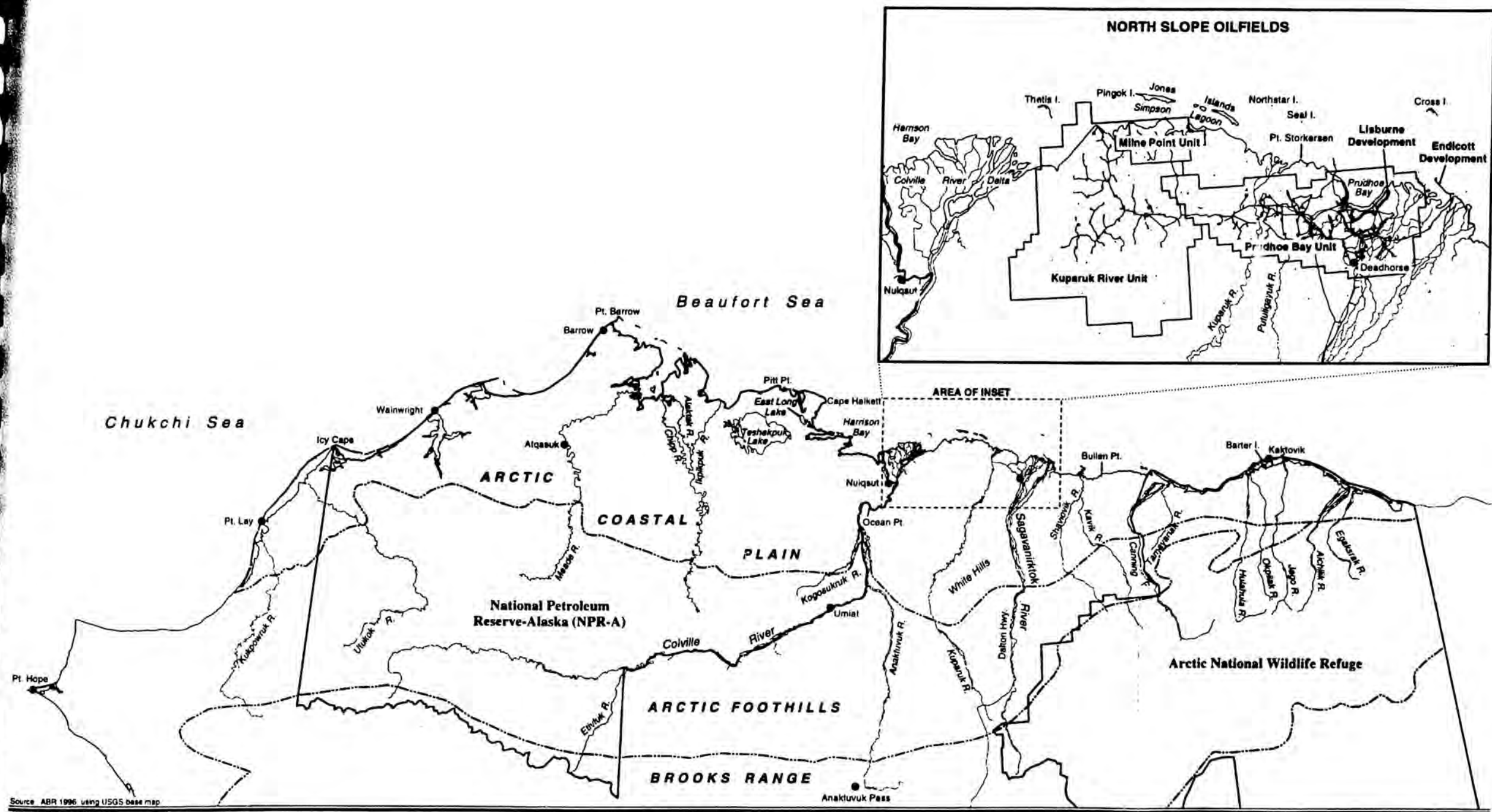
Figure 1. Location map, National Petroleum Reserve in Alaska (NPRA).



Well location, number refers to key on preceding page.

LEGEND FOR FIGURE 2

- | | | | |
|-----------------------|-------------------------|--------------------------|-------------------------|
| 1. Avak - 1 | 17. South Barrow - 3 | 33. Peard - 1 | *49. Knifeblade - 1, 2A |
| 2. East Simpson - 1 | 18. South Barrow - 16 | 34. South Meade - 1 | 50. Lisburne - 1 |
| 3. East Simpson - 2 | 19. South Barrow - 12 | 35. Topagoruk - 1 | 51. Seabee - 1 |
| 4. Iko Bay - 1 | 20. South Barrow - 14 | 36. Tunalik - 1 | 52. Square Lake - 1 |
| 5. North Simpson - 1 | 21. South Barrow - 17 | 37. Atigaru Point - 1 | *53. Titaluk - 1 |
| 6. Simpson - 1 | 22. South Barrow - 19 | 38. Cape Halkett - 1 | 54. Umiat - 1 |
| 7. South Barrow - 1 | 23. South Barrow - 20 | 39. Drew Point - 1 | 55. Umiat - 2 |
| 8. South Barrow - 2 | 24. South Simpson - 1 | 40. East Teshekpuk - 1 | 56. Umiat - 3 |
| 9. South Barrow - 4 | 25. Walakpa - 1 | *41. Fish Creek - 1 | 57. Umiat - 4 |
| 10. South Barrow - 6 | 26. West Dease - 1 | 42. Ikpihpuk - 1 | 58. Umiat - 7 |
| 11. South Barrow - 7 | 27. East Oumalik - 1 | 43. J.W. Dalton - 1 | 59. Umiat - 11 |
| 12. South Barrow - 8 | *28. East Topagoruk - 1 | 44. North Kalikpik - 1 | *60. Wolf Creek - 1 |
| 13. South Barrow - 9 | 29. Kaolak - 1 | 45. So. Harrison Bay - 1 | *61. Wolf Creek - 2 |
| 14. South Barrow - 10 | 30. Kugrua - 1 | 46. West Fish Creek - 1 | *62. Wolf Creek - 3 |
| 15. South Barrow - 11 | *31. Meade - 1 | 47. W.T. Foran - 1 | 63. Grandstand - 1 |
| 16. South Barrow - 13 | 32. Oumalik - 1 | 48. Inigok - 1 | 64. Gubik - 1 |
| | | | 65. Gubik - 2 |



Source: ABR 1996 using USGS base map
 ABR File: NSREG_RF.PRJ

SCALE IN MILES

0 50 100



Boundary of physiographic province (Arctic Coastal Plain, Arctic Foothills, Brooks Range)

Figure 2.1.0-1.
North Slope Region
and Existing Oilfields