be disability due to exposure to smoke, gases, carcinogens, inadequate oxygen, or psychological stress of firefighters of a paid fire department if a direct causal relationship is established.

New York General Municipal Law § 24-207-N, O, P Compensation for illness as a result of hepatitis infection for corrections officers, EMTs or advanced EMTs, police officers, and firefighters.

Nevada
N.R S. 617.453 Cancer as occupational disease of firemen

N.R.S. 617.455 Lung diseases as occupational diseases of firemen and police officers

N.R.S. 617.457 Heart diseases as occupational diseases of firemen and police officers

Pennsylvania
77 P.S. § 27.1 Includes some cancers and heart diseases

South Carolina § 42-11-30. Presumption that heart or respiratory diseases occurring in fire fighters arose out of and in course of employment.

Virginia § 65.2-402 Presumption as to death or disability from respiratory disease, hypertension or heart disease, cancer

Washington 51.32.185 Includes cancer and some respiratory and heart diseases

Chaptered Bills

MD S.B. 633, Chaptered APRIL 22, 2003: Extends the presumption of a compensable occupational disease under the workers' compensation law to include Baltimore City deputy sheriffs who suffer from heart disease or hypertension resulting in partial or total disability or death; requires that workers' compensation benefits in addition to retirement benefits; requires Baltimore City deputy sheriffs to submit medical reports to the Baltimore City Sheriff

NV A.B. 451, Chaptered MAY 30, 2003. Relates to occupational diseases; clarifies provisions governing compensation for certain firemen who develop disabling cancer as an occupational disease.

NV S.B. 184, Chaptered JUNE 12, 2003. Relates to public employees; expands the definition of accident benefits for purposes of industrial insurance to include preventative treatment for hepatitis administered as a precaution to certain local police officers; creates a statutory presumption that hepatitis is an occupational disease for certain local police officers.

NM H.B. 840, APRIL 11, 2003; Pocket Veto by GOVERNOR. Relates to worker's compensation; removes silicosis and asbestosis exemptions in the New Mexico occupational disease disablement law.

NY S.B. 7367, Chaptered JANUARY 30, 2003, Provides a presumption of that a disease of the heart was incurred in the performance of duty for EMTs and advanced EMTs in certain cities.

VA H.B. 757, Chaptered APRIL 8, 2002, Relates a presumption that hepatitis, meningococcal meningitis, tuberculosis, herpes or HIV causing the death or disability of firefighters, paramedics, emergency medical technicians, members of the State Police Officers' Retirement System, members of county, city or town police departments, sheriffs and deputy sheriffs, city sergeants or deputy city sergeants of certain cities, and the Capitol Police shall be occupational diseases

VA H.B. 1237, Chaptered APRIL 6, 2002; Provides that medical evidence contesting the relationship between employment and disease shall not be considered substantial competent medical evidence sufficient to overcome the respiratory disease, heart disease, or cancer presumptions for the purpose of workers' compensation; defines firefighter as any firefighter, paramedic or emergency medical technician employed by any public or private employer.

VA H.B. 1877, Ch ed MARCH 22, 2003; Eliminates the provision in Workers' Compensation that delays the application of the presumption that certain diseases causing the death or disability of a firefighter or certain other employees who have a documented occupational exposure to blood or body fluids are presumed to be occupational diseases until 6 months after the employee has undergone a preemployment physical examination.

AZ S.B. 1197, Chaptered JANUARY 29, 2003, Concerns workers' compensation and peace officers assigned to hazardous duties

July 2003

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February 21, 2005

The Honorable Tom Anderson
Alaska House of Representatives
State Capitol Building
Juneau, Alaska 99801-1182

RE. Support for HB31, original version, Presumption of Injury/Blood-born Pathogens

Dear Representative Anderson;

Thank you for your sponsorship of House Bill 31, relating to presumption of coverage for worker's compensation claims for certain diseases. The original version of the bill provides an important protection for health care employees infected with a blood borne pathogen during the course of their employment.

I am a registered nurse on the Progressive Care Unit at Providence Alaska Medical Center and am the President of AaNA's Providence Registered Nurses Bargaining Unit, the largest nursing union in the state of Alaska. I also serve as the state representative for our national union the United American Nurses Association. At the National Labor Assembly in Washington D.C. this March, I plan to announce Alaska's HB31 to the assembly – This bill deserves national attention for its protection of RNs and other first responders in their care of our citizens.

Your leadership is in good company. In 2001, the State of Nevada adopted legislation (Assembly Bill 279) that provides a worker's compensation claim presumption for any employee exposed to blood borne pathogens "during the course and scope of his employment that results in a temporary or permanent disability or death." The presumption is provided for contagious diseases, which is defined as hepatitis A, hepatitis B, hepatitis C, tuberculosis, and HIV/AIDS.

In speaking with Mr. Bittner in your office, he informed me of a proposed amendment that would limit the blood borne diseases presumption to police, fire fighters, and emergency responders. To institute this limitation denies the fact that healthcare providers also face accidental and critical exposure to blood and bodily fluids in their everyday work – it would be as though the patient care stopped at the emergency room door.

HB31, in its original version, is good legislation and good policy for the State of Alaska. The presumptions offered should be afforded to all care providers who face accidental exposure to blood borne pathogens.

Sincerely,

Kathleen A. Gettys

Kathleen A. Gettys, RN, BSN, BA
President, Providence Registered Nurses Bargaining Unit

LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
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MEMORANDUM

December 15, 2004

SUBJECT: Establishing a presumption of coverage in Workers Compensation for occupational diseases. (Work Order No. 24-LS0225\A)

TO: Representative Tom Anderson
Attn: Josh Applebee

FROM: Barbara R. Craver BRC
Legislative Counsel

You asked for a bill to provide a broad presumption of coverage in workers compensation for public safety employees and other first responders. You attached several state laws and some articles. Enclosed is a draft bill. Your attachments indicated that the primary concern was the unique risks for disease suffered by fire fighters and by persons engaged in occupations involving exposure to human blood or bodily fluids.

In regard to fire fighters, I defined the term "fire fighters" as those who are covered by workers compensation under AS 23.30.243.[1] This would cover volunteer fire fighters serving regularly organized volunteer fire departments. The Washington law (RCW 51.32.185) defines fire fighters by reference to the definitions in its public employment retirement system. The Texas bill (not enacted) applies the presumption to fire protection personnel who are various kinds of permanent fulltime employees. You could limit the application of this bill to fire fighters covered by the Public Employees Retirement System (PERS), but that would not include the numerous volunteer fire fighters who are not employees of PERS members. Because AS 23.30.243 extends workers compensation coverage to volunteers as well as employees, I incorporated that

---

[1] Sec. 23.30.243. Extending coverage to certain fire fighters.

(a) For the purposes of workers' compensation any injury, disability or death incurred by a fire fighter by reason of the fire fighter's participation in authorized training, proceeding to or engaging in a fire suppression or rescue operation, or the protection or preservation of life or property, anywhere in the state is considered to have arisen out of and been sustained in the course of employment, and the fire department or regularly organized volunteer fire department of the fire fighter's primary employment or registration is considered to be the employer, except when the injured, at the time of injury or death, is acting for compensation from another.

(b) Nothing in this section requires the extension of benefits to a fire fighter employed by a municipality which by law or regulation expressly prohibits the activity giving rise to the injury, disability, or death.

section to define the scope of fire fighters covered. Please let me know if you would like a different definition.

This bill only allows the presumption of work-related cancer for fire fighters who had a "qualifying medical exam" upon becoming a fire fighter or during employment as a fire fighter if the exam showed no sign of cancer. This is derived from the Washington code, RCW 51.32.185(3) and the Texas bill. The Texas bill you provided extends the presumption to a person who has an exam during employment as a fire fighter to rule out pre-existing cancer. I cannot find a definition in those laws and bills for "qualifying exam." In the bill draft, I have directed the department to define by regulation what a "qualifying exam" would be, because a medical exam might not be thorough enough to detect cancer. Because this bill includes volunteers with regularly organized fire departments, it is possible that those departments do not require medical exams, so you may wish to consider whether this limitation unfairly exempts those fire fighters from the presumption. Because of this medical exam requirement, it is possible that many current fire fighters will not qualify for the presumption either because their employer won't pay for a qualifying exam or because the fire fighter has already developed cancer.

In regard to the presumption established for workers exposed to human blood or bodily fluids, I did not limit that to "first responders." We do not have any current definition in the statutes for "first responders", or any other term that covers all the occupations you had listed: fire fighters, airport police, corrections officers, trooper and other first responders. Because contagious diseases transmitted through exposure to human blood and bodily fluid were covered specifically for fire fighters in the Washington code section (RCW 51.32.185(4)), and generally for any occupation in the Idaho law (I.C. 72-436), I took the more general approach and provided a presumption for any occupation involving exposure to human blood or bodily fluids. If you would like that presumption applied more narrowly, please let me know.

Section Two provides that claims may be made based on exposure which occurred prior to the effective date of the law.

If I may be of further assistance, please advise.

BRC:lmb
04-195.lmb

Enclosure

National Council on Compensation Insurance, Inc.

March 1, 2005

NATIONAL COUNCIL ON COMPENSATION INSURANCE, INC.

ANALYSIS OF ALASKA HOUSE BILL 31

The enactment of House Bill 31 could produce a significant increase in loss costs for the relatively few class codes directly impacted (particularly firefighters). Note that the proposed language allows for coverage of claims made after the effective date of the proposal, regardless of whether or not the exposure leading to the occupational disease occurred before the effective date. Therefore, it is expected that there would be a significant impact on total system costs due to the retroactive nature of this proposal.

Summary of Bill

HB 31 creates a presumption of workers compensation coverage for firefighters for the following occupational diseases:

Respiratory disease
Heart problems that are experienced within 72 hours after exposure to smoke, fumes, or toxic substances
After 10 years experience:
- Primary brain cancer
- Malignant melanoma
- Leukemia
- Non-Hodgkin's lymphoma
- Bladder cancer
- Ureter cancer
- Kidney cancer

HB 31 would also create a presumption of workers compensation coverage for employees in occupations involving exposure to human blood or bodily fluids for the following diseases:

Human immunodeficiency virus
Acquired immunodeficiency syndrome
All strains of hepatitis
Meningococcal meningitis
Mycobacterium tuberculosis

Currently, the employee has the burden of proof for compensability of a workers compensation disability claim. This proposal establishes a presumption of coverage, which must be overcome by a preponderance of evidence to the contrary. This would now place the burden of proof on the employer (and insurer.)

Additionally, this proposal could increase the frequency and total cost of claims in some classes (i.e. firefighters) significantly. It should also be noted that much of the impact for some of these classes would be felt by governmental entities as the employer of many of those being impacted by this proposal.

March 1, 2005

Potential Impact

Information about Alaska cancer rates and research on the relationship between cancer rates and firefighters suggest that **cost of prospective claims in this classification could increase loss costs by 10% to 20%, with potentially greater impacts due to the retroactive nature of this proposal.** If HB 31 becomes law, respiratory diseases, heart problems, and cancer cases for firefighters previously covered under health insurance would more likely be covered under WC due to the exclusive remedy feature of WC, the lack of medical cost sharing under WC, and the proposed presumption of compensability for firefighters.

The above scenario assumes that current practice is not to provide WC coverage for such ailments (respiratory disease, heart ailments, certain cancers) for most claims. On the other hand, if most of the claimants with such ailments were currently being accepted for WC coverage, then the codification of this practice would not have much impact on system costs.

In situations where employees file claims as a result of their occupation and associated exposure to human blood or bodily fluids, the impact on WC costs for such classes is not expected to be significant. Such employees could include law enforcement officers, firefighters, nurses and emergency medical technicians, among others. Based on claims data available from NCCI's unit statistical plan (USP), there are several claims in Alaska that have resulted from exposure to AIDS or other contagious diseases. Thus, it appears that the enactment of HB 31 will result in the codification of current practice. Any additional impact will be reflected in subsequent data that is collected and used in future rate filings. However, due to the retroactive coverage provided by this proposal, the overall costs could be significant. Since coverage for such claims may not have been contemplated in previous loss cost filings, such retroactive costs would be unfunded.

Other potential impacts not explicitly priced but expected to offset one another to some degree are:

a) Decrease in attorney costs due to fewer cases where an attorney needs to be involved as a result of the presumptive clause for firefighters, emergency responders, which could be easily offset or more by...

b) Additional claim filings and disputes over other related diseases or occupations, filed in the spirit of this proposal.

Estimated Fiscal Impact of HB 31

Although the Alaska DCED gave a zero cost fiscal note associated with this legislation, and the Dept of Administration estimated the fiscal note to be indeterminate, we believe that it is reasonable to suggest that there would be some claims experience related to this type of coverage. Therefore, we were able to obtain some additional numbers on fire fighter disabilities and cost experience from around the country.

In the State of California, which has the largest career sector of fire fighters in the country (30,000) and one of the largest volunteer sectors (33,000) the addition of cancer presumptive benefits has had "no impact" on the actuarial assumptions or funding of the state's fire fighter retirement system (Assemblyman Sal Cannella California Legislature). An actuary for the California Public Employee Retirement System (CALPERS), the largest retirement system in the United States, has declared that the addition of presumptive cancer benefits for fire fighters has had "minimal effect" on the actuarial costs to the retirement system. In fact, the financial implications were so minimal, that CALPERS never had to perform an actuarial impact study after the implementation of the benefit by the California legislature (David DuBois, Contract Services Department, CALPERS). During the first three years, an average of 45 annuitants claims have been paid for cancer related disabilities. This is .07% of the active fire fighting workforce. The average claim for total cancer benefits was $14,075.00.

In 1984, the State of Illinois added cancer presumption language to its worker compensation statute. The City of Chicago employs over 50% of the 10,700 career fire fighters in the State of Illinois. During the 6 year period following the implementation of the statute the average number of beneficiaries receiving occupational disability benefits was 8.3% lower than the average number of beneficiaries in the six years prior to passage. Thus the inclusion of cancer benefits in 1984 has obviously had no impact on the funding requirements for the occupational disability benefits portion of the Chicago Firemen's Annuity and Benefit Fund (Firemen's Annuity and Benefit Fund of Chicago Actuarial Statement).

In the first six years that they have had fire fighter cancer legislation in Oklahoma, they have had 22 claims paid statewide or 6% of the 378 disability claims paid. This averages to 4 claims per year for a rate of cancer claims of .03% at an average cost to the pension system of $10,409.00 per total cancer claim (Bob Hollander, Executive Director, Oklahoma Firefighters Pension and Retirement System). There are 3,420 career fire fighters and 9,000 volunteer fire fighters.

In Nevada, there have been 3 cancer claims paid in the first four years since the legislation was enacted. None of these cases include lung cancer, which is covered under separate legislation (S. Mark Balen, President, Nevada Fire Fighters Association). There are 1,790 career fire fighters and 2,200 volunteer fire fighters in Nevada. This averages to less than 1 claim per year for a rate of cancer claims of .02%.

In Rhode Island, which passed the legislation in 1986, there have been 6 claims paid in the first 8 years. This averages to less than 1 claim per year for a rate of cancer claims of .02% (Theodore Scripsack, Chairman, Rhode Island Firefighter's Relief Board). There are 2,200 career fire fighters and 2,800 volunteer fire fighters in Rhode Island.

In the first four years that they have had cancer legislation in Massachusetts, there have been 34 cancer claims paid (15 disability and 19 death benefits). (Joseph Martin, Deputy Director, Public Employee Retirement Agency). This averages to less than 9 claims per year at a rate of .03% of the active firefighting workforce. There are 14,500 career fire fighters and 11,400 volunteer fire fighters in Massachusetts.

In Alaska there are roughly 1,000 career and volunteer firefighters. However, this would assume that every firefighter would pass through the various restrictions and requirements written into HB 31. For example, not every firefighter who begins a career will make it through 10 years, which is the minimum time on the job to be eligible for presumptive cancer coverage. Smoking, fitness, and heredity are other factors that might make employees ineligible for presumptive coverage. These factors could narrow the range of employees qualifying for presumptive coverage considerably. However, even when using the original number of 1,000 fire fighters and making the assumption that Alaska has a rate that does not exceed the average of the above States' cancer

related disabilities -- .034% of the active fire fighting workforce -- the expected number of annual cancer claims for career fire fighters would be less than 1 fire fighter.

Based on the preceding information on actual experience, the cost per cancer claim for those states having presumptive occupational disease statutes is substantially less than the unsubstantiated figures asserted by other parties. The reason for this, unlike benefits for other occupations, is the higher mortality rate and significantly shorter life expectancy associated with fire fighting. Fire fighters are dying too quickly from cancer and other occupational diseases, unfortunately producing a significant pension annuity saving for states and municipalities.

1: Am J Ind Med. 1993 Jun;23(6):921-40.

Mortality of urban firefighters in Alberta, 1927-1987.

Guidotti TL.

Occupational Health Program, University of Alberta Faculty of Medicine, Edmonton, Canada.

The mortality experience of firefighters has been an active topic of investigation. Collateral toxicological evidence suggests that certain causes of death are likely to be associated with firefighting: lung cancer, heart disease, and obstructive pulmonary disease. To date there has not been a clear and consistent demonstration of excess risk due to occupational exposure for these outcomes, but certain other cancers, including genitourinary, colon and rectum, and leukemias, lymphomas, and myeloma, appear to be consistently elevated. A major unproven hypothesis is that risk increased following the introduction, in the 1950s of combustible plastic furnishing and building materials known to generate toxic combustion products. Mortality by cause of death was examined for two cohorts totalling 3,328 firefighters active from 1927 to 1987 in Edmonton and Calgary, the two major urban centers in the province of Alberta, Canada, examining associations with cohort (before and after the 1950s) and years of service weighted by exposure opportunity. The study attained 96% follow-up of vital status and over 64,983 person-years of observation, yielding 370 deaths. Mortality from all causes was close to the expected standardized mortality ratio (96; 95% confidence limits (CL) 87, 107) as was that for heart disease (110; 95% CL 92, 131), and neither was statistically significant at the $p < 0.05$ level (N.S.). Excesses were observed for all malignant neoplasms (127; 95% CL 102, 155, $p < 0.05$) and for cancer of lung (142; 95% CL 91, 211, N.S.), bladder (315; 95% CL 86, 808, N.S.), kidney and ureter (414; 95% CL 166, 853, $p < 0.05$), colon and rectum (161; 95% CL 88, 271, N.S.), pancreas (155; 95% CL 50, 362, N.S.) and leukemia, lymphoma, and myeloma (127; 95% CL 61, 233, N.S.); obstructive pulmonary diseases (157; 95% CL 79, 281, N.S.). Fire-related causes showed a marked excess (486; 95% CL 233, 895, $p < 0.01$), but external causes overall showed a significant deficit (66; 95% CL 49, 87, $p < 0.05$). The lung cancer excess was confined to Edmonton; there was no consistent association with duration of employment, exposure opportunity, or cohort of entry (before or after the 1950s) except that the highest risk was observed among Edmonton firefighters with over 35 weighted years. The excess of cancers of the urinary tract was observed mostly among firefighters entering service after 1950, appeared to increase with length of service and exposure opportunity, and was observed in both cities. An occupational association with heart disease and chronic pulmonary disease is not supported in this study on this population.(ABSTRACT TRUNCATED AT 400 WORDS)

1: Cancer Causes Control. 1994 Mar;5(2):129-35.

Cancer incidence among firefighters in Seattle and Tacoma, Washington (United States).

Demers PA, Checkoway H, Vaughan TL, Weiss NS, Heyer NJ, Rosenstock L.

School of Public Health and Community Medicine, University of Washington, Seattle.

In order to determine if exposure to carcinogens in fire smoke increases the risk of cancer, we examined the incidence of cancer in a cohort of 2,447 male firefighters in Seattle and Tacoma, (Washington, USA). The study population was followed for 16 years (1974-89) and the incidence of cancer, ascertained using a population-based tumor registry, was compared with local rates and with the incidence among 1,878 policemen from the same cities. The risk of cancer among firefighters was found to be similar to both the police and the general male population for most common sites. An elevated risk of prostate cancer was observed relative to the general population (standardized incidence ratio [SIR] = 1.4, 95 percent confidence interval [CI] = 1.1-1.7) but was less elevated compared with rates in policemen (incidence density ratio [IDR] = 1.1, CI = 0.7-1.8) and was not related to duration of exposure. The risk of colon cancer, although only slightly elevated relative to the general population (SIR = 1.1, CI = 0.7-1.6) and the police (IDR = 1.3, CI = 0.6-3.0), appeared to increase with duration of employment. Although the relationship between firefighting and colon cancer is consistent with some previous studies, it is based on small numbers and may be due to chance. While this study did not find strong evidence for an excess risk of cancer, the presence of carcinogens in the firefighting environment warrants periodic re-evaluation of cancer incidence in this population and the continued use of protective equipment.

PMID: 8167259 [PubMed - indexed for MEDLINE]

1: Am J Ind Med. 2001 May;39(5):463-76.

Cohort mortality study of Philadelphia firefighters.

Baris D, Garrity TJ, Telles JL, Heineman EF, Olshan A, Zahm SH.

Division of Cancer Epidemiology and Genetics, National Cancer Institute, Rockville, Maryland 20892, USA. barisd@mail.nih.gov

BACKGROUND: Fire fighters are exposed to a wide variety of toxic chemicals. Previous studies have reported excess risk of some cancers but have been limited by small numbers or little information on employment characteristics. METHODS: We conducted a retrospective cohort mortality study among 7,789 Philadelphia firefighters employed between 1925 and 1986. For each cause of death, the standardized mortality ratios (SMRs) and 95% confidence intervals were estimated. We also compared mortality among groups of firefighters defined by the estimated number of career runs and potential for diesel exposure. RESULTS: In comparison with U.S. white men, the firefighters had similar mortality from all causes of death combined (SMR = 0.96) and all cancers (SMR = 1.10). There were statistically significant deficits of deaths from nervous system diseases (SMR = 0.47), cerebrovascular diseases (SMR = 0.83), respiratory diseases (SMR = 0.67), genitourinary diseases (SMR = 0.54), all accidents (SMR = 0.72), and suicide (SMR = 0.66). Statistically significant excess risks were observed for colon cancer (SMR = 1.51) and ischemic heart disease (SMR = 1.09). The risks of mortality from colon cancer (SMR = 1.68), kidney cancer (SMR = 2.20), non-Hodgkin's lymphoma (SMR = 1.72), multiple myeloma (SMR = 2.31), and benign neoplasms (SMR = 2.54) were increased among firefighters with at least 20 years of service. CONCLUSIONS: Our study found no significant increase in overall mortality among Philadelphia firefighters. However, we observed increased mortality for cancers of the colon and kidney, non-Hodgkin's lymphoma and multiple myeloma. There was insufficient follow-up since the introduction of diesel equipment to adequately assess risk.

PMID: 11333408 [PubMed - indexed for MEDLINE]

FIREFIGHTERS WANT WCB TO RECOGNIZE WORK-RELATED CANCERS

VANCOUVER – The British Columbia Workers' Compensation Board has been asked to examine a request that firefighters who develop certain cancers be presumed to have contracted them through work, said Labour Minister Graham Bruce.

In a meeting with the B.C. Professional Firefighters' Assocation Thursday, Bruce and Burnaby-Edmonds MLA Patty Sahota heard that firefighters are up to three times more likely to develop cancers of the brain, bladder and kidney, as well as leukemia and non-Hodgkin's lymphoma, from breathing in toxic fumes.

"Clearly the firefighters strongly believe their concerns about work-related cancers should be recognized by the WCB," said Bruce, "and I believe they should have an opportunity to meet with the WCB."

Bruce said he has asked the WCB to consider the firefighters' request. The WCB is already looking into this matter, the minister added, and has advised him it will consult with firefighters as part of its process.

The Workers Compensation Act lists a number of occupational diseases where there is a presumption that the disease was caused by work unless proved otherwise. Currently, firefighters who develop cancers must make their case on an individual basis in order to get workers' compensation.

Bruce noted the WCB had been revamped with a new board of directors and a new mandate, "and we have to give the process a chance to work. If the WCB determines that the science supports a causal relationship between firefighting and these cancers, then we will make the appropriate changes."

Sahota said Manitoba, Alberta, Nova Scotia and Saskatchewan have either enacted or are in the process of enacting legislation providing firefighters with the benefit of a presumption for specific types of cancers including brain, bladder, kidney, non-Hodgkin's lymphoma, leukemia and colon.

The effect of such legislation is that a firefighter who develops the particular cancer will be entitled to workers' compensation benefits without having to prove a link between exposures at work and the cancer.

-30-

Visit the province's Web site at http://www.gov.bc.ca/ for online information and services.

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MAR 17 2005

Alaska Nurses Association

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March 16, 2005

Representative Peggy Wilson, Chair
House Health, Education & Social Services Committee
State Capitol Building Room 108
Juneau, Alaska

Subject: HB31, Presumption for Certain Illness/Work Comp Claims

Dear Representative Wilson:

Thank you for meeting with Patricia Senner and myself in Juneau on Thursday, March 3.

Among the issues we discussed was House Bill 31, an Act establishing a presumption regarding certain illnesses for workers compensation claims. You requested information so you could assess how these presumptions might impact worker compensation insurance premiums.

A summary analysis to HB31 was done by the National Council on Compensation Insurance (NCCI) on March 1, 2005. NCCI manages the nation's largest database of workers compensation insurance information, and prepares recommendations for rates.

NCCI reports that HB31 could increase the frequency and total cost of claims in some classes (i.e., firefighters) significantly. However, in situations where employees file claims as a result of their occupation and associated exposure to blood born pathogens, the impact on costs is not expected to be significant.

A presumption of coverage for blood borne pathogens is needed due to the many experiences nurses have had by being stuck with contaminated needles from HIV/Hepatitis C patients. It has been reported that in some states without such presumptions, nurses and other health care workers have been subjected to private investigations to try and prove that the blood borne infection they acquired was due to their "lifestyle " and not the hazards of their job.

The original version of the HB31 provided an important protection for health care employees infected with a blood borne pathogen during the course of their employment, and would be good policy for the State of Alaska. The presumptions offered should be afforded to all care providers who face accidental exposure to blood borne pathogens and not just those on one side of the emergency room door or the other.

The Sponsor Substitute House Bill 31 limits the presumption for blood borne pathogens to firefighters, peace officers and emergency responders. This entirely deletes the same coverage for all other health care workers. It is as if the care of the patient stopped at the emergency room door.

As you know, the continuation of the care of patients with blood borne diseases starts in the field and continues on through the emergency room door where the care continues for that same patient for many hours, days and sometimes weeks.

Earlier this month, HB31 was announced at a national nurses meeting for the American Nurses Association. It drew the attention of the American Nurses Association national delegates as well as the President Barbara Blakney, who responded by stating that the sponsor substitute had the appearance of being discriminatory given that health care workers are predominately female.

Thank you for the opportunity to meet and speak with you on this issue. The Alaska Nurses Association appreciates all the hard work you do as representatives of your constituents in protecting health care workers of Alaska.

Sincerely,

Rebecca Bolling, RN, BSN
President, Alaska Nurses Association
2928 Baranof Ave.
Ketchikan, AK 99901
907.225.4087

IAFF LEGISLATIVE FACT SHEET

Revised: 4/11/2003

FEDERAL FIRE FIGHTERS PRESUMPTIVE LAW

BACKGROUND

Fire fighters are exposed on a daily basis to stress, smoke, heat, and various toxic substances. As a result, fire fighters are far more likely to contract heart disease, lung disease and cancer than other workers. And as fire fighters increasingly assume the role of the nation's leading providers of emergency medical services, they are also exposed to infectious diseases. Heart disease, lung disease, cancer and infectious disease are now among the leading causes of death and disability for fire fighters, and numerous studies have found that these illnesses are occupational hazards of fire fighting.

In recognition of this linkage, 38 states have enacted "presumptive disability" laws, which presume that cardiovascular diseases, certain cancers and infectious diseases are job related for purposes of workers compensation and disability retirement unless proven otherwise. No such law covers fire fighters employed by the federal government.

Under the Federal Employee Compensation Act (FECA), federal fire fighters must be able to pinpoint the precise incident or exposure that caused a disease in order for it to be considered job-related. This burden of proof is extraordinarily difficult for fire fighters to meet because they respond to a wide variety of emergency calls, constantly working in different environments under different conditions. As a result, very few cases of occupational disease contracted by fire fighters have been deemed to be service-connected.

CURRENT LEGISLATION

H.R. 1101, sponsored by Reps. Rodriguez (D-TX) and JoAnn Davis (R-VA), and **S. 530**, sponsored by Sen. Kerry (D-MA), have been introduced that will amend the FECA so that cardiovascular disease, certain cancers and infectious diseases are presumed to be job related for purposes of workers compensation and disability retirement, and places the burden on the employer to prove otherwise.

IAFF POSITION

The IAFF **supports** H.R. 1101 and S. 530 which provide a disability presumption for federal fire fighters.

IAFF ARGUMENTS

- Federal fire fighters, like all fire fighters, regularly respond to HAZMAT incidents involving chemical, radiological, and biological hazards. Working in such a hazardous environment, it is virtually impossible to precisely identify when and where a fire fighter contracted a disease.
- Most states have acknowledged the occupational hazards attributed to fire fighting and have presumptive disability laws for fire fighters because it is so difficult for fire fighters to identify when and where they contracted an occupational disease.
- Federal fire fighters do not have the benefit of a presumptive disability law. Instead they are faced with a burden of proof that is nearly impossible to meet and only in extraordinary cases do federal fire fighters, suffering from occupational diseases, receive fair and just compensation or retirement benefits.
- It is only fair that the federal government should provide parity for federal fire fighters who are exposed to the same occupational hazards as other professional fire fighters. There is no legal or rational reason why federal fire fighters do not have the same right as fire fighters in 38 states.

CURRENT STATUS

On 3/5/2003 H.R. 1101 was introduced and referred to the House Committee on Education and the Workforce.

On 3/5/2003 S. 530 was introduced and referred to the Senate Committee on Governmental Affairs.

Department of Governmental Affairs
International Association of Fire Fighters, AFL-CIO, CLC
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FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number:
Bill Version: HB031- DOLWD-WC-02-04-05
() Publish Date:

Revision Date/Time (Note if correction):
Title: Workers' Comp Coverage

Department: Labor and Workforce Development
RDU: Workers' Compensation
Component: Workers' Compensation

Sponsor: Representative Anderson
Requester: House L&C

Component Number: 344

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	* 0.0	* 0.0	* 0.0	* 0.0	* 0.0	* 0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type--Do not abbreviate)						
TOTAL	* 0.0	* 0.0	* 0.0	* 0.0	* 0.0	* 0.0

Estimate of any current year (FY2005) cost: None
Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal:

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

The broadly applicable presumptions included in the bill could result in numerous claims. The seriousness of the covered conditions would involve large amounts of benefits, and those factors coupled with the broad scope of defenses (like heredity and other life exposures) could lead to extensive, complicated hearings.

*The costs of this proposed legislation cannot be determined in advance as there are no comparable Workers' Compensation Act provisions at present. Increased costs, if any, would consist of additional personnel needed to resolve disputed claims for benefits based upon the new presumptions.

Prepared by: Paul F. Lisankie, Director
Phone: 465-6059
Division: Workers' Compensation Division
Date/Time: 2/4/05 3:22 PM
Approved by: Greg O'Claray, Commissioner
Date: 2/4/2005
Agency: Department of Labor and Workforce Development

HB

32

HOUSE COMMITTEE REPOI

(11)
Date Referred to Committee: February 2, 2005 FURTHER REFERRALS:

Date of Committee Action: 4/13/05

The FINANCE Committee considered: HB 32

HOUSE BILL NO. 32 APPROP: GRANT TO ARCTIC POWER FOR ANWR

"An Act making a special appropriation for a grant to Arctic Power to promote the opening of the Arctic National Wildlife Refuge for oil and gas exploration and development; and providing for an effective date."

Recommends it be replaced with [ ] HCS *or* [✓] CS *for* HB32 (FIN)
For Senate Bills with new title: [ ] Technical Title [ ] New Title: HCR_____ [ ] Same Title [ ] New Title

[ ] attach amendments
[ ] add new referral to _____Committee
[ ] Letter of Intent_____Committee

List of Abbrev for Depts.:
ADM
CED
COR
CRT
EED
DEC
DFG
GOV
HSS
LEG
LAW
LWF
MVA
DNR
DPS
REV
DOT
UA

NEW FISCAL NOTES *Assigned by Chief Clerk's Office				
List by Dept(s):	*FN#	Fiscal	Indet.	Zero

PREVIOUS FISCAL NOTES				
List by Dept(s):	FN#	Fiscal	Indet.	Zero

Signing with recommendations	Printed Last Name	DP	DNP	NR	AM
Mike Hawker	Hawker	★			
	Stoltz			✓	
Gene E. Moses	MOSES	X			
	FOSTER	X			
Bruce Weyhrauch	Weyhrauch				X
	Kelly			X	
Chair:					
Chair:	Thomas	✓			

ALASKA STATE LEGISLATURE

Interim:
600 East Railroad Avenue
Wasilla, Alaska 99654
(907) 373-1842
Fax (907) 373-4729

Session:
State Capitol Building
Juneau, Alaska 99801-1182
(907) 465-2186
Fax (907) 465-3818

REPRESENTATIVE VIC KOHRING
DISTRICT 14

Sponsor Statement

House Bill 32

A grant to Arctic Power to promote opening the Arctic National Wildlife Refuge (ANWR) for Oil and Gas Development.

House Bill 32 appropriates $1,200,000 from the General Fund to Arctic Power for use in promoting the opening of the Arctic National Wildlife Refuge (ANWR) by Congress for oil and gas development. The legislation includes a General Fund appropriation of $100,000 to the native village of Kaktovik for their community outreach effort to gain support for the opening of the refuge.

With declining oil revenues, it is imperative Alaska develops new fields. ANWR is the best prospect for future oil and gas development in the state and nation, and the U.S. Interior Department considers the Coastal Plain within ANWR to have the highest potential for discovery of significant oil and gas accumulations in North America, with an estimated 10,000,000,000 barrels of recoverable oil.

This appropriation will assist in reaching that goal of opening the region. In addition, oil and gas exploration and development of the Coastal Plain and adjacent land could result in major unforeseen discoveries that would help reduce our country's future need for imported oil, help balance the nation's trade deficit, and improve our national security.

Arctic Power will use this funding to advocate to Congress the importance of oil and gas production from Alaska's North Slope, demonstrate our state's history of environmentally responsible resource development, and convey the overwhelming support that exists among Alaskans and many Americans for opening ANWR.

Arctic Power is a non-profit private group that has been in existence for 12 years. They have received previous state funding for their efforts, including raising private funds to supplement their budget needs. The existing window of opportunity to open ANWR is considered the best in years, given the current make up of Congress in both the House and Senate, as well as the President's support of development in the refuge.

E-Mail: Representative_Vic_Kohring@legis.state.ak.us • Toll Free Hotline [illegible]
Website: www.akrepvickohring.org/kohring

2-7-05

AMENDMENT NUMBER #1

BY REPRESENTATIVE REGGIE JOULE

TO HB 32

Amend page 1 lines 9-10 as follows:

Delete $100,000 on line 9
Insert $50,000 on line 9

Insert the following on line 10 between the words "Kaktovik" and "in": and $50,000 for the City of Kaktovik

NOT DISCUSSED
2/7/05
not offered
4-13-05

Adopt

24-LS0230\F
Utermohle
4/12/05

CS FOR HOUSE BILL NO. 32( ) 4/13/05

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTY-FOURTH LEGISLATURE - FIRST SESSION

BY

Offered:
Referred:

Funding Information:	**General Fund**	**$**	**1,300,000**
	Other Funds		**-0-**
	Total	**$**	**1,300,000**

Sponsor(s): REPRESENTATIVE KOHRING

A BILL

FOR AN ACT ENTITLED

"An Act making a special appropriation for a grant to Arctic Power to promote the opening of the Arctic National Wildlife Refuge for oil and gas exploration and development; and providing for an effective date."

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

*** Section 1.** GRANT TO ARCTIC POWER. The sum of $1,300,000 is appropriated from the general fund to the Department of Commerce, Community, and Economic Development for payment as a grant under AS 37.05.316 to Arctic Power for education efforts to open the coastal plain of the Arctic National Wildlife Refuge for oil and gas exploration and development. The amount appropriated in this section includes $50,000 for the participation of the Native Village of Kaktovik and $50,000 for the participation of the City of Kaktovik in support of the education efforts undertaken by Arctic Power under this section.

*** Sec. 2.** The appropriation made by this Act lapses June 30, 2009.

*** Sec. 3.** This Act takes effect immediately under AS 01.10.070(c).

THE
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• JUNEAU/WASHINGTON, D.C.

Arctic Power: To fund or not to fund

Lawmakers ponder organization's request that Congressional leaders use group's research to make case for ANWR drilling

BY ROSE RAGSDALE
Petroleum News Contributing Writer

While Alaska lawmakers debate whether the state should appropriate funds for Arctic Power this year, top congressional leaders in Washington, D.C., are busy citing research gathered by the advocacy group to bolster their arguments in favor of opening the Arctic National Wildlife Refuge to oil drilling.

The Alaska House of Representatives passed a resolution Jan. 28, urging Congress to open ANWR's coastal plain to oil and gas exploration and production, but the show of solidarity may not extend to supporting Arctic Power, Alaska's chief lobbyist for opening ANWR for the past decade.

The grassroots group is seeking at least $1.1 million in funding from the state this year. But some lawmakers are questioning whether they should approve the funding request.

"They're apprehensive about giving more money to Arctic Power at this time," Sen. Tom Wagoner, R-Kenai and chairman of the Senate Resources Committee, told the Anchorage Daily News recently.

Arctic Power is an organization supported by business and resource development interests and guided by a statewide board of directors. Alaska has invested nearly $9 million in the organization's programs since 1992.

Wagoner said the Legislature likely would sit on a bill requesting the funding until state lawmakers received more news from Washington, D.C.

In Washington, D.C., Rep. Richard Pombo, R-Calif. (left), and Sen. Pete V. Domenici, R-N.M. (right), have joined Alaska's congressional delegation in citing Arctic Power's research to promote ANWR drilling among their colleagues.

House Oil & Gas favors funding

But all five members present at a House Oil and Gas Committee hearing Feb. 1 voted in favor of House Bill 35, which authorizes $1.3 million in funding for Arctic Power and related programs. Two committee members were absent, including Rep. Beth Kerttula, D-Juneau, who has opposed oil drilling in ANWR.

"Arctic Power may not have been as effective as they could have been in the past, but with Kevin Hand as executive director and Gail Phillips and Al Adams as co-chairs, we believe they have the horsepower now to really make a difference," said Oil and Gas Committee Chairman Vic Kohring, R-Wasilla.

Kohring said he has asked for a hearing in the House Finance Committee, which he believes will support the bill. "We've still got a long way to go, but we think we have the best shot we've had in a long time of getting ANWR open to drilling," he said Feb. 2.

Polls show growing support for drilling in ANWR 1002 area

In Washington, D.C., Rep. Richard Pombo, R-Calif., and Sen. Pete V. Domenici, R-N.M., have joined Alaska's congressional delegation in citing Arctic Power's research to promote ANWR drilling among their colleagues.

Pombo, who chairs the House Resources Committee, cited results of two national polls Feb. 1 that show public opinion favoring resource development in the 1.5 million acre coastal plain of the refuge near the Arctic Ocean is on the rise.

More than half of Americans surveyed believe dependence on foreign oil is a direct threat to our national security and approved opening ANWR for oil exploration, according to a Luntz Research Group survey conducted on behalf of Arctic Power.

"The vast majority of Americans understand that our dependence on Middle East sources of oil is a direct threat to our national security," Pombo said. "They support the deployment of 21st century technology here at home, in energy-rich places like ANWR, to lessen the pressure of our dependence by becoming more self-sufficient."

In addition, the congressman cited an earlier independent poll conducted by Harris Interactive that found a strong majority of Americans believe the nation is in an energy crisis. "Nearly 60 percent of respondents supported "energy reform to allow companies to drill for oil in certain areas such as ... ANWR," Pombo noted.

Letters reflect Arctic Power's influence

Pombo also defended efforts to open up ANWR in a recent letter to members of the House of Representatives.

Separately, Rep. Don Young, R-Alaska, drafted a similar letter to House members.

Both congressmen said energy production and exploration in ANWR would take place on just 2,000 acres of its 1.5 million acre coastal plain, which amounts to a tiny fraction of Alaska's protected lands.

Plus, there's no shortage of "special places" in Alaska or America, Pombo said, noting that Alaska holds 16 national wildlife refuges, 13 national parks and 25 wild, scenic or recreational rivers.

His comments come as Senate Energy and Natural Resources Committee Chairman Domenici prepares to insert an ANWR resolution into the budget reconciliation process and just a week after U.S. Energy Secretary nominee Samuel Bodman, who described himself as an "energetic advocate" for opening Alaska to drilling, also noted the "very small" area that would be needed for oil development.

In his letter, Young also said 75 percent of Alaskans consistently support oil drilling in ANWR, development that would provide numerous benefits for the nation including $2.15 billion in immediate payments to the federal government, regardless of whether energy is ever discovered, and "an answer to your constituents when they ask what you are doing to help with the high cost of gasoline, diesel or home heating oil."

"As chairman of the Transportation and Infrastructure Committee, I know that for the foreseeable future, America's economy will run on conventional energy, including oil," Young said. "It also pays the taxes that build the bridges, roads and airports so important to our quality of life. Secure, affordable and reliable energy like that available from ANWR is thus, an energy and a transportation issue."

"Congressman Young uses Arctic Power's research because he believes the group provides a valuable and needed service with the work they do," Young Chief of Staff Michael Anderson said Feb. 1. "Somebody has to get out front and educate the public about ANWR."

Pro-ANWR group's reality check is needed

"[Arctic Power] provides factual information about what oil drilling would mean

see ARCTIC POWER page 8

ANWR defenders fear time is up

Members of Congress who have successfully blocked oil drilling in the Arctic National Wildlife Refuge for more than a decade vowed to do everything, including a Senate filibuster, to protect the preserve again this year. But they say there is a real possibility they will fail this time.

"If there ever was an occasion to support a filibuster, this is," said Sen. Joe Lieberman, D-Conn., who attended a rally Feb. 2 with environmental groups. "There are not 60 senators who will vote for drilling."

But he and others agreed that if Republicans put the drilling legislation in the budget resolution, which is not susceptible to a filibuster, there's a greater chance it will have the votes to pass.

Republican gains in the Senate give President Bush his best chance yet to win approval for oil drilling in the refuge, which is one of his top energy priorities. The GOP now has a 55-44-1 majority in the Senate, compared with a narrower margin last year – 51 Republicans, 48 Democrats and one Democratic-leaning independent.

Lieberman said he believes that "a couple" of the new senators could be persuaded to oppose the drilling. There are two new Democrats and seven new Republicans in the Senate.

—THE ASSOCIATED PRESS

Earnings from Top 35 North American E&P Capex Spenders

Earnings fourth quarter 2004 • Change from fourth quarter 2003
Liquids production fourth quarter 2004 • Change from fourth quarter 2003
Natural gas production fourth quarter 2004 • Change from fourth quarter 2003

BP	BP						
BG/Shell	RD	$4,478	+134	2,163,000	-9	9,710	+4
EnCana	ECA						
ExxonMobil	XOM	$4,420	+27	2,965,000	-1	10,410	-4
Can. Natural	CNQ TO						
ConocoPhillips	COP	$2,432	+138	1,036,000	+2	3,360	-6
El Paso	EP						
Chevrontexaco	CVX	$3,440	+98	1,656,000	-8	3,725	-11
Anadarko	APC	$405	+38	223,000	8	1,841	-7
Devon	DVN	$673	+24	379,200	+22	2,433	+3
Dominion	D	$438	+49	28,130	+24	1,012	-8
Burlington	BR	$400	+3	197,600	+23	1,900	-3
Occidental	OXY	$845	+78	433,000	-3	644	+8
Husky	HSE TO	C$218	-8	208,800	-6	697	+6
Newfield	NFX						
Petro Canada	PCZ	C$441	+23	288,700	-19	821	+3
Unocal	UCL	$368	+49	171,000	+9	1,544	-2
Kerr-McGee	KMG	$134	+166	184,700	+32	1,325	+51
EOG	EOG	$304	+184	29,900	+19	1,141	+17
Noxen	NXY TO						
Imperial	IMO	C$538	+68	274,500	+8	578	+4
Talisman	TLM						
Pioneer	PXD						
Apache	APA	$502	+95	242,651	+10	1,241	-1
Marathon	MRO	$429	11	162,000	-11	996	-11
Suncor	SU TO	C$333	+10	226,500	+5	200	+7
Merit	Private company does not report results						
Williams	WMB						
Chesapeake	CHK						
Pogo	PPP	$47	-16	41,921	-33	319	+7
Penn West	PWT TO						
EnCana	ECA						
Spinnaker	SKE						
Forest	FST						
BHP Billiton	BHP						

Liquids production in barrels per day, natural gas production in millions of cubic feet per day
NOTE: Top 35 is based on Petroleum News research

continued from page 6

MACKENZIE

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In the meantime, the NGOs, indicating they are already overwhelmed by the volume of material, say they are concerned that the review panel is rushing the review process unnecessarily.

The organizations include Ecology North, the Status of Women Council for the Northwest Territories and the Northwest Territories Literacy Council.

Ecology North has strongly advocated that the Northwest Territories should end its reliance on fossil-fuel based energy and move towards renewable energy such as wind, solar and run-of-river hydro electricity.

The Status of Women, an advisory body to the Northwest Territories government, has also put a special focus on resource development projects.

—GARY PARK

continued from page 7

TRUSTS

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Easing that kind of upheaval, he said changes should be made in two stages, selling 10 trusts initially and the balance later. ●

continued from page 4

ARCTIC POWER

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Sen. Ted Steven, R-Alaska, who works every day on ANWR, says Arctic Power has a purpose but not necessarily on Capitol Hill, according to his spokeswoman Courtney Schikora Boone.

"The senator believes that ANWR doesn't need anymore lobbyists in Congress because its members are so polarized on the issue," Boone said Feb. 2. What's needed is a grassroots campaign — winning the support of people outside of the Congress who can influence its members, she said.

Boone also said Stevens will not tell the Alaska Legislature whether or not to fund Arctic Power this year. He is scheduled to address the Legislature later in February, and the topic of ANWR is sure to come up, she said.

Anderson said Young also will defer any decision about Arctic Power's funding to Alaska Gov. Frank Murkowski.

Arctic Power is currently updating its numbers on the potential impact of oil drilling in ANWR in light of recent higher oil prices, a spokeswoman in the group's Washington, D.C., office said. Feb. 1. Working with the University of Maryland, Arctic Power expects to complete the work in mid-February, she added.

The Arctic Power/Luntz survey examined respondents' attitudes upon learning that the U.S. imports more than 55 percent of its oil. Nearly 70 pe of

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Americans were more "angered" by the United States' dependence on OPEC oil than by the actual cost of gasoline at the pump. Respondents were told that of ANWR's 19.6 million acres, less than 2,000 acres would be used for actual development — a statement not included in the Zogby/Wilderness Society poll. More than 60 percent said they were more likely to support production upon learning the facts.

The Luntz Poll found that 64 percent of Americans believe we need to develop our domestic energy resources and 67 percent support the "exploration, development and production" of oil and natural gas in ANWR.

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The Committee on Resources is expected to vote Feb. 9 to revive a broad energy bill that would allow oil drilling in ANWR. ●

continued from page 7

ENCANA

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The new round includes:

• An average 40 percent working interest in 1.4 million gross acres in the Gulf of Mexico, including a 25 percent working interest in the ChevronTexaco operated Tahiti discovery.

• A Feb. 8 deadline for bids on the 15 Alberta properties that produce a combined 17,700 bpd of oil and natural gas liquids and 27 million cubic feet per day of gas.

• Three natural gas gathering and processing plants with capacity of 210 million cubic feet per day in Colorado and Utah.

• Five blocks in Ecuador's Oriente that produce 78,000 bpd and close one-third stake in the 450,000 bpd, 306-mile OCP pipeline to Ecuador's coast.

Ecuador has been a growing burr under EnCana's saddle over the last year, with Morgan conceding last year that operating in the South American country was "constantly a roller-coaster."

It has been embroiled in two fights with the government of Ecuador, taking one claim for US$120 million in a wrangle over value-added taxes on exported oil to an international tribunal in London.

Major attention has been focused on India's Oil and Natural Gas Corp. and China National Petroleum Corp., both of them desperate to lock in long term international oil supplies, as likely bidders for the Ecuador holdings.

—GARY PARK

continued from page 6

BROOKS RANGE

to get a well done this year," including paying more money, which Thompson is in charge of, Darrah said.

Edgar Dunne, vice president of contracts and land for AVCG and Brooks Range, has worked with Houston-based First Dicrsified Financial Services on a private equity offering for the Crawler well.

"We're still optimistic Devon (Energy) is going to show up, however," Darrah said.

"We're very hopeful we can drill this winter, but it's hard to make a call on obtaining additional funding until we meet with the institutional groups," Thompson said. "A number of private companies have also shown interest.

"We'll be meeting with potential investors the second week of February. We'll know soon after that if they are interested in proceeding this winter. If not, we'll drill the well next winter," he said.

So why did AVCG back out of the first well with Jil; let the leases expire and then pick them up again?

"The prospect did not get funded in 2002 because at that time we had not solved the oil marketing and facility sharing problems — getting the oil off the North Slope without utilizing Pittaltoot assets and their associated production back-outs. Since then Thompson and AVCG have solved that problem," Darrah said.

"We're working with ASRC Energy Services and others ... on new concepts (to lower processing facility costs) such as smaller scale and skid mounted production systems — what we call 'micro processing units,'" Thompson said last fall. ●

CORRECTION

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

OIL COMPANY EARNINGS

Earnings from Top 35 North American E&P Capex Spenders

Earnings fourth quarter 2004 • Change from fourth quarter 2003
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ExxonMobil	XOM	$8,420	+27	2,561,000	-1	10,430	-4
Can. Natural	CNQ TO						
ConocoPhillips	COP	$2,432	+138	1,030,000	+2	3,360	-6
El Paso	EP						
Chevron/Texaco	CVX	$3,449	+38	1,656,000	-8	3,725	-11
Anadarko	APC	$675	+28	323,000	0	1,641	-7
Devon	DVN	$678	+24	279,200	+22	2,433	+3
Dominion	D	$406	+49	28,130	+24	1,012	0
Burlington	BR	$400	+3	157,600	+23	1,900	-3
Occidental	OXY	$645	+74	427,000	-3	644	+0
Husky	HSE TO	C$218	-8	258,600	-4	697	+6
Newfield	NFX						
Petro Canada	PCZ	C$441	+23	288,700	-11	891	+1
Unocal	UCL	$158	+60	171,000	+9	1,544	-3
Kerr McGee	KMG	$134	+166	184,700	+32	1,125	+51
EOG	EOG	$268	+184	29,900	+19	1,143	+12
Nexen	NXY TO						
Imperial	IMO	C$138	+68	214,000	-9	578	+4
Talisman	TLM						
Pioneer	PXD						
Apache	APA	$607	+95	242,611	+10	1,243	-1
Marathon	MRO	$428	11	162,800	13	Pla	-11
Suncor	SU TO	C$333	+10	226,500	+5	2,0	+7
Merit	Private company does not report results						
Williams	WMB						
Chesapeake	CHK						
Pogo	PPP	$47	+8	4,931	33	178	+7
Pose Rest	PXT TO						
ATO	ATO						
Spinnaker	SKE						
Forest	FST						
BHP Billiton	BHP						

Liquids production in barrels per day. Natural gas production in millions of cubic feet per day.
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continued from page 4

ARCTIC POWER

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continued from page 8

MACKENZIE

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continued from page 7

TRUSTS

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Facing that kind of upheaval, he said changes should be made in two stages, adding 10 trusts initially and the balance later. ●

continued from page 7

ENCANA

oil and gas have attracted "substantial interest from potential buyers."

EnCana started unloading assets in a big way last year by divesting 76,000 barrels of oil equivalent per day of production for US$3.5 billion, including the sale of its United Kingdom North Sea assets to cross-town rival Talisman for US$2.1 billion.

The new round includes:

• An average 48 percent working interest in 1.4 million gross acres in the Gulf of Mexico, including a 25 percent working interest in the Chevron Texaco operated Tahiti discovery.

• A Feb. 8 deadline for bids on the 15 Alberta properties that produce a combined 17,700 bpd of oil and natural gas liquids and 27 million cubic feet per day of gas.

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continued from page 6

BROOKS RANGE

to get a well done this year," including saving more money, which Thompson is in charge of, Dariah said.

Edgal Dionne, vice president of contracts and land for AVCG and Brooks Range, has worked with Houston-based Enid Diversified Financial Services on a private equity offering for the Ivashut well.

"We're still optimistic. Devon (Energy) is going to show up, however," Dariah said.

"We're very hopeful we can drill this winter, but it's hard to make a call on obtaining additional funding until we meet with the institutional groups," Thompson said. "A number of private companies have also shown interest.

"We'll be meeting with potential investors the second week of February. We'll know soon after that if they are interested in proceeding this winter. If not, we'll drill this well next winter," he said.

So why did AVCG back out of the farmout with BP, let the leases expire and then pick them up again?

"The prospect did not get funded in 2002 because at that time we had not solved the oil marketing and facility sharing problem — getting the oil off the North Slope without utilizing Pump Station assets and then associated probation back costs. Since then Thompson and AVCG have solved that problem," Dariah said.

"We're working with ASRC Energy Services and others on new concepts (to lower processing facility costs) such as smaller scale and skid mounted production systems — what we call 'micro processing units,'" Thompson said last fall. ●

RICHARD W. POMBO
11TH DISTRICT, CALIFORNIA

CHAIRMAN, COMMITTEE ON RESOURCES

COMMITTEE ON AGRICULTURE

Congress of the United States

House of Representatives

Washington, DC 20515-0511

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January 31, 2005

Honorable Frank Murkowski
Alaska State Capitol
P.O. Box 110001
Juneau, AK 99811-0001

Governor Murkowski,

I hope this letter finds you well and enjoying the New Year. As always, I look forward to working with you on behalf of the State of Alaska.

I write to you today to specifically thank you for continued support of Arctic Power. As you know, Arctic Power was an integral part of the 1995 campaign to open a portion of the coastal plain of the Arctic National Wildlife Refuge to oil and gas exploration and production. Now, in 2005, with President George W. Bush in the oval office and increased support in both the House and the Senate, I believe we have the best chance yet to achieve our goal. Arctic Power will be critical to our success.

Arctic Power has played an integral role on this issue here in the halls of Congress. Its very capable staff has been invaluable over the years in educating members on all facets of this debate. The up to date information and statistics they have compiled and provided has not only allowed members to educate their fellow colleagues on this important issue, but has also afforded them justification for their votes. In addition, Arctic Power's vote analysis has been superb.

Again, I believe we are within striking distance of success. With your help and that of Arctic Power, ANWR legislation will pass this Congress for the good of your state and our nation.

Once again, thank you for your continued support of this valuable organization. Arctic Power has served its cause and the State of Alaska well.

Sincerely,

Richard Pombo

Richard W. Pombo (R-CA)

Cc: Alaska State Legislature

TRANSPORTATION INSTITUTE

Pacific Coast Office
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Seattle, WA 98105
Phone (206) 443-1738
Fax (206) 443-0917

January 25, 2005

Senator Thomas Wagoner
State Capitol, Room 427
Juneau, AK 99801-1182
Alaska State Senate
Juneau, AK 99801

Senator Wagoner:

As an advocate of environmentally responsible oil exploration and development in the Coastal Plain of ANWR, I urge you to provide adequate funding for Arctic Power in the FY 2005 Budget and to support SB 69/HB 32 so that they may continue their efforts to assure our Nation has the ability to maintain its own production of oil.

As an advocate of the U.S.-Flag Maritime industry, my job responsibilities include addressing policy issues with the Pacific Northwest Congressional delegation. I often use Arctic Power materials in developing my arguments for why it is imperative for Congress to allow the Coastal Plain to be open for oil exploration and development. I have personally given Arctic Power promotional material to most of the Senators and congressional representatives in Washington and Oregon. Having access to such material is an invaluable tool in combating much of the inaccurate and misleading missives distributed by extremists in the environmental movement or the prototypical editorial found in the print media.

Moreover, other Arctic Power supporters and I encourage our congressional delegation to avail themselves of the occasional tours that Arctic Power sponsors and several of our PNW members of Congress have taken the opportunity to visit the Section 1002 Area to get their own perception of the ANWR debate and view the great care expended to assure that oil exploration and development on the North Slope is conducted in strict accord to environmental regulation. These tours serve as an invaluable tool to educate policymakers.

In conclusion, I'm afraid without your support for Arctic Power, along with the assistance of many organizations like my own, we will lose the expertise and momentum we have so carefully crafted over the last decade

A small investment by the legislature for Arctic Power on behalf of Alaskans is both proper and necessary. Thank you for your consideration of this request.

Sincerely yours,

Richard Berkowitz
Director, Pacific Coast Operations

ANWR:

JOBS AND ENERGY FOR AMERICA

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www.anwr.org

Memorandum

To: House Oil & Gas Committee
Alaska State Legislature

Fr: Kevin Hand, Executive Director

Date: February 1, 2005

RE: ANWR Education Funding Request – HB 32

Arctic Power is requesting expedited state funding for on-going education and advocacy efforts to open the coastal plain of the Arctic National Wildlife Refuge to responsible oil and gas development.

The appropriation request would support continuous Congressional education programs and grass roots advocacy efforts already underway nationwide and in Washington D.C.

As in years past, the state funds will be used to conduct ANWR tours, continue our Capital Hill Education Program, provide advocacy materials, maintain union and coalition outreach, and respond to media campaigns.

The 2005 program budget for Arctic Power, including private funds, in-kind contributions, and coalition support is greater than $3 Million. The state portion is an important facet to this cause, and is integral to the success of the Open ANWR campaign.

The attached documents provide a synopsis of the program costs of each component as funded under this legislation. Additionally, a synopsis of Arctic Power historical grant appropriations and the component expenditures are attached for your information.

Despite recent gains in Washington, the success of ANWR in Congress is far from assured. Once again, we are witnessing zealous opposition from unrelenting environmental organizations who have the capability to raise and spend resources many times greater in their aim of locking up ANWR forever.

The State of Alaska must not sit idle at this important time. Alaska, being dependent upon oil for a significant portion of state revenues, cannot ignore the future potential of ANWR revenue generation for both the Permanent Fund and the GF. Alaska simply cannot afford to have ANWR taken off the table by obstructionist groups who care little about Alaska or its residents.

The people of Alaska must have a voice in this debate. There are alarmingly few groups promoting Alaskans' thoughts and feelings on this issue. Alaska cannot afford to sit on the sidelines; the future ramifications may be too great.

Arctic Power Board of Directors' believes strongly that the large revenue potential (in Billions) of ANWR makes the advocacy funding by the Legislature a very small, wise investment in Alaska's future.

If you have any questions, please feel free to contact Kevin Hand at #907-274-2697 (ANWR).

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January 21, 2005

The Honorable Vic Kohring
Alaska State Legislature
State Capitol #427
Juneau, Alaska 99801

Dear Representative Kohring,

This letter is in support of and urging your fellow member's support of HB 32, *"An Act making special appropriation for a grant to Arctic Power to promote the opening of the Arctic National Wildlife Refuge for oil and gas exploration and development."*

The resources necessary to continue the advocacy efforts to open a small portion of the coastal plain of the Arctic National Wildlife Refuge to responsible oil and gas development are needed immediately. Funds are needed to support the open ANWR legislation campaign already underway in Congress.

As you know, energy is a topic attracting much attention nationwide. The debate becomes focused on America's dangerous reliance on foreign oil, the ever-growing global demand for energy and the costs borne by society to utilize that energy. It is critical that ANWR be a part of this national energy debate.

Politically speaking, ANWR legislation may be at one of the most favorable positions in recent history. The recent gain among supporters has ANWR receiving renewed attention in Congress, in the media and among the American public. A positive outcome, however, is far from assured.

We will continue to encounter heavy opposition every step of the way. Alaska must advocate its position in this debate in order for ANWR to become a reality. Arctic Power can assist by sustaining our relentless efforts to cultivate support among policy makers and educate the public on the benefits of opening ANWR.

Arctic Power will utilize these state funds for continued advocacy including the multiple advantages of production from Alaska's North Slope, Alaska's historical experience of environmentally responsible resource development and the overwhelming support among Alaskans for ANWR.

Program components include:

Capital Hill Education – Effective and continuous lobbying of members of Congress by Alaskans. Coordinating with and assisting the Alaska delegation in education and advocacy efforts for members of Congress.

Union Outreach – Securing and maintaining national and state level organized labor support for the opening of ANWR.

Coalition Building – Continued efforts to build and foster a network of organizations and governments to further the grass-roots support of legislation containing ANWR provisions.

ANWR Tours – Alaska tours for members of Congress, the media, and other national opinion leaders to showcase Alaska's knowledge of responsible oil development; including the exploration, production, and transportation systems. Participants have in the past visited Valdez, Prudhoe Bay, Barrow, and Kaktovik.

Targeted States Education Program – Delegations of Alaskans and ANWR supporters who undertake education trips to states to provide information on responsible ANWR development and the benefits to both the nation and their state.

Communications Materials – Continue the production and distribution of ANWR informational documents nationwide. Includes maintaining the ANWR.org website, providing continuous information and materials to meet growing demand – currently averaging over 1,000,000 hits per month.

Arctic Power continues our private fundraising efforts to match state appropriations. Private funding is attained through fundraising events, membership and contributions, direct mail requests and other means. The Arctic Power Board of Directors is committed and confident that these private funds can and will continue to be raised in a timely manner to augment these efforts.

As always, we are witnessing a very aggressive and well-organized effort from obstructionist environmental groups that have the ability to raise and spend considerable resources. These organizations will surely wage an assault of multi-million dollar campaigns of professional media and lobbying groups with the aim of blocking ANWR legislation and instituting a permanent Wilderness designation.

Arctic Power is there as Alaska's primary voice advocating ANWR as a safe supply of domestic energy while creating jobs and revenue for America and the state of Alaska. Immediate action is required if Alaska is going to take advantage of this opportunity.

As Alaska's citizen organization charged with coordinating Alaska's efforts to open the coastal plain to development, Arctic Power believes strongly that this is a small, wise investment in Alaska's future.

Sincerely,

Gail Phillips
Co-chair

Al Adams
Co-chair

ANWR:

JOBS AND ENERGY FOR AMERICA

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2005 PROGRAM BUDGET SUMMARY

GRANT ALLOCATION - HB 32

2005 Program Components	TOTAL
Capital Hill Education $600,000 Contractual Services, Delegation Travel, Education Materials, Communications	
Coalition Building Coordination of Coalitions, Network of Grass-Roots Advocacy Organizations	$60,000
ANWR Tours	$60,000
Targeted States Target Mailers, Phone Program Advocacy/Education State Trips	$290,000
Union Outreach Continuation of Union ANWR Advocacy, Congress Outreach, JOBPOWER advocacy efforts	$72,000
Media Response Public/Media Relations, Rapid Response Program Media ANWR Education	$58,000
Communications Education Mats. Production of Education/Advocacy Materials Website Maintenance/Updates/Equipment	$60,000
TOTAL – Arctic Power Program	$1,200,000
Native Village of Kaktovik	$100,000
TOTAL	$1,300,000

FY 1996 - FY 2004
Grant Expenditures

Grant Year	Approp.	DC Ed.	Target St.	Tours	Union	Media	Documents	St. Officials	Misc.	Kaktovik	Total
FY 96	431,800	81,465	129,187	221,148							431,800
FY 97	250,000	98,499	51,348	97,653					2,500		250,000
FY 98	550,000	280,767	100,897	42,284	66,014		58,737	1,301			550,000
FY 99	225,000	133,978	20,292		29,911		40,819				225,000
FY 00	250,000	183,123	31,915	16,143		8,869	9,950				250,000
FY 01	310,000	250,000								60,000	310,000
FY 01	1,500,000	1,178,062	56,000	155,618	34,738	5,782	69,770				1,499,970
FY 01	250,000	250,000									250,000
FY 02	2,000,000	1,858,992	57,269	37,891	20,140	13,782	11,926				2,000,000
FY 02	700,000	433,191	23,580			243,229					700,000
FY 02	400,000					300,000				100,000	400,000
FY 03	1,100,000	651,298	54,778	14,274	52,300	310,537	16,813				1,100,000
FY 04	800,000	421,960	2,858	13,388	56,700	193	17,559		3,627		516,285
										re-appropriated	-283,715

About Arctic Power

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Formed in 1992, Arctic Power is a 501(c)6 non-profit organization advocating jobs and energy for Americans through development of the Arctic National Wildlife Refuge's (ANWR) resources. We seek congressional and presidential approval of legislation to allow responsible oil and gas exploration and production within ANWR's promising Coastal Plain.

Arctic Power is a grassroots coalition of citizens from Alaska and across the nation who hail from a full economic spectrum: miners, fishermen, loggers, tourism operators, retail and service businesses, transportation companies, labor unions, financial institutions, educational systems, the legal community, Alaska Native Corporations, elected officials and more. Many trade and business associations have joined our ranks through membership and participation on the Arctic Power board of directors. These include the Alaska Support Industry Alliance, Alaska State Chamber of Commerce, Alaska State Home Builders Assn., Alaska Forest Assn., Alaska Oil & Gas Assn., Alaska Miners Assn., Resource Development Council for Alaska, Alaska Trucking Assn., Alaska Outdoor Council, Associated General Contractors, Bristol Bay Drift netters Assn., Anchorage Convention & Visitors Bureau, People for the USA and National Federation of Independent Businesses.

Arctic Power is governed by a board of directors representing all regions of the state...from Barrow to Kodiak. The board works closely with Alaska's U.S. congressional delegation, who have endorsed Arctic Power's purpose. Outreach efforts in Washington, D.C. are the product of cooperative efforts between Arctic Power, the State of Alaska and our congressional leaders. Arctic Power is based in Anchorage but maintains an office in Washington, D.C. when ANWR is being debated in Congress.

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ANWR - IMPORTANT DATES

1903	President Theodore Roosevelt established the National Wildlife Refuge System.
1949	The National Park Service began a recreational survey in Alaska to identify areas with special natural values.
1954	The National Park Service recommended that the undisturbed lands in the northeastern corner of Alaska be preserved for their wildlife, wilderness, recreation, scientific, and cultural values.
1957	The Department of the Interior announced plans to ask Congress to establish an 8,000 square-mile wildlife reserve in the area identified by the National Park Service study.
Jan. 3, 1959	Alaska Statehood
Dec. 6, 1960	Arctic National Wildlife Range Created (8.9 million acres)
1964	President Lyndon Johnson signed the Wilderness Act, establishing the National Wilderness Preservation System and policies for wilderness management.
1969	The first manager was hired for ANWR.
Dec. 18, 1971	Alaska Native Claims Settlement Act. The Act gave the Kaktovik Inupiat Corporation (KIC) surface rights to 69,000 acres along the arctic coast within the Range.
June 20, 1977	Trans Alaska Pipeline Start-up
Dec. 2, 1980	Alaska National Interest Lands Conservation Act (ANILCA). The Act expanded the Arctic Range to approximately 18 million acres, renamed it the Arctic National Wildlife Refuge, designated eight million acres as Wilderness, designated three rivers as Wild, and called for wildlife studies and an oil and gas assessment of 1.5 million acres of the ANWR Coastal Plain (the"10-02 Area"). Gwich'in opt out settling for Indian Reservation status and thus not subject to ANILCA 7i revenue sharing of

	natural resources. Likewise they don't receive benefit of other native natural resource royalties.
1983	The Chandler Lake land exchange agreement conveyed subsurface ownership of Kaktovik Inupiat Corporation lands to the Arctic Slope Regional Corporation.
1983 cont. …	Nearly one million acres were added to the south side of the Refuge when the State of Alaska decided not to retain control of lands it had selected under the Statehood Act.
Winter, 1983-84	Approx. 600 line miles of 2D geophysical data acquired in ANWR
Winter, 1984-85	Approx. 580 line miles of 2D geophysical data acquired in ANWR
Dec. 2, 1985	ANWR closed to any further geophysical surveys
Sept. 2, 1986	Secretary of Interior's Report to Congress, as required by Sec. 1002 of ANILCA
Feb., 1987	Draft Environmental Impact Statement for ANWR Exploration Published
Sept, 1987	Dept. Of Interior recommends to Congress to open the coastal plain.
1988	House Merchant Marine & Fisheries Committee approves an open ANWR Bill. Congress added 325,000 acres to the south side of the Refuge, bringing the total area managed by the Refuge to approximately 19.3 million acres and making ANWR the largest Refuge in the National Wildlife Refuge System.
early 1989	House Merchant Marine & Fisheries Committee again approves an ANWR Bill.
Mar. 24, 1989	Exxon Valdez aground in Prince William Sound.
Aug 2, 1990	Saddam Hussein invades Kuwait.
October 31, 1991	Congress debated National Energy Policy Act, Title 9 of which allowed for development of the Coastal Plain.
	Senate Energy Committee approves Title 9.

Nov. 1991	Senate Roll-call vote on Sen. Wellstone amendment to cut off debate on ANWR, 50 to 44. (60 votes needed to defeat filibuster) National Energy Policy Act shelved.
October 1992 passed.	New National Energy Policy Act, without ANWR,
Nov. 1992	Mr. Clinton elected President
March 1995	ANWR resurrected as part of the Balanced Budget bill.
May 24, 1995	Senator Roth amendment to table ANWR from the Budget Resolution defeated 56 to 44 votes.
Sept. 1995	President Clinton tried to create a National Monument of ANWR under the Antiquities Act - this was prevented.
Sept. 19, 1995	Cong. Vento motion to strike ANWR from the Budget Reconciliation Bill in the House Resources Committee, defeated 27 to 14.
Oct., 1995	House vote on Budget Reconciliation plan including ANWR, passed 227 to 203 votes.
Oct. 25, 1995	Sen. Bumpers asset sale amendment (which would drop ANWR from the Reconciliation bill), defeated.
Oct. 26, 1995	Sen. Baucus anti-ANWR amendment defeated 51 to 48 votes.
Dec. 6, 1995	President Clinton vetoed the Balanced Budget Act which included a provision to open ANWR.
May, 1996	A new Budget Resolution was initiated by Congress.
May 24, 1996	Sen. Bumpers again tried an asset sale amendment on the floor of the Senate as a way of killing ANWR. The first amendment was modified and defeated 98 to 0, but a second attempt aimed directly at ANWR was defeated 52 to 46 votes.
1997	President William Clinton signed the "National Wildlife Refuge System Improvement Act." This Act provides specific guidance to the Refuge System, and establishes the mission of the National Wildlife Refuge System "to administer a national network of lands and waters for the conservation, management, and where appropriate,

	restoration of fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans." The U.S. Supreme Court affirmed that the barrier islands and the lagoons which they enclose, along the northeast coast of Alaska, are within the boundaries of the Arctic Refuge. The State of Alaska had hoped to claim ownership of these lagoons and to lease them for oil and gas exploration and development.
May 1998	U.S. Geological Survey released the Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998 containing the highest estimates ever for the region. The agency's mid-range estimate of oil in place rose from 13.8 billion barrels to 20.7 billion barrels of oil.
Jan. 2000	Representative Vento's Morris Udall ANWR Wilderness Bill has 165 co-sponsors; while Senator Roth's Senate version has 25 co-sponsors.
March 31, 2000	Assumptions about ANWR revenues were included in the FY2001 budget resolution (S. Con. Res. 101) as reported by the Senate Budget Committee. An amendment to remove the language was tabled. However, conferees rejected the language.
January 10, 2001	Clinton announced that ANWR would not be declared a national monument.
May 24, 2001	Vermont Senator James Jeffords changes party affiliate from Republican to Independent. Democrats take over Senate majority.
July 27, 2001	Representative Billy Tauzin (D-SD) introduces HR4 that included a provision to open ANWR.
Aug. 1, 2001	HR4 passed in the House of Representatives.
Dec. 5, 2001	Senator Tom Daschle introduces S.1766. Bill does not move.
January 17, 2002	The Interior Department concluded that the proposed Arctic drilling plan would not violate American treaty obligations to protect polar bears.
February 26, 2002	As the energy bill begins to wind its way through the Senate, the White House considered a "scaled-back"

	version of the ANWR drilling plan, including only 500,000 of the original 1.5 million acres of the refuge's coastal plain.
Mar. 12, 2002	Senator Jeff Bingaman (D-NM) introduces S.517, The National Energy Policy Act.
Apr. 25 2002	S.517 passes Senate 88-11. It did not contain ANWR.
Nov 2002	Conference Committee fails to pass Comprehensive Energy Bill
Dec 2002	Energy Bill is shelved.
April 2003 House passes	Amendment vote to take ANWR language out of the Energy Bill. The vote did not pass. House votes and its version of the Energy Bill (H.R.6)that included ANWR. Senate votes 52-48 to strip from a budget resolution language to lift the longtime ban on the development of oil in the ANWR.
July 2003	Senate passed the 2002 Senate Energy Bill excluding ANWR language.
Sept 2003	Conference Committee convened and failed to reach agreement
2004	The House again passed a comprehensive energy bill that included authorization to open the Coastal Plain to exploration and development. No action occurred in the Senate.
Jan 2005	Sen. Domenici reappointed Chairman of Senate Natural Resources Committee and in inaugural speech announces opening the Coastal Plain of AN

Oil and Gas in the ANWR? It's Time to Find Out!

Alaska Department of
NATURAL
RESOURCES
Division of Oil and Gas

February 2003

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STATE OF ALASKA
Governor Frank H. Murkowski

ALASKA DEPARTMENT OF NATURAL RESOURCES
Tom Irwin, Commissioner

DIVISION OF OIL AND GAS
Mark D. Myers, Director

This publication was released by the Division of Oil and Gas, Anchorage, Alaska. For more information about this report, contact the Division of Oil and Gas, 550 W 7th Ave Suite 800, Anchorage, Alaska, 99501. This report is also available for download at http://www.dnr.state.ak.us/oil/products

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Oil and Gas in the ANWR? It's Time to Find Out!

Introduction

The petroleum potential of the North Slope's coastal plain, including that of the Arctic National Wildlife Refuge (ANWR), has been the object of speculation and geological exploration since about 1906. Oil seeps and exposed oil-stained rocks across the North Slope long hinted of the area's petroleum potential. Within the 1002 Area of the ANWR coastal plain several oil seeps and surface exposures of oil-stained rocks occur along the Katakturuk and Jago rivers and at Manning Point and Angun Point on the sea coast. Many geologists regard the area as the most prospective unexplored onshore area in North America.

The 1002 Area consists of 1,500,000 acres of highly prospective terrain in the northeastern portion of the North Slope. The region is situated between the prolific North Slope oil fields to the west and the petroleum-rich Canadian Mackenzie Delta province to the east. A very large gas field with a significant volume of recoverable liquid hydrocarbons and two large offshore oil accumulations have been discovered nearby, clearly demonstrating that the 1002 Area is a prime target for oil and gas exploration (fig. 1). The state's and the nation's need for additional oil and gas reserves and production, the need to maintain the life and deliverability of TAPS, and the promise of a gas pipeline to transport North Slope gas to fill the growing supply void in the Lower 48 all justify development of the ANWR 1002 Area's oil and gas potential.

Geology

All of the key geologic elements needed to produce major hydrocarbon accumulations occur beneath the coastal plain of the ANWR. Geological studies and seismic, gravity and magnetic geophysical data suggest reservoir rocks similar to those found in the Prudhoe-Kuparuk area to the west and the Mackenzie Delta to the east may be present in the subsurface of the ANWR coastal plain. Interpretation of the seismic data collected to date has identified numerous prospective structures and structural and stratigraphic leads beneath the surface of the ANWR coastal plain. Based upon field observations of oil seeps and oil-stained reservoir rocks at surface outcrops in the area, it is evident that oil has been generated and perhaps has been trapped within reservoir rocks in these prospective features

Trapping mechanisms abound in the ANWR 1002 Area. Interpretation of seismic data shows that the structural style of the area becomes increasingly complex from west to east and that the region can be divided into two structural zones, the undeformed zone and the deformed zone (fig.2). The boundary between the two zones lies along the Marsh Creek anticline. Rocks in the undeformed zone in the northwest part of the coastal plain are characterized by nearly flat-lying strata cut by faults with only small displacements. Fault-block traps and subtle anticlinal traps may be present in this area. The deformed zone is characterized by thrust-faulted basement highs overlain by northeast-trending, complexly

deformed structures. Within both zones the probability of encountering stratigraphic traps is moderate to high. However, such subtle features are extremely difficult to locate and identify without a 3-D seismic program.

Figure 3 illustrates the locations of wells surrounding the ANWR coastal plain. Significant proven accumulations (Pt. Thomson, Flaxman Island, Sourdough) immediately west of the 1002 Area may, in part, extend beneath the 1002 Area. Offshore, north of the undeformed area, what are rumored to be large discoveries, each in the range of 200-400 MMBO, apparently have been found at Hammerhead and Kuvlum (operators have not disclosed reserve estimates). Prohibitively costly to develop offshore in the Beaufort Sea, fields of this size would quickly be brought on line were they located onshore. The 430 MMBO Alpine field is the largest onshore oil field discovered in North America in the last 15 – 20 years. If Hammerhead and Kuvlum are of comparative size they are significant discoveries. Most significant, however, is the probability that the geology in the undeformed area is very similar to that of the Point Thomson, Sourdough, Hammerhead and Kuvlum accumulations to the west and to the north where oil and gas are known to occur in large quantities.

Petroleum Exploration History

Despite opposition by the state of Alaska and by the U.S. Geological Survey (USGS) the northeast corner of Alaska was created as the Arctic National Wildlife Range (ANWR) by PLO 2214 in 1960. In 1972 the state and the Department of Interior (DOI) failed in an attempt to exchange sensitive waterfowl habitat for prospective ANWR acreage. The area was substantially enlarged to 19 million acres, renamed and designated as the Arctic National Wildlife Refuge by the Alaska National Interest Land Claims Act (ANILCA) in 1980. Section 1002(h) of the ANILCA set aside approximately 1.5 million acres on the refuge's coastal plain for assessment of its petroleum potential. Upon completion of the assessment the congress is to determine final classification of the area.

To that end, a group of twenty-two oil companies joined to conduct a widely gridded (3 miles by 6 miles) 2-D seismic, gravity and shallow geology survey of the 1002 Area during the winters of 1983-84 and 1984-85. Approximately 1,450 line-miles of seismic and gravity data were acquired across the coastal plain and adjacent lands. In addition individual companies also conducted surface geology studies within the refuge. Industry submitted these data to the DOI for its use in preparation of the required petroleum potential assessment of the 1002 Area. Since that time two Interior agencies (the Bureau of Land Management (BLM) and the USGS), the Energy Information Administration, and the State of Alaska Division of Oil and Gas have published several assessments and reassessments of the petroleum potential of the 1002 Area.

In a separate proprietary program, Chevron and predecessor companies of BP Amoco conducted a smaller geophysical survey of the Kaktovik village selection lands in the north-central area of the ANWR coastal plain. Subsequently this group drilled the KIC well. Results of the geophysical survey and the well remain confidential to the participants and unavailable for use in the resource assessments.

ANWR Petroleum Assessments

At least eight assessments of the hydrocarbon potential of the 1002 Area have been released since 1986 – one by the Alaska Division of Oil and Gas, one by the Energy Information Administration, three by the BLM, and three by the USGS. Results of these resource assessments differ somewhat because, over time, additional data have become available, analytical methods have changed, lower-cost technology has evolved, and significant technical data-collection and data-processing advances have occurred. Some assessments were restricted to only the 1002 Area and others, more regional in scale, encompassed surrounding onshore and offshore areas. Consequently, there is not a common denominator for all of the assessments. The results of those assessments are displayed in figure 4.

The most recent petroleum assessment of the ANWR 1002 Area was prepared by the USGS in 1998 (Arctic National Wildlife Refuge, 1002 Area, Petroleum Assessment, 1998; OFR 98-34). It is important to note that in this assessment the resources are quantified as "technically recoverable," the volume of hydrocarbons that can be recovered with existing technology without consideration of commodity price.

This assessment emphasized the oil potential of the study area and, based upon identification of ten prospective plays in the 1002 Area, predicts a technically recoverable mean crude oil resource of 7.7 billion barrels of oil (BBO). (Note that "resource" means the quantity of hydrocarbons inferred to exist from analyses of technical data. This differs from "reserves" which are generally regarded as the quantity of discovered producible resources.) The range of technically recoverable oil is estimated to be between 4.3 BBO and 11.8 BBO (i.e. there is a 95 percent probability that as much as 4.3 BBO exists, but only a 5 percent probability that at least 11.8 BBO might occur) (fig. 5).

Unlike earlier assessments, the 1998 study estimates that the quantities of technically recoverable oil are not expected to be uniformly distributed throughout the ANWR 1002 Area. The undeformed area is estimated to contain between 3.4 and 10.2 billion barrels of oil (BBO) (95- and 5-percent probability), with a mean of 6.4 BBO. The deformed area is estimated to contain between 0 and 3.2 BBO (95- and 5-percent probability), with a mean of 1.2 BBO.

The same USGS assessment estimated technically recoverable gas reserves within the 1002 Area to be in the range of 0.0 TCF (F95) to 10.0 TCF (F5), with a mean value of 3.5 TCF. Most of these reserves are expected to occur in the deformed area. At the time of the assessment, however, non-associated gas was not considered to be a likely exploration objective and the resource was not rigorously evaluated by the USGS. Since that time gas has become a more economically desirable objective and recent USGS reassessments of other areas (NPR-A, Rocky Mountain basins) have resulted in significantly higher natural gas potential than have past assessments. Consequently, the 1998 estimates might be conservative.

The 1998 estimates are somewhat higher than earlier estimates because:

- the existing seismic data have been reprocessed and re-evaluated using more modern processing and analytical techniques, and
- the results of near-by wells drilled since the earlier assessments have been incorporated in the evaluation.

The 1998 USGS assessment did consider the sensitivity of ANWR production to crude oil price (fig. 6). At a market price (landfall price plus 12 percent ROR) of $30.00 per barrel (1996 dollars) the assessment suggests that virtually all technically recoverable oil is economically recoverable. Economics become positive for large accumulations at about $13.00 per barrel. Smaller fields might not be economic at prices less that $24.00 per barrel.

Because the reprocessed seismic data and recent well data were incorporated and more rigorously evaluated than in the past, the investigators were able to better identify the distribution of plays across the 1002 Area. ("Play" may be defined as a rock volume exhibiting geological characteristics conducive to entrapment of petroleum.) The 1998 USGS assessment distributes the potential of the 1002 Area among ten prospective plays, each an extension of a play-type known to exist in neighboring petroleum-bearing areas and, on the basis of geological and geophysical data, thought to extend beneath the study area.

While earlier assessments generally assumed uniform distribution of plays and resources across the coastal plain, the 1998 study correctly concludes that the play-type, the number of prospects, potential field size and potential technically recoverable resource are differentially distributed across the undeformed and deformed areas because of the differing geologic histories of the undeformed and deformed areas.

The undeformed area lies in the northwestern one-third of the 1002 Area and is closer to existing infrastructure, a significant economic advantage. The USGS estimates that technically recoverable oil in three plays evaluated in this area ranges between 3.4 and 10.2 BBO with the mean value being 6.4 BBO. Field-size simulation models suggest these reserves will be found in about 31 accumulations (mean case) with technically recoverable oil volumes ranging from 8 to 4,096 MMB (million barrels).

The remainder of the 1002 Area comprises the deformed area. Here seven prospective plays were modeled with an estimated range of technically recoverable oil between none and 3.2 BBO and with an expected mean of 1.2 BBO. The highly complex geological style of this area results in a higher geological risk because the subsurface structure is more difficult to interpret with data now available. Here the simulation model suggests that the expected mean number of accumulations is only three pools and that about 85 per cent of the recoverable oil will occur in fields smaller than about one billion barrels.

The 1998 USGS assessment concludes that the expected mean of 7.7 BBO recoverable for the 1002 Area, as a whole, will be distributed among approximately 35 accumulations. The most common field size will be in the range of 64 – 256 MMBO recoverable. Approximately 80 per cent of the recoverable

resource is expected to be found in accumulations smaller that 2.048 BBO recoverable. Chapter AO in the USGS Open File Report 98-34 offers a comprehensive overview of the methods and results achieved.

The proximity of the undeformed area to existing infrastructure suggests that relatively smaller field sizes will be economically developable there. Today satellite fields with recoverable reserves of less than 30 MMBO recoverable are being developed near the major North Slope fields. A successful discovery in the undeformed area might well provide the financial incentive to extend production infrastructure eastward from Badami to the Pt. Thomson, Sourdough, and Flaxman Island accumulations and to bring those fields on stream. Availability of facilities in this area also might make it possible to develop the offshore Hammerhead and Kuvlum pools. Combined, these accumulations could add one billion barrels or more to the nation's domestic crude oil inventory.

Unless development proceeds easterly across the 1002 Area, the deformed area's greater distance from now-existing infrastructure suggests that fields there will have be larger than those in the undeformed area if they are to prove commercial. Geological structures there are large and complex so the traps and the field sizes can be large. However, success in the undeformed area to the west will provide the facilities to support development in the deformed area and, as a result, fields smaller than otherwise required might prove economical in the deformed area. Clearly, while it may now be a cliché, the "string of pearls" concept applies here. Facilities and significant known, but undeveloped, reserves exist nearby. The incremental reserves necessary to lead to their development might lie beneath the undeformed area of the ANWR 1002 Area.

The 1998 assessment cannot be meaningfully compared to all earlier 1002 Area assessments because the assessment methods used in some earlier studies are not documented. However, both the BLM assessment submitted in the 1987 Report to Congress and the 1998 USGS assessment did attempt to quantify the estimated oil-in-place (OIP) resource. The 1987 study concluded that the range of OIP is between 4.8 and 29.4 BBO (95 and 5 percent) while the current assessment estimates the OIP to be between 11.6 and 31.5 BBO (95 and 5 percent). The respective 1987 and 1998 mean OIP estimates are 13.8 and 20.7 BBO. Clearly the recent evaluation assigns greater potential to the area than did the original 1987 Report to Congress.

The other significant difference between the 1987 and 1998 assessments is the distribution of the resource. In the 1987 report approximately 75 percent of the estimated mean OIP was assumed to be in what is now identified as the deformed area. The 1998 assessment assigns only 15 percent of the mean OIP to the deformed area. In 1987 the undeformed area was thought to contain only 25 percent of the OIP. Current thinking is that 85 percent of the OIP occurs in the undeformed area on the northwestern coastal plain.

As previously stated these changes reflect the impact of improved seismic processing and analytical methods and inclusion of geological analogs derived from recent drilling results near the 1002 Area. Furthermore, modern understanding of the geohistory of the ANWR coastal plain suggests that the

deformed area, underlain by more thermally mature sediments than is the undeformed area, may be more prospective for gas than for oil.

North Slope and Potential ANWR Contribution to Domestic Supply

Having discussed the oil and gas potential of the ANWR 1002 Area, it seems appropriate to place that potential in a national perspective. Alaska's North Slope currently produces approximately one million barrels of oil a day, a significant decline since the peak production of 2.2 million barrels of oil a day transported through the Trans-Alaska Pipeline System (TAPS) in 1988. At that time the Alaska North Slope provided about twenty-five percent of the nation's domestic crude oil production. According to the American Petroleum Institute 2002 report, Alaska's North Slope production represents about 18 percent of the nation's domestic crude production and 5.6 percent of the nation's daily demand of 19 million barrels. In 2002 the United States imported 57.6 per cent of its total crude oil products demand.

With Figure 5 the USGS report displays graphically how economically recoverable oil volume might vary across a range of oil prices (1996 dollars). Given the mean technically recoverable resource, the field number and field size distributions modeled, possible success rates and other parameters, somewhat more than 6 BBO could be economically produced from the 1002 Area at today's $28.00 - $30.00/barrel price. An oil price of about $15.25/barrel would support exploration for and development, production and transport of only a few hundred million barrels.

In its May 2000 report, "Potential Oil Production from the Coastal Plain of the Arctic National Wildlife Refuge: Updated Assessment", the U.S. Department of Energy (DOE), Energy Information Administration, estimated daily production schedules for the 5 per cent, mean and 95 per cent technically recoverable oil cases described in the 1998 USGS assessment. The DOE assigned a range of production volumes, based upon engineering assessments and the development history of the area, to each case in order to determine the cumulative production levels and project life for each model. The methodology used by the DOE to simulate field production curves assumes that daily production will peak in the third year at about ten per cent of the total technically recoverable volume. Production rates during years one and two are approximately one-quarter and one-half respectively of the peak rate. After year three, production declines exponentially at ten per cent each year until all technically recoverable reserves are produced. The DOE study projects peak production rates ranging from 600,000 to 1.9 MMBO per day with production peaks estimated to occur about 20 – 30 years after sustained production begins. Production could continue for 50 – 60 years. Note, however, that the DOE report considers technically recoverable oil from all of the coastal plain area, including Native and adjoining state lands. These lands will contribute only 26 per cent of the production rates and volumes assigned to the entire area by the DOE (the 1002 Area will contribute 74 per cent).

In the mean case, for example, the DOE postulated development rates of 400 and 600 MMBO per year. The methodology assumes that a new 400 or 600 MMBO recoverable development volume ("unit") will be

brought on line each year and produced until all technically recoverable oil assigned to the mean case is depleted. For the 400 MMBO per year development case a new 400 MMBO "unit", each with a life of about 40 years, will be brought on line each year for 25 years. Under this scenario, peak production for the 400 MMBO per year case is about one million barrels per day 26 years after start of sustained production. Forty years after the 25th "unit" is placed on production the total technically recoverable oil resource (mean case) will be depleted. The total production phase will take approximately 65 years (a new "unit" each year for 25 years and a 40-year life for the last "unit").

In the higher rate 600 MMBO per year development model only about 18 "units" are needed to deplete the mean case technically recoverable resource. Peak production will occur in the 18th year at a rate of about 1.35 MMBO per day. Assuming a 40-year life for each "unit" the total production phase might continue for about 48 years, by which time the mean case resource will be depleted.

The reality is that development will not occur on an annually replicated schedule. The number of fields, field sizes and production schedules can not be determined until the area is further explored with modern seismic methods and the drill bit. Clearly, however, potential production of at least 7.7 BBO from the 1002 Area would be a significant contribution to the nation's domestic production.

Minimum Economic Field Size, Technology and the Environment

A critical criterion when evaluating a prospect is to determine whether it equals or exceeds the minimum economic field size (MEFS) - the volume of recoverable oil necessary to make the project an economic success. MEFS is the product of numerous technical and economic variables - among them the value of oil; the finding costs; the productivity, depth and thickness of the reservoir; the proximity to and cost of infrastructure; the cost of applicable technology; royalty payments; transportation tariffs, regulatory costs and tax structure. Recent dramatic changes in oil prices make it clear that prospects must be evaluated across a range of prices and that, in a fluctuating oil market, a MEFS for any given price represents only a snapshot in time.

On the North Slope, as elsewhere, the MEFS has decreased significantly. Fields as small as 30 – 50 MMBO recoverable are being developed around the Prudhoe Bay and Kuparuk River fields west of the ANWR. Two significant contributing factors are technology-based: 3-D seismic and advances in directional drilling.

3-D seismic field acquisition and processing methods have evolved to the point where potential reservoirs and traps only several hundred feet wide can be identified at substantial depths. Once used to aid delineation of field limits after a discovery well was drilled, 3-D seismic is now less costly than an exploration well and the technique has evolved to the point where it now is employed before the wildcat well is drilled. Modern digital seismic recording and processing methods allow certain attributes to be extracted from the data and analyzed to better locate and characterize the exploration target.

Furthermore, experienced explorationists have come to recognize certain data characteristics as typical of common prospect types in an area. The technique has also advanced to the point where repeated 3-D seismic surveys (4-D seismic) can be used to design and monitor secondary recovery programs. Unfortunately no 3-D seismic surveys have been conducted in the 1002 Area where such information would contribute significantly to a more definitive assessment of the area's petroleum potential. Combined with modern directional drilling engineering methods, 3-D seismic allows selection of drill-sites having the least environmental impact within a prospective area.

Directional control of the drill bit is an engineering marvel. A drilling engineer can now plan a well-bore trajectory that will penetrate one or more small targets, identified by the 3-D seismic, at distances of more than four miles from the drill rig location. Application of this "extended reach" drilling method - "designer well" as it is sometimes called - allows numerous exploration and development wells to be drilled within a radius of nearly five miles from a single drill pad. North Slope satellite fields such as Midnight Sun and Aurora were discovered and are being developed from existing surface facilities several miles from those fields. In the not-too-distant past new drill pads, roads and pipelines might have been necessary to drill and develop these fields and the cost of doing so might have been high enough to prevent carrying the projects forward. Hundreds of millions of barrels of oil would have remained in the ground.

Accurate spatial control of the drill bit offers other advantages to the operator. Horizontal production wells are now routinely completed, the well bore penetrating thousands of feet of reservoir strata horizontally and increasing reservoir volume exposed to the borehole and production tubing. Production is more efficient and much less costly. Virtually all North Slope wells are now drilled using horizontal drilling methods.

Coiled tubing units, much smaller that conventional rotary drill rigs, are now frequently used to drill and complete many wells. They are often used to sidetrack existing wells to prolong well life or to complete new production zones in the producing reservoir. Here, too, development of small diameter down-hole drilling tools allows the operator to control directional drilling with precision.

Advances in directional drilling methods and associated improvements in production technology now allow multi-lateral long-reach completions. Multi-lateral drilling consists of several extended-reach horizontally-completed wells drilled and produced from a single pilot hole. Pilot holes can be drilled only a few feet apart by a mobile conventional drilling rig leaving a very small "footprint" on the surface. The number of wells that once were completed on a 65-acre gravel pad can now be confined to an area of only nine acres. Here too, the Alpine field, now under development by Phillips Petroleum Company and Anadarko Petroleum Company, is the best example of modern oil field development using multi-lateral completions.

Also recently developed is through-tubing rotary drilling which is used to drill a new borehole through existing production tubing without pulling and replacing that tubing. Savings in rig-time and materials are substantial.

A combination drilling/production/camp platform being tested on the North Slope this winter is intended to extend the North Slope drilling season, to reduce surface disturbance and to greatly reduce the need for gravel and ice pads and roads. Developed by the Anadarko Petroleum Company, it consists of light-weight, inter-locking Rolligon-transportable aluminum modules mounted above the tundra on vertical pilings. Camp facilities will be mounted on a similar, but smaller, adjacent structure. Designed to be easily constructed and, if necessary, removed, it promises significant environmental and economic advantages.

Many of these advances in drilling engineering, now used around the world, were conceived and developed by North Slope operators as they tried to reduce costs and environmental impacts. Not only do these engineering advances reduce the surface area of individual drill sites, they also reduce the number of drill sites required. As a result the operator uses less gravel and the disturbances that accompany field construction are significantly reduced. Remember, too, that grind-and-inject methods whereby drilling mud and cuttings are injected back into the well, have virtually made mud pits a thing of the past and also have significantly reduced water demand. Remote sites often can be supported by seasonal ice roads and by air. Production facilities can be remotely operated with minimum or no permanent on-site staffing. Clearly, "lean is clean" in the oil patch. Cost-efficiency and reduced environmental impact are joined at the hip.

The use of 3-D seismic and extended-reach drilling have contributed significantly to lower finding costs by substantially increasing the probability of commercial success. From 1995 – 2001 inclusive, the commercial success rate on the North Slope was at least 32 per cent (at least 8 of 25 exploration wells). Statistics published by the Division of Oil and Gas indicate that the commercial success rate between 1959 and 1995 (prior to the use of 3-D seismic as an exploration tool and the advent of modern directional drilling technology) was only 3.3 per cent. The ten-fold increase between 1995-2001 is attributable to the improved subsurface knowledge now attainable from 3-D seismic data and the advances in drilling methods.

Operational costs have dropped dramatically over the last twenty years as North Slope operators have sought to remain competitive under intense public scrutiny. Reduced materials, rig-time and construction costs have contributed significantly to lower operational costs. For example (all estimates in 1996 dollars)

- In a 1984 report by the BLM exploration drilling costs were estimated to be $22MM per well. The 1998 USGS study estimated the cost to be $15MM.
- The BLM estimated a 10,000 foot development well then cost about $7MM. The USGS estimate is $2.73MM.
- Facilities investment was estimated to be $10 per barrel in 1984 - today about $2 per barrel.
- A 20-inch 85-mile pipeline was estimated to cost $9.2MM in the 1984 BLM report. The 1998 USGS assessment estimated a similar pipeline would cost $2.7MM.

Drainage Issue

Several major accumulations are known to adjoin the western boundary of the refuge's coastal. Directly abutting the northwest boundary of the ANWR is the Point Thomson Unit with development expected to begin by 2006. This field is expected to produce 8 TCF of natural gas and perhaps as much as 400 MMB of natural gas liquids, the latter transportable through the near-by Badami facilities to the TAPS system. Several years ago British Petroleum Alaska and ChevronTexaco announced discovery of a 100 MMBO field at their Sourdough field, also within the Point Thomson Unit. Whether these gas and oil pools extend under the 1002 Area remains a matter of speculation today. A short distance offshore lie two more undeveloped pools rumored to contain nearly a billion barrels of oil. Due to the confidential nature of much the exploration data within the Point Thomson Unit, in the area offshore of the 1002 Area, and in the 1002 Area proper, the possible occurrence and extent of these resources within the 1002 Area remain speculative. However, most petroleum explorationists working the area believe the same reservoirs are very likely to occur beneath the ANWR coastal plain and regard the area as the most prospective unexplored onshore area in North America.

If left undrilled any recoverable reserves beneath the western margin of the 1002 Area might be drained by wells on adjacent state leases. While any such oil or gas will find its way into the nation's energy supply, the federal government will not be compensated for drainage extracted by the state and/or its lessees. If drainage is an issue it is the state's legal opinion that the "rule of capture" prevails and that a state lessee can drain oil from adjacent federal land. The federal government can protect its equitable share of the resource by having a drainage lease sale or by allowing offset wells to be drilled within the 1002 Area, possibly from state land utilizing extended reach methods. Clearly the only way to protect federal revenue is to drill in the area with either a government program or by offering the area for leasing.

Conclusion

What quantity of oil and gas lies beneath the tundra of the ANWR 1002 Area? Despite repeated sophisticated analyses by government and industry geoscientists, only additional seismic surveys and the drill bit will reveal what lies beneath the study area. The 3-by-6 mile seismic grid acquired during the assessment phase served its intended reconnaissance purpose, but prospects of substantial size could be missed by such a large grid. Clearly, modern in-fill seismic coverage is needed to better evaluate the area.

That exploration, development and production technologies have evolved to mitigate or eliminate many environmental and economic issues is apparent. It is reasonable to believe that practice will continue. The Alpine field-development program on the Colville Delta to the west is the most recent example of those advances - many of which had their origin in the uniquely demanding arctic environment of the North Slope.

Too often overlooked in the controversy surrounding the future of the 1002 Area is the fact that much of the information germane to the living and renewable resource assets of the area was gathered in conjunction with the ANWR petroleum exploration programs of the mid-80s. Those programs provided the impetus, support and means to compile comprehensive studies of the environmental and wildlife values of the area. That development and the environment can co-exist in the Arctic has been clearly demonstrated over the last 25-30 years. To believe otherwise is short-sighted and detrimental to our nation's energy needs.

Acknowledgements

The Alaska Department of Natural Resources, Division of Oil and Gas, originally prepared this report in support of Governor Knowles' testimony before the United States Senate Energy and Resource Committee on April 5, 2000. All information contained in this report is from various public sources. Information regarding the geology and petroleum potential of the 1002 Area, including figures 1–3, 5 and 6, is from the USGS Open File Report 98-34 and the USGS Bulletin 1778. While this informational report addresses only the oil potential of the 1002 Area, the USGS publications discuss the natural gas resource of the area also. The staff of the Division of Oil and Gas wishes to thank USGS scientists Emil D. Attanasi, Kenneth J. Bird and David W. Houseknecht for their contributions to the body of science regarding the petroleum potential the Arctic National Wildlife Refuge 1002 Area.

Oil production rate information is extracted from the DOE-EIA report "Potential Oil Production from the Coastal Plain of the Arctic National Wildlife Refuge: Updated Assessment, May 2000". For a more comprehensive review of the petroleum potential of the Arctic National Wildlife Refuge coastal plain and surrounding areas please refer to the acknowledged publications.

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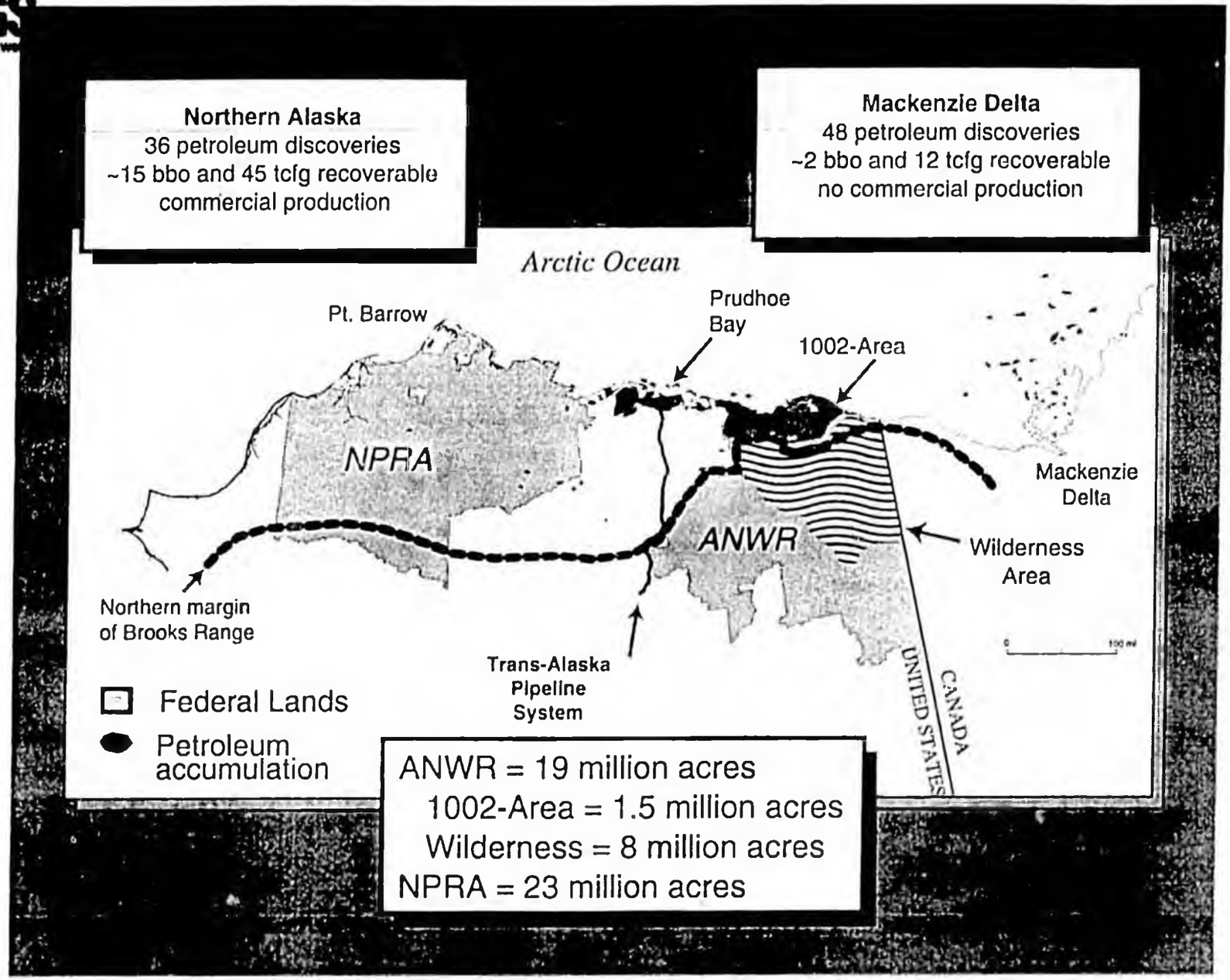


Figure 1. Map of northern Alaska and nearby parts of Canada showing locations of the Arctic National Wildlife Refuge (ANWR), the 1002 assessment area, and the National Petroleum Reserve - Alaska (NPRA). Locations of known petroleum accumulations and the Trans Alaska Pipeline System (TAPS) are shown, as well as summaries of known petroleum volumes in northern Alaska and the Mackenzie delta of Canada. bbo = billion barrels of oil, includes cumulative production plus recoverable resources; tcfg = trillion cubic feet of gas recoverable resources.

The Oil and Gas Resource Potential of the Arctic National Wildlife Refuge 1002 Area, Alaska
Open File Report 98-34

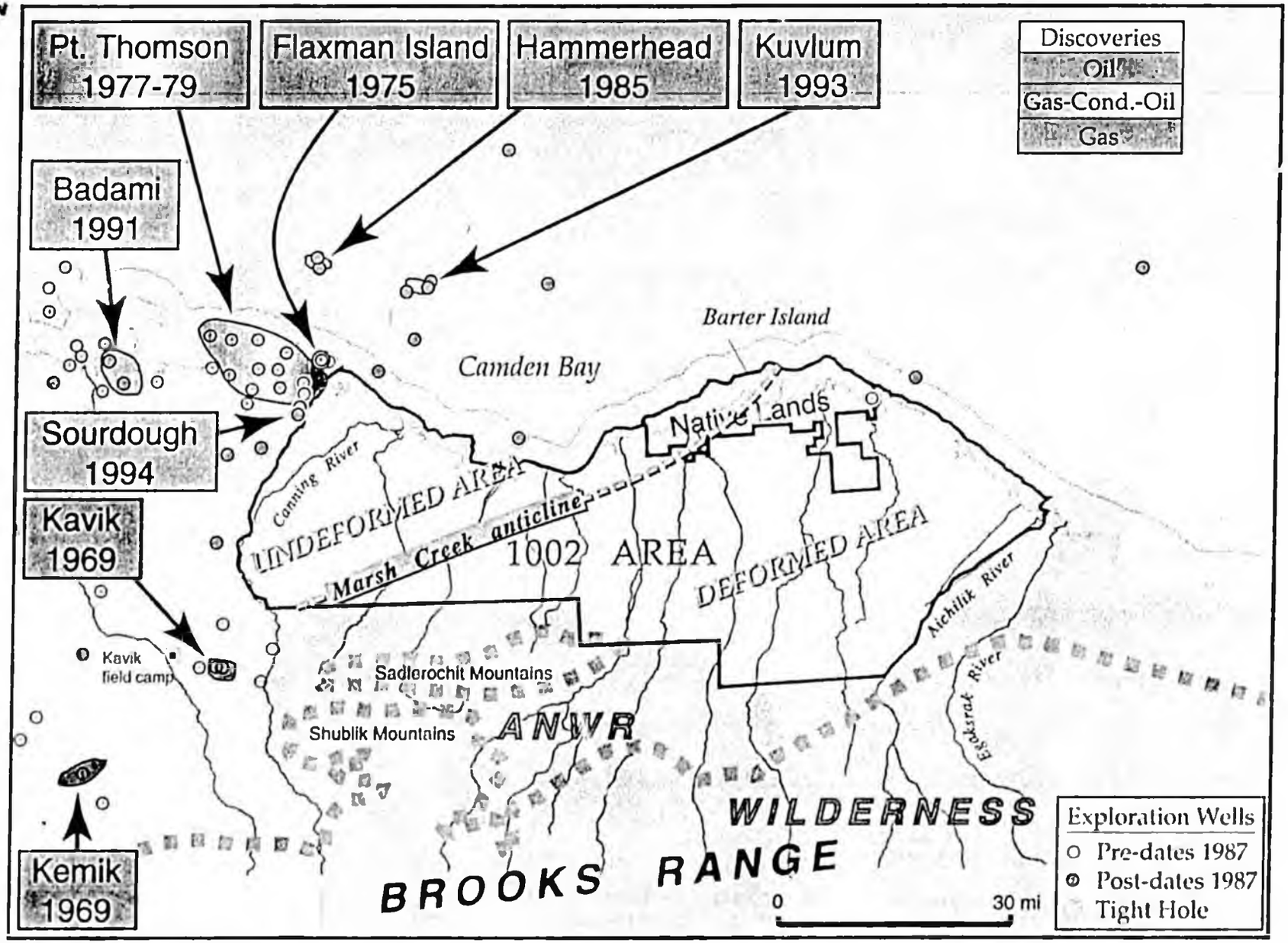


Figure 2. Map of the ANWR 1002 and adjacent areas showingpetroleum discoveries and status of exploratory wells relative to 1987 USGS assessment. Orange dashed line marks approximate boundary between undeformed area, where rocks are generally horizontal, and deformed area, where rocks are folded and faulted.

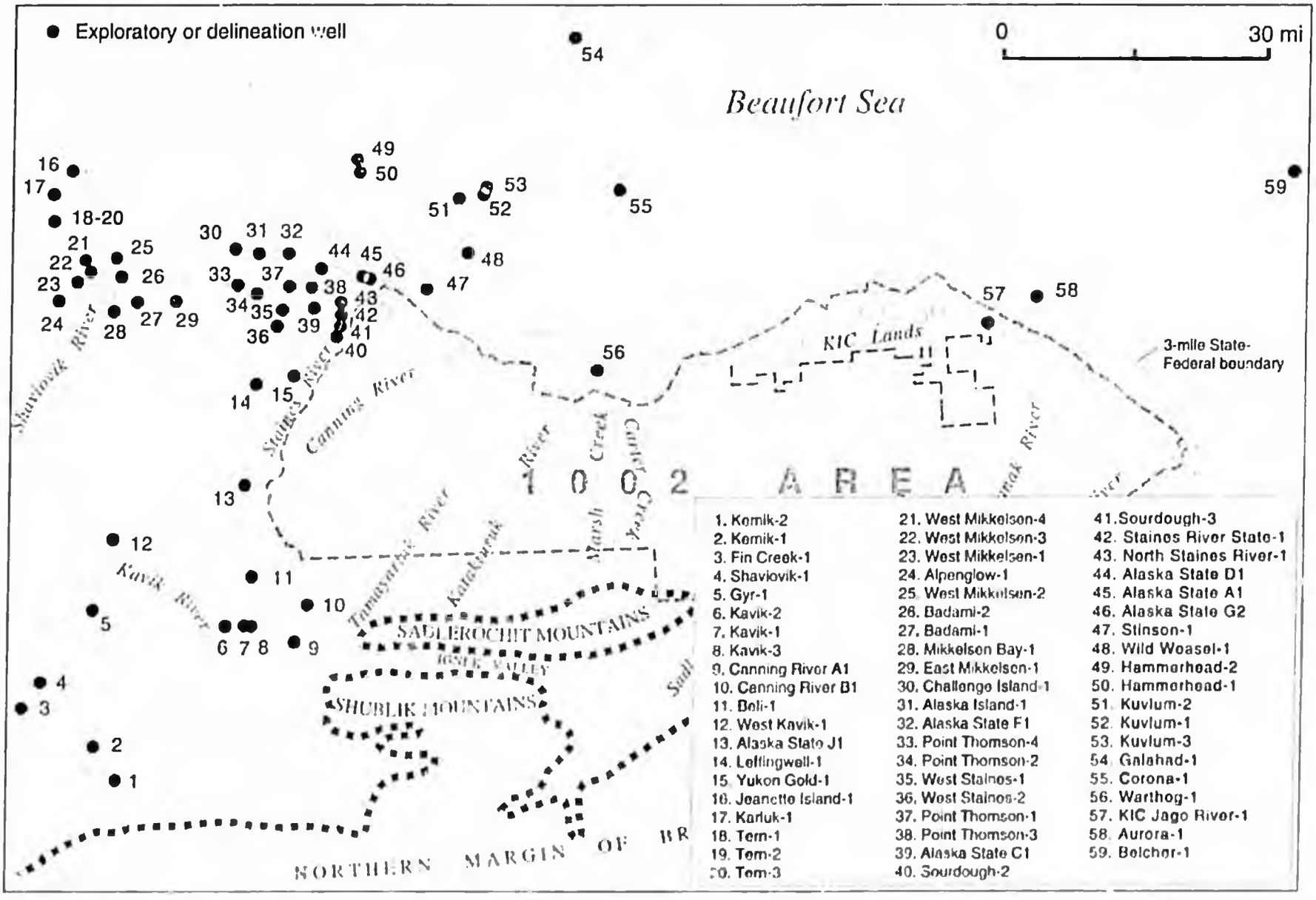
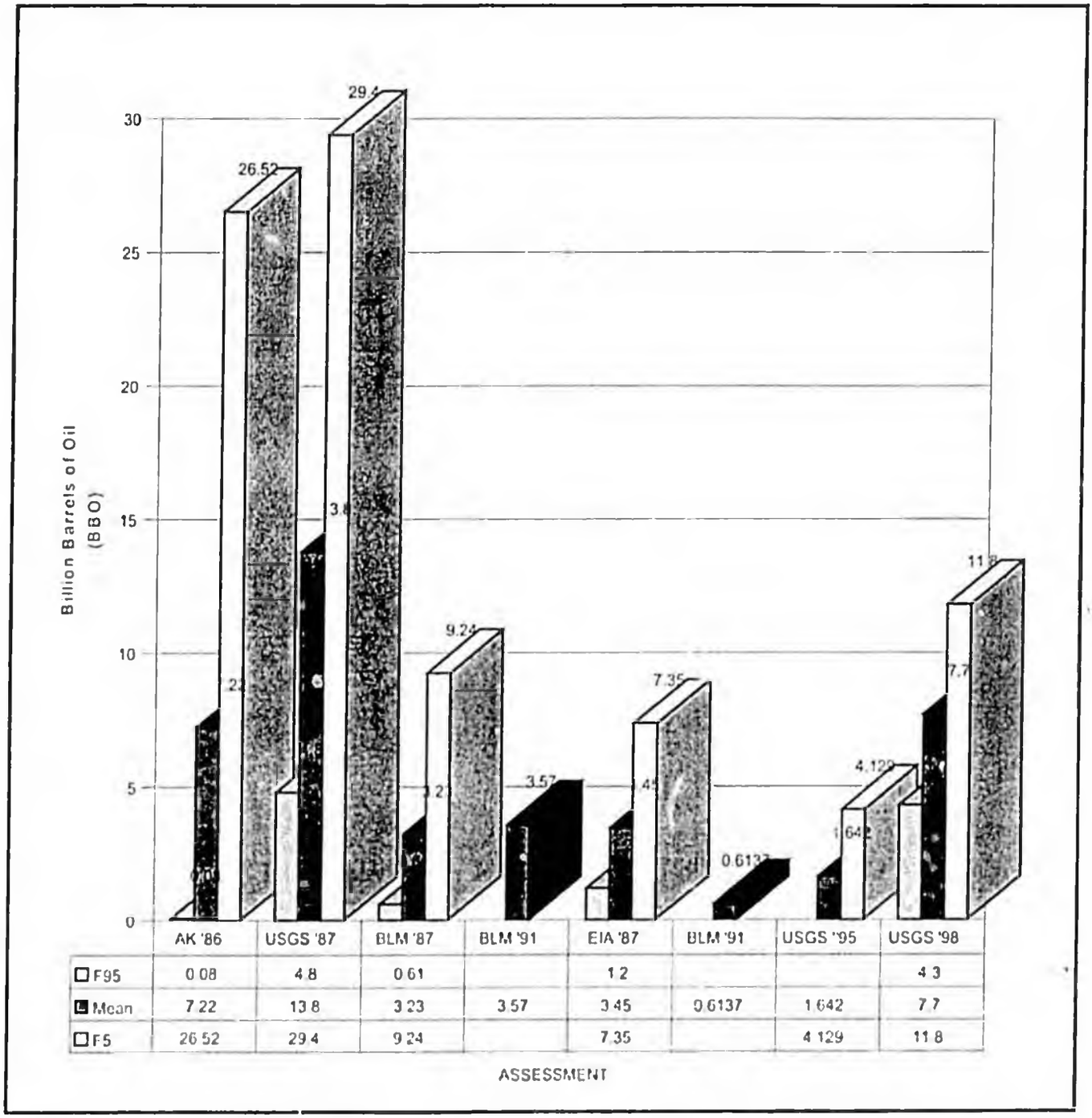


Figure 3. Location map of wells near the ANWR 1002-area.



DOSG 4/00

ASSESSMENT	BBO		
	F95	Mean	F5
AK DOFG "in place", 1986	0.08	7.22	26.52
USGS "in place", 1987	4.8	13.8	29.4
BLM Undiscovered conditional economically recoverable oil, 1987	0.61	3.23	9.24
BLM Undiscovered conditional economically recoverable oil, 1991		3.57	
EIA Unconditional (risked) economically recoverable oil, 1987	1.2	3.45	7.35
BLM Unconditional (risked) economically recoverable oil, 1991*		0.6137	
USGS Unconditional (risked) economically recoverable oil, 1995		1.642	4.129
USGS Technically recoverable oil, 1998	4.3	7.7	11.8

* Reflects a change in original probability from 19% to 46%

Figure 4. ANWR 1002 Area Assessment Results

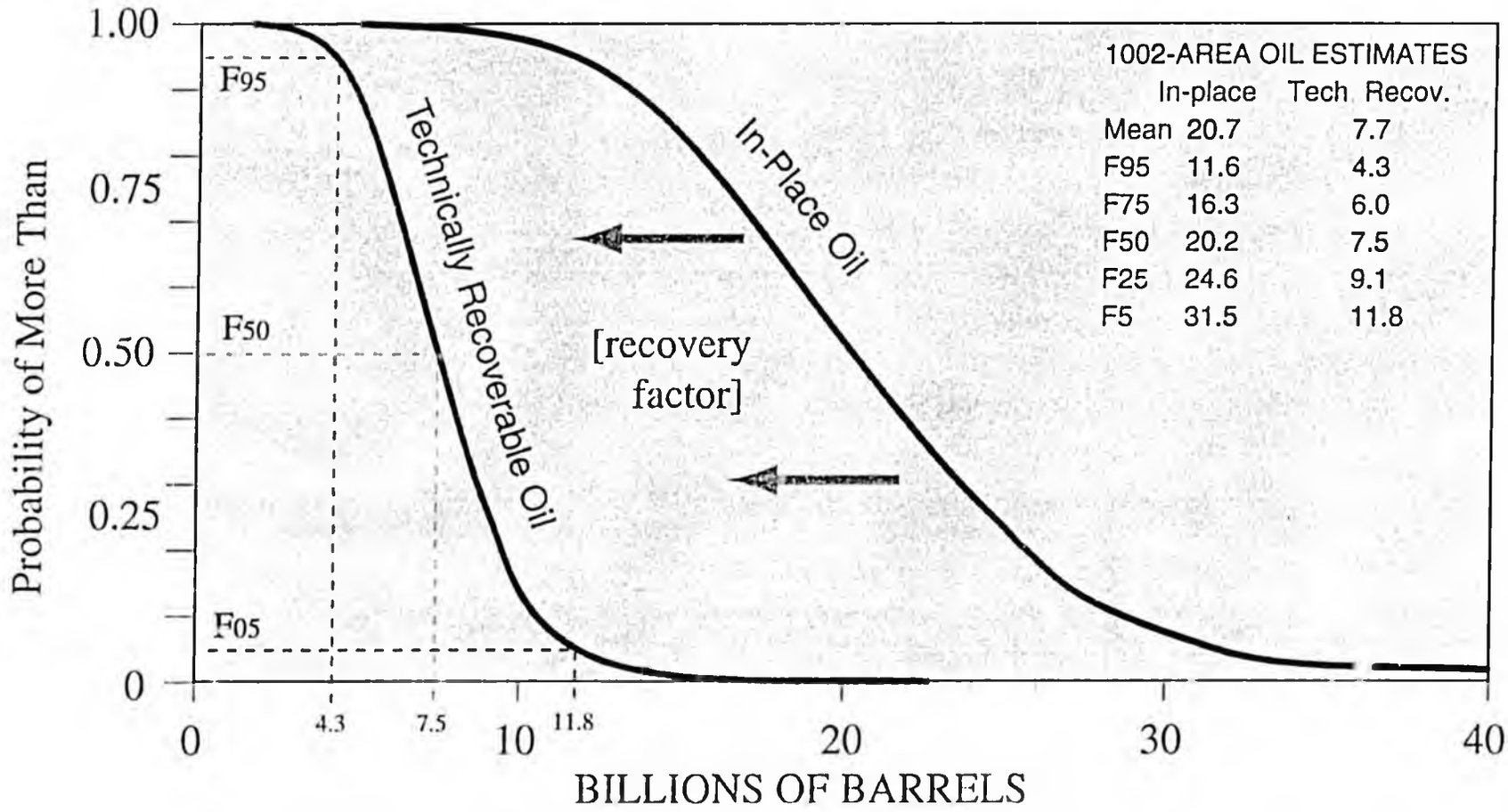


Figure 5. Graph illustrating oil volumes and probabilities for the 1002 area. Curves represent categories of oil in assessment. The larger volumes of oil are represented by the in-place curve and lesser amounts by the technically recoverable curve. An example of how one reads this graph is illustrated by the dashed lines projected to the red curve for technically recoverable oil. There is a 95-percent chance (i.e., probability F_{95}) of at least 4.3 billion barrels of technically recoverable oil; there is a 50-percent chance (F_{50}) of at least 7.5 billion barrels of recoverable oil; and there is a 5-percent chance (F_{05}) of at least 11.8 billion barrels of recoverable oil. The F_{05} and F_{95} values are considered reasonable maximum and minimum values, while the mean expresses the average or expected value.

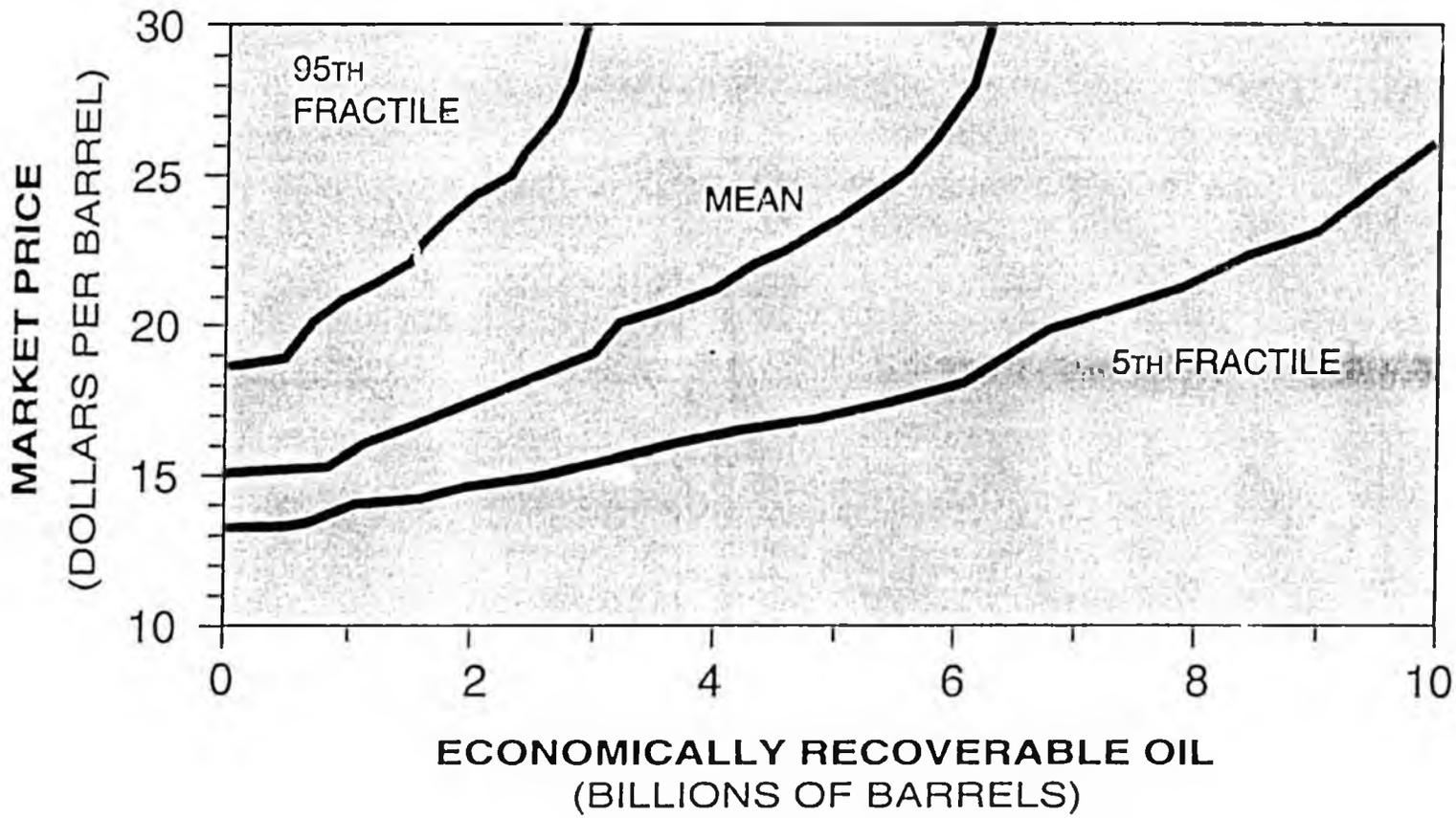


Figure 6. Graph showing increasing volumes of oil that could be profitably recovered at increasing commodity prices from undiscovered fields in the 1002 area of the Arctic Refuge. Analysis includes costs of finding, developing, producing, and transporting oil to market, as well as a 12-percent return to capital.

ARCTIC NATIONAL WILDLIFE REFUGE

America's Energy and Environment in Balance

"WE ARE THE stewards

OF THIS LAND.

WE KNEW

this land

BEFORE IT HAD AN ENGLISH NAME."

— Mayor George Ahmaogak, Sr.,

Mayor of the North Slope Borough

The Arctic National Wildlife Refuge
19,600,000 Acres

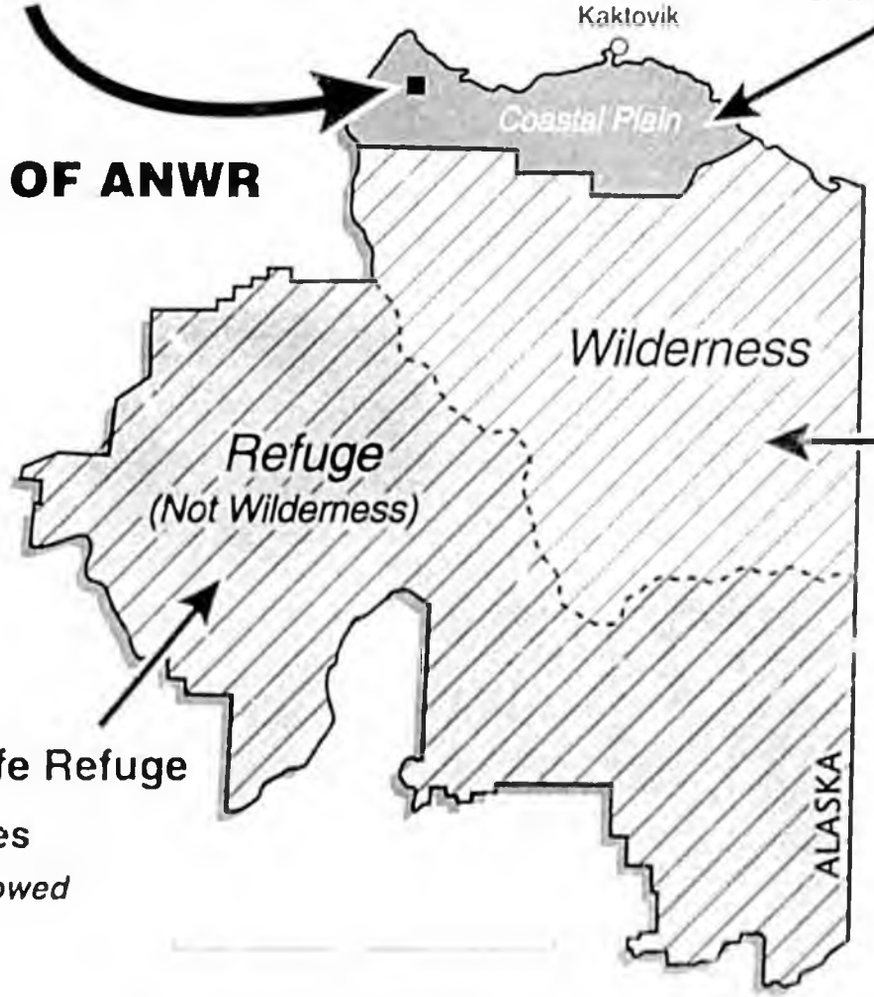
Proposed total amount of land
allowed for development by Congress
2,000 acres (to scale)

ONLY .01% OF ANWR

The "1002" Area Coastal Plain of ANWR

Specifically set aside by Congress
for analysis of oil and gas exploration.

1.5 million acres



Wilderness Area

8 million acres

No Development Allowed

Arctic National Wildlife Refuge

9.16 million acres

No Development Allowed

Coastal Plain *(Not Wilderness)*

Wilderness Area

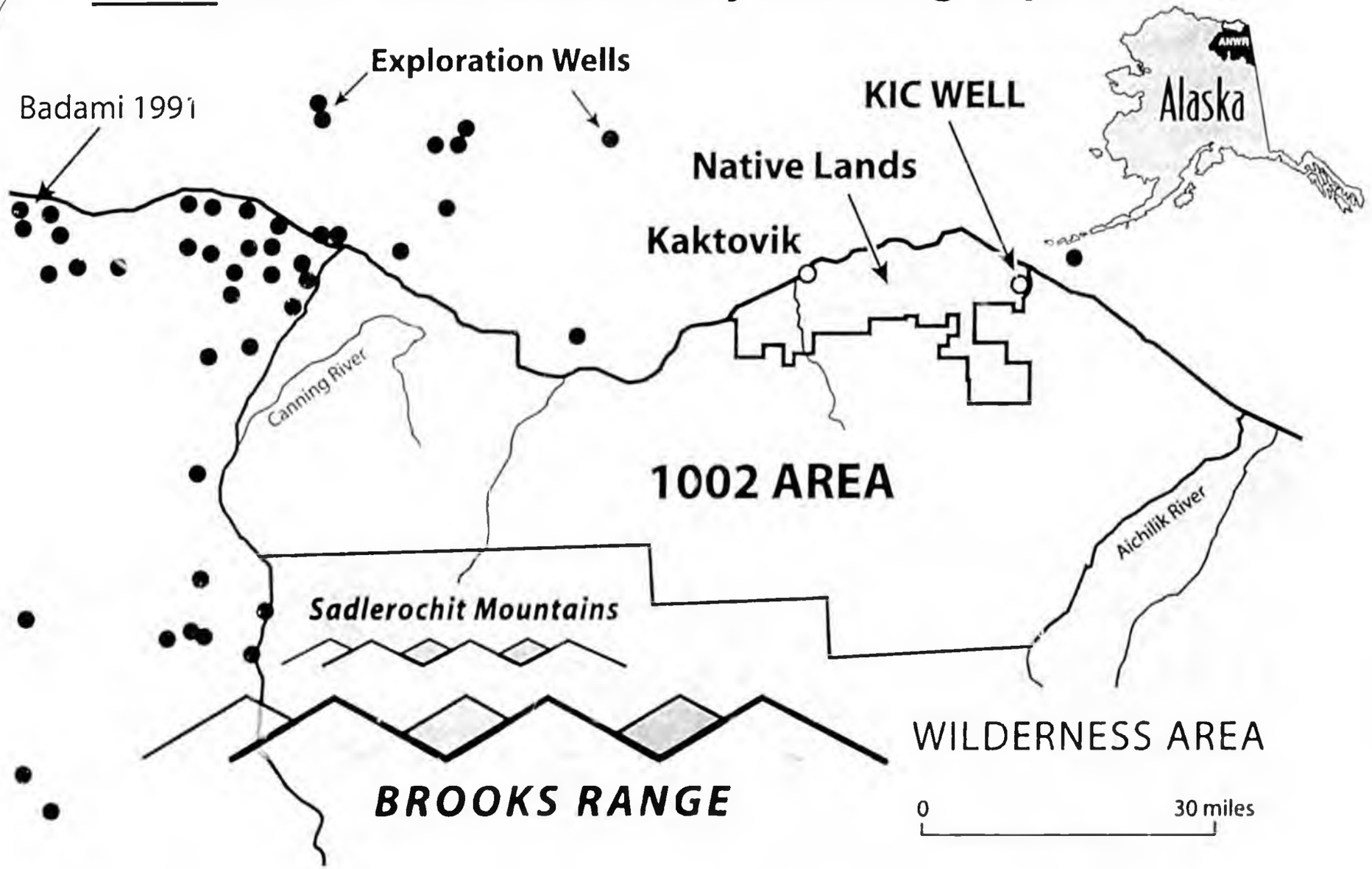
Refuge *(Not Wilderness)*

▪ Proposed Development Area *(to scale)*
2,000 Acres (3.13 sq miles)

2,000 acres out of 19,600,000 acres is only .01%

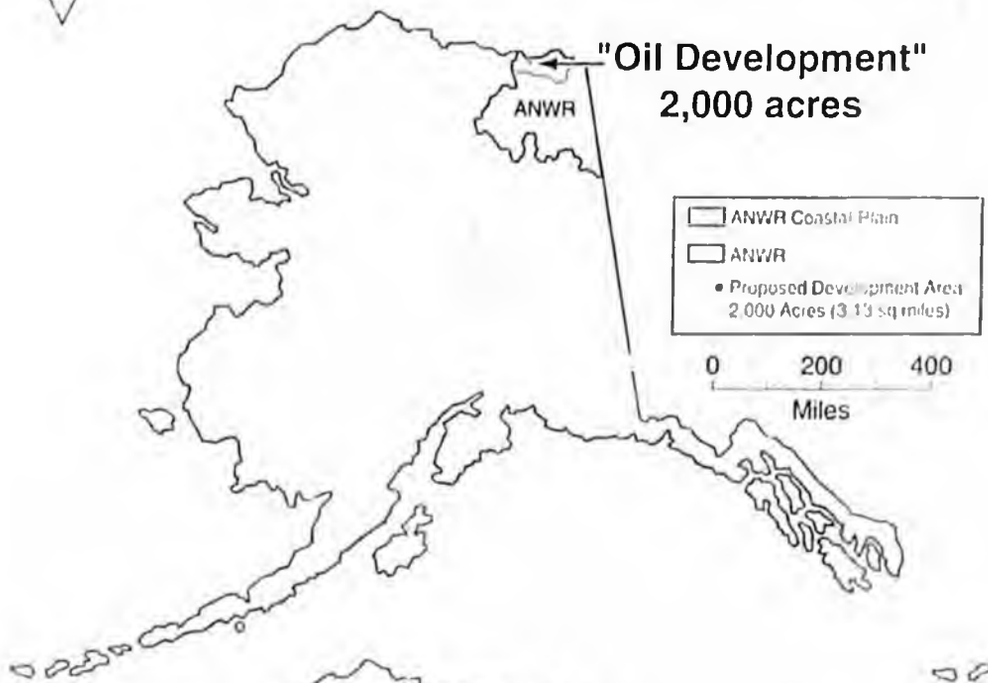
99.99% of ANWR will remain untouched!

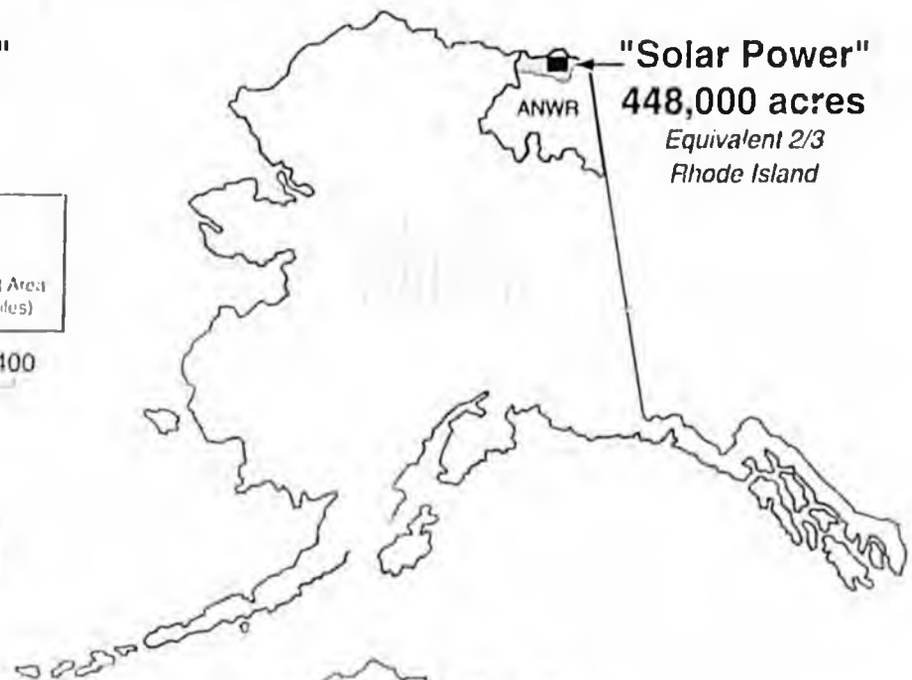
The ANWR Coastal Plain, or 1002 Area, is the ONLY area of ANWR with any oil and gas potential.

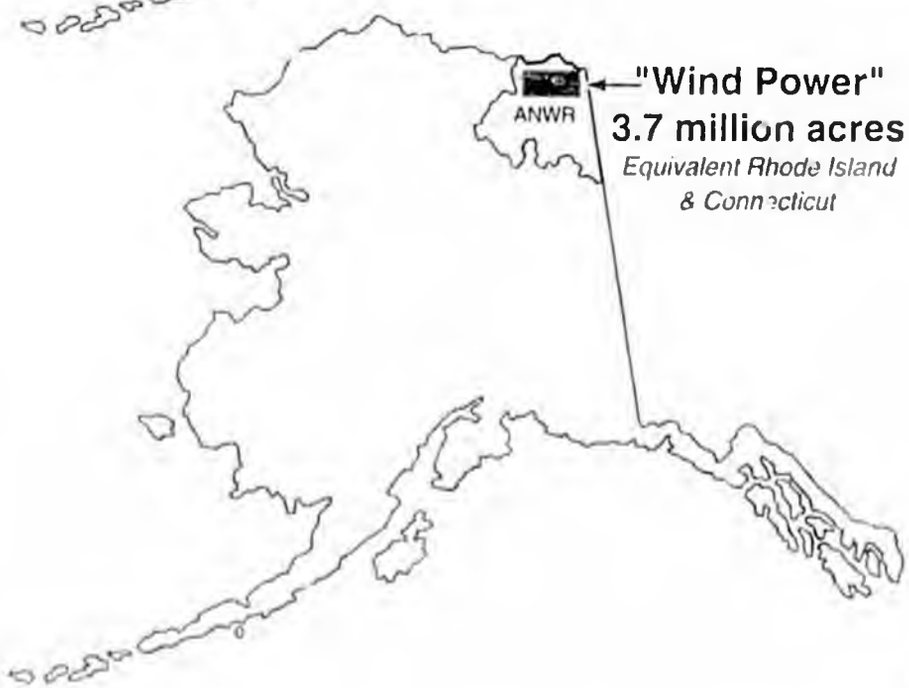


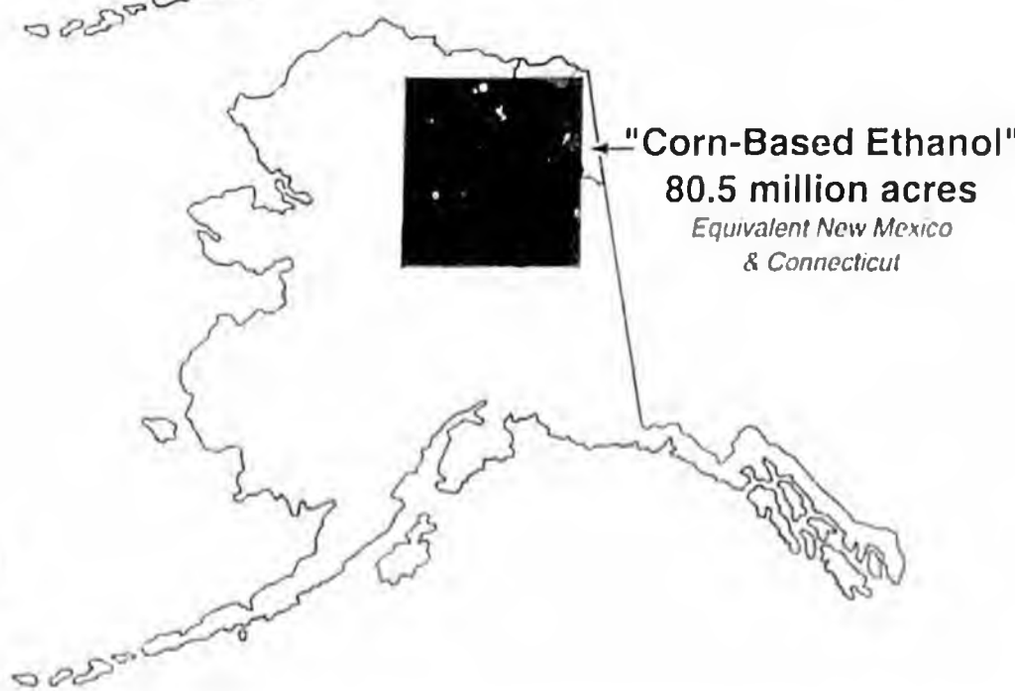
The 1002 Area was specifically set aside by Congress for study of oil and gas exploration. Geologically, the Area has the best onshore potential in North America for a large oil discovery.

The footprint of ANWR oil in comparison to equal amounts of energy.









ANWR Creates Jobs and Revenue for Every State

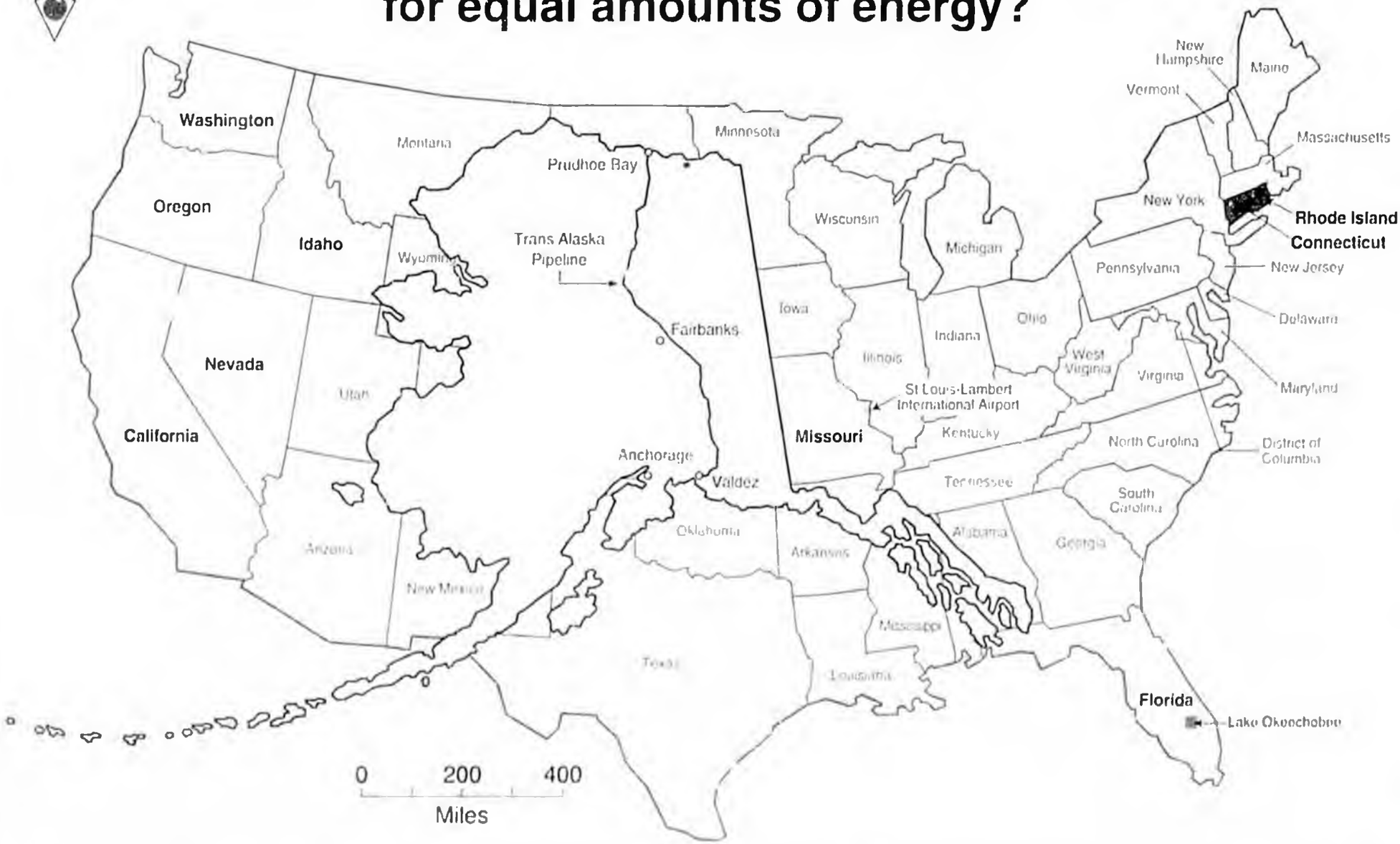
Potential Jobs from ANWR Coastal Plain Development
Money spent in each state so far from Alaskan oil development.

735,000 Jobs
50 Billion Dollars

Jobs Created*
Dollars Spent So Far**

*Potential jobs created by ANWR Coastal Plain development for oil and gas resources as forecast by WEFA.
**Dollar figures of estimated expenditures in America by BP Exploration, ConocoPhillips, and ARCO between 1977 to the present for their Alaskan oil field activities.
This excludes royalties, foreign purchases, and payments that could not be allocated to a single state

How much land are you willing to use for equal amounts of energy?



Corn-Based Ethanol
80.5 million acres

Wind Power
3.7 million acres

Solar Power
448,000 acres

Equivalent Acreage as proposed for the Coastal Plain - 2,000 acres

- **Proposed Development Area on the Coastal Plain**
2,000 acres

Based on the amount of energy produced from 1 million barrels of oil per day

ANWR
INFORMATION BRIEF

Do the caribou really care?

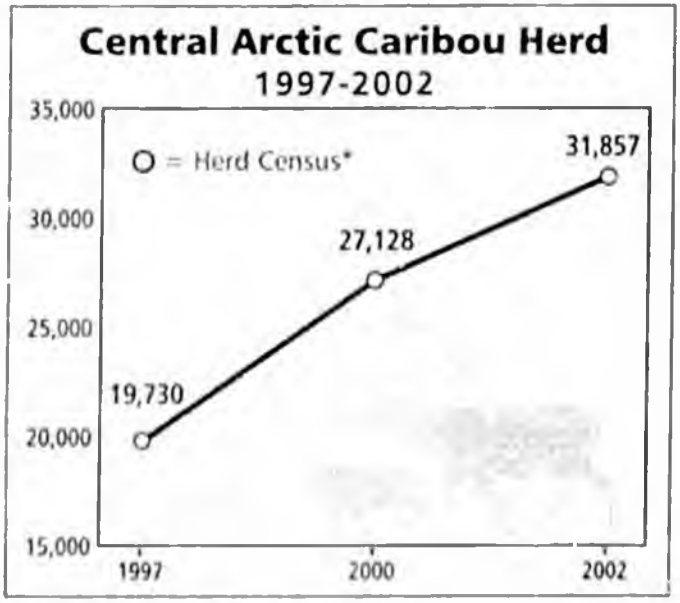
Central Arctic Herd near Prudhoe Bay on Alaska's North Slope.

Are caribou affected by oil development on the North Slope? It would appear not, based on the growing population of herds that use land in the existing oil fields in northern Alaska. The population of the Central Arctic caribou herd, which migrates north each summer into the oil fields near Prudhoe Bay, has been growing about 8.5 percent per year. Alaska Dept. of Fish and Game biologists counted 31,857 caribou in aerial surveys of this herd in July 2002. In July 2000, fish and game biologists counted 27,128. In 1997, the count was 19,730.

Caribou herd populations rise and fall with natural cycles, but one explanation biologists have for the increasing population of the Central Arctic Herd is good calf production and survival, and high survival of adults.

Pregnant caribou cows in the Central Arctic herd bear their calves on lands within or near operating oil fields. Some calves are born within a few hundred meters of oil field roads.

The Alaska Dept. of Fish and Game findings are backed by the Argonne National Laboratory. Argonne found no evidence that oil development harmed the Central Arctic Herd in the lab's work on the Environmental Impact Statement for an extension of the Trans-Alaska Pipeline System federal right-of-way.

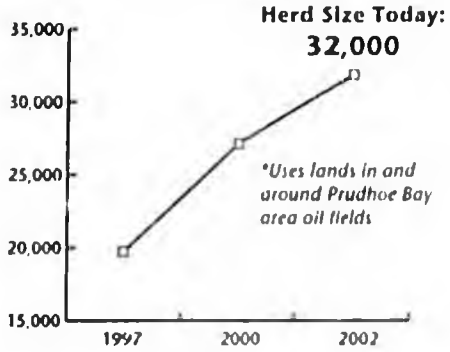


*Most recent survey taken in 2002

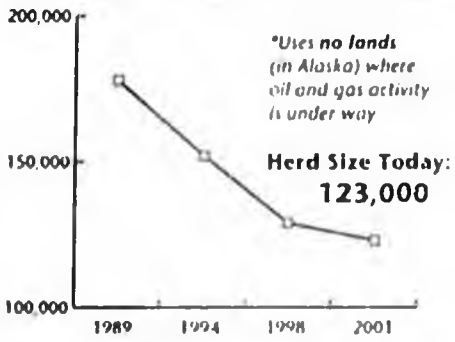
Arctic caribou herds

Caribou herds rise and fall in natural cycles, and it is interesting that while populations have been rising in the Central Arctic Herd (see chart) which use lands in the North Slope oilfields, populations have been declining in the Porcupine Herd (see chart) which do not use lands where there is oil and gas development. The Central Arctic Herd increased to 32,000 animals in 2002, up from 27,000 in 2000. In the most recent survey the Porcupine Herd was estimated at 123,000. It is interesting to note that in 6 out of the last 10 years the Porcupine Herd did not use the ANWR Coastal Plain as their main calving ground.

Central Arctic Herd*

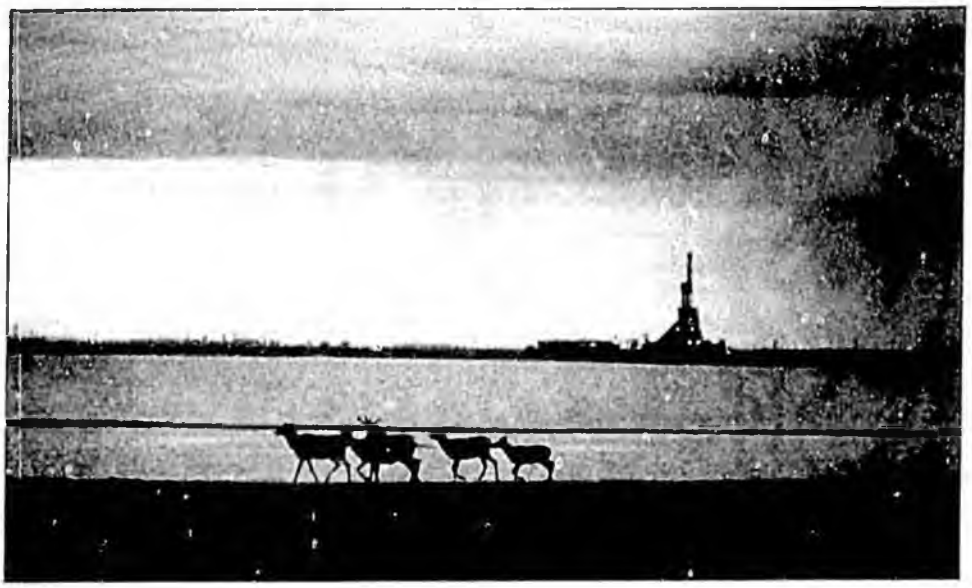


Porcupine Herd*



Central Arctic, Porcupine caribou mingle

There is now evidence that caribou mix between all of the North Slope caribou herds, the Porcupine, Central Arctic and Western Arctic herds. Using analysis of DNA, researchers from the University of Alaska, Texas A&M University and the U.S. Dept. of Agriculture found that caribou in the three herds are genetically related. This reflects migration of animals between the herds over many generations.



The truth on Arctic Caribou

- Caribou use of the 1002 Area of ANWR varies dramatically from year to year. In 1995, 92% of the Porcupine Caribou Herd used this area to calve. In 2000, none did so.
- In some years, the Porcupine Herd calves only in Canada.
- Choice of calving area depends on snow melt and early growth of forage plants.
- Caribou live a boom and bust cycle, due to predation, weather, and overhunting.
- During the summer, caribou frequently use oil field roads and gravel pads as insect relief habitat: they stand on the elevated gravel pads because fewer mosquitoes and flies harass them there.
- North slope oil facilities are specifically designed to allow caribou migration with elevated pipes to allow caribou to freely walk underneath and limited use of service roads.
- With 30 years of contact with oil development to go by, the industry has shown that caribou and oil fields can successfully co-exist. The Central Arctic Herd, which calves in the vicinity of the Prudhoe Bay, Kuparuk, and Milne Point oil fields, has increased 900% from an estimated 3,000 animals in the early 1970s to 32,000 in 2002.

ANWR Facts:

- Refuge totals 19.6 million acres.
- 8 million acres is classified as designated Wilderness;
- Coastal Plain, 1.5 million acres, set aside by Congress for study of oil potential;
- Only a small percentage, .01%, of Coastal plain, about 2,000 acres, would be allowed to be used for oil development.

The coastal plain is not a pristine wilderness:

- About 40 guide outfits offer hunting and recreation services in the coastal plain; A community, Kaktovik, exists in the Coastal Plain; Military installations operate on the Plain now and in the past.

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PHOTO Courtesy ALYESKA PIPELINE SERVICE CO. /DAVID PREDEGER

ANWR could create 736,000 jobs

Development of oil reserves in the Coastal Plain of the Arctic National Wildlife Refuge could create as many as 736,000 new U.S. jobs, according to an economic analysis by Wharton Econometrics Forecasting Associates. (WEFA)

Supplying equipment and services needed to develop the expected oil discoveries on ANWR's coastal plain means jobs for workers in every single US state. Geologists think ANWR's coastal plain has the best potential of any unexplored U.S. region for major new oil discoveries, on the scale of the Prudhoe Bay oil field, also on Alaska's North Slope.

Where the jobs are:

WEFA calculates the breakdown of types of employment

Category	Jobs
Manufacturing	128,000
Mining (incl. oil)	84,000
Trade	225,000
Services	145,000
Construction	135,000
FIRE*	19,000
Total	**736,000**

Source: Wharton Econometric Forecasting Associates

An example of potential benefits is seen in the $22.5 billion spent between 1980 and 1994 for construction of production modules for Alaska's existing North Slope oil fields.

Seventy eight percent of this $22.5 billion was spent outside of Alaska. Among the states, California received more than $3.2 billion; Texas received more than $6.8 billion; Washington received $1.7 billion; Minnesota received almost $84 million.

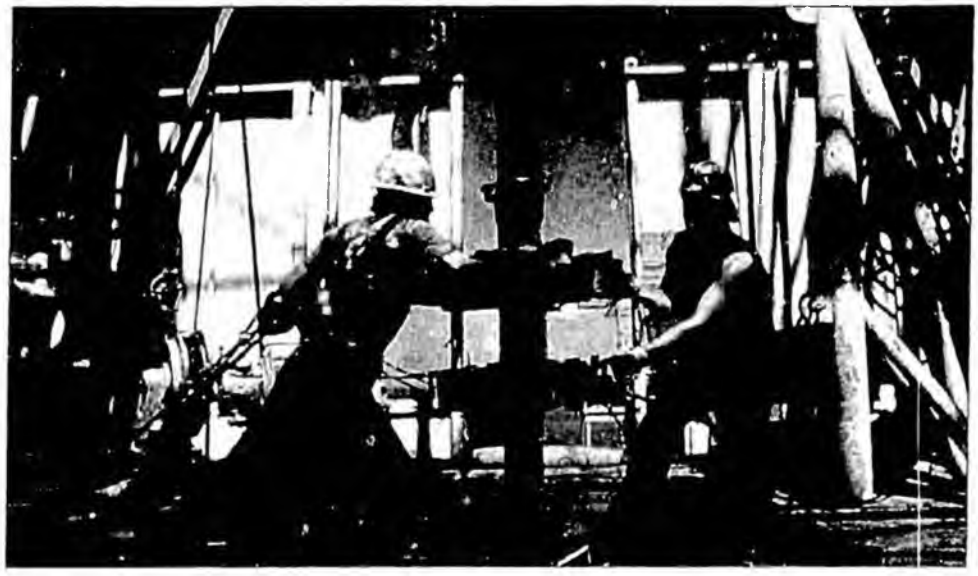
This money was spent for salaries, materials, design, engineering and construction services. To date an estimated $51billion has been spent to develop Alaska's oil ANWR will create more jobs and money that stay in America!

ANWR = jobs and income for America

The employment effect of ANWR is created not only by direct new investment in oil and gas drilling but also the widespread economic stimulus created by a larger domestic US oil supply and fewer barrels of imported oil. The national debt is decreased and the nation has fewer unemployed workers and greater revenues to spend. The mean average estimate of ANWR oil is about 9.25 billion barrels of oil, resulting in new production peaking at about 1.9 million barrels daily. The national macroeconomic effect of this amount of production is an increase in the nation's annual Gross National Product by $26 billion (based on the current world average price of oil @$38 a barrel).

Unions and Business support opening ANWR. Over 10,000 vendors have done business with Alaska's North Slope oil industry since operations began. This has affected over 1.5 million jobs nationwide! For this reason the International Brotherhood of Teamsters, the AFL-CIO, the National Association of Counties, the National Grange, and the US Chamber of Commerce actively support responsible oil exploration of ANWR's coastal plain. The Energy Stewardship Alliance with over 90 participating organizations support opening the Coastal Plain of ANWR.

A job kept in America is better than a job sent abroad. A dollar kept in America is better than a dollar spent abroad. ANWR keeps the jobs and money home IN AMERICA!



ANWR Jobs and Investment in America

Since operations started in Prudhoe Bay over $50 billion has been spent on construction and production. Over three-quarters of that $50 billion was spent outside Alaska. Jobs such as manufacturing piping, designing and constructing production modules, building super tankers, ecological field research, oil field maintenance work such as wire-lining and rig camp operations have been created. With future ANWR Coastal Plain development states such as New York, Texas, and California are estimated to benefit with more job creation than Alaska will. That's jobs and incomes that STAY IN AMERICA and don't get exported abroad.

Within 22 months of opening the Coastal Plain of ANWR, lease sales will bring in over $2 billion in revenue to the Native land holders and State Government. This will be followed by 8 years of design manufacturing and construction of components for the new fields coming from businesses in all 50 states. That means solid full time jobs and income for hundreds of thousands of people across America. Once the field is in operation, oil tax revenue will flow to the State and Federal government and steady incomes to thousands who work to continue maintaining field operations.

All of this revenue, income and work stays in America!

ANWR Facts:

- Refuge totals 19.6 million acres.
- 8 million acres designated Wilderness;
- Coastal Plain, 1.5 million acres, set aside by Congress for study of oil potential;
- Only 2,000 acres, .01%, of the Coastal Plain could be used for oil development.

The coastal plain is not a pristine wilderness:

- A community, Kaktovik, exists in the Coastal Plain; Military installations operate on the Plain now and in the past.

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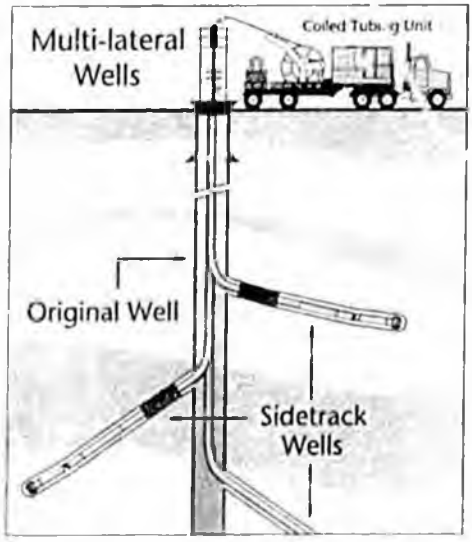


Multi-lateral oil wells

An exciting new technology pioneered on the North Slope involves "multi-lateral" wells, or several new wells drilled underground from the vertical hole of a single well. This conserves resources used on the surface, since one pad and pipeline could serve many underground wells instead of just one.

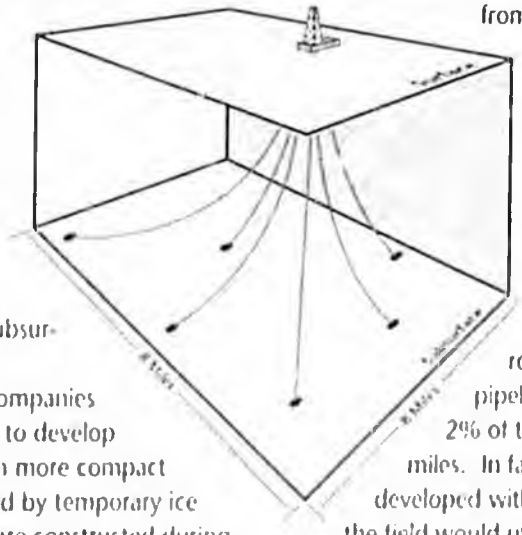
3-D seismic

New seismic technologies, aided by the powerful computers available today, more precisely and efficiently pinpoint promising oil and gas prospects. "Three-dimensional" seismology, is a new technique, involving conducting geophysical seismic surveys on a grid rather than in parallel "two dimensional" lines. The increased efficiency from 3D maps allows seismic crews to spend less time on the ground, and to more precisely pinpoint oil deposits. The result is that fewer exploration wells have to be drilled.

Using 3D technology will allow scientists to create more accurate maps to access the great oil and gas potential locked up beneath ANWR.

Technology allows industry to lessen "footprint" on land.

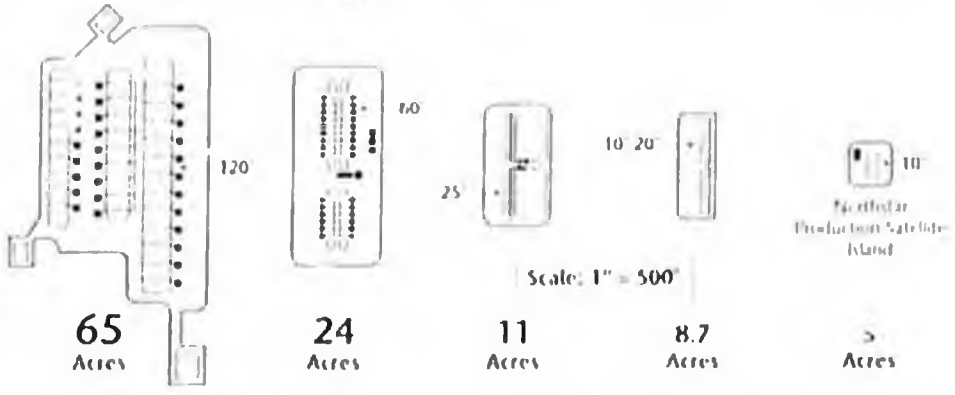
Industry now has technology to reduce the amount of land impacted by new oil development. North Slope drillers can now drill directional wells that reach out eight miles from the surface location of the rig. That means one production pad on the surface can access 216 square miles of subsurface.



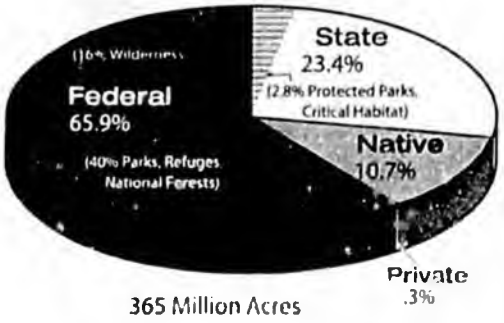
Alaskan oil companies have also learned to develop satellite fields with more compact facilities connected by temporary ice roads. Ice roads are constructed during the long winter, equipment is moved, and in the spring the roads melt away with minimal impact to the tundra. The reducing industry footprint on land is most noticeable with the reduction of drill pad sizes. The best example of drill pad size reduction is the Northstar offshore oil field west of ANWR which is being produced from only one five acre island.

Future oil development to be used in ANWR will continue the trend toward smaller satellite micro pads. It is interesting to note that in the giant Prudhoe Bay field all roads, drill pads, and pipeline routes take up only 2% of the field's 250 square miles. In fact, if Prudhoe Bay were developed with today's technologies, the field would utilize an area of land 64% smaller. Any ANWR development will be limited to 2,000 acres and yet it is expected that only 1,600 acres will be used due to compact modern oil technologies.

The Evolution of a Drillsite: 1970 to Present

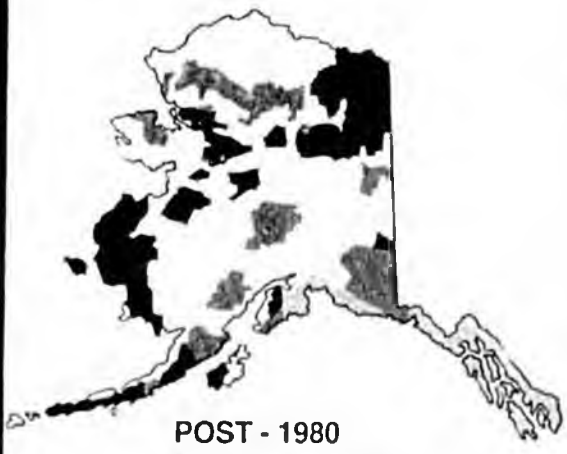


EXPLORATION



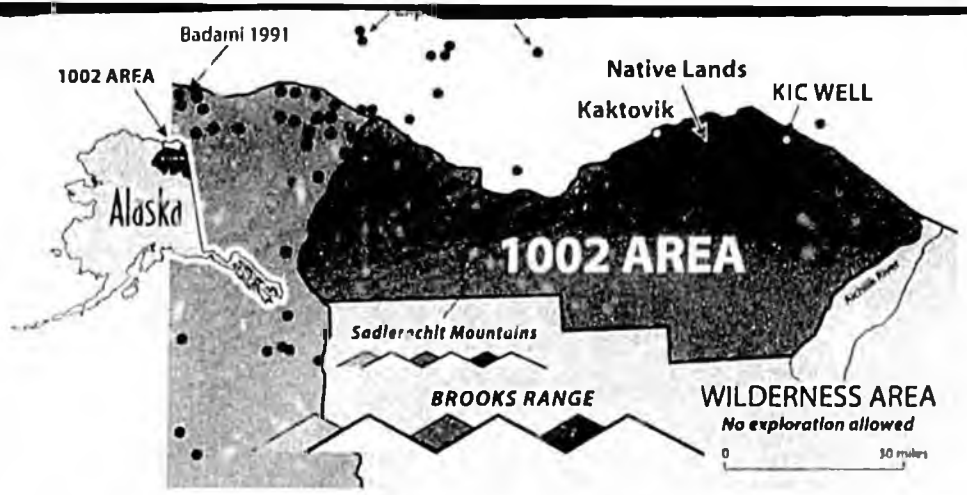
365 Million Acres

Half of Alaska's lands are protected. 58 million acres have been given formal wilderness designation, a restriction that prevents any development and virtually all human use.



Alaska's Parkland Overkill

The federal government currently owns about 235 million of Alaska's 365 million acres, about 65% of the state. That's bigger than the entire state of Texas. It's larger than Washington, Oregon and California combined. 58 million of these acres are designated as official wilderness, which accounts for 56% of the nation's total. About 40% of Alaska's land is in some sort of protected status, including wilderness land. Alaska has the largest state park system in the country. The notion that Alaska is somehow short on wild places is simply wrong. If Alaska's wilderness lands were made into a state it would be the 11th largest in the nation.



You can't find oil where there is none. "1002" is where the oil's at!

"Section 1002" of The Alaska National Interest Lands Conservation Act (ANILCA) passed by Congress in 1980, **specifically sets aside 1.5 million acres of the northern tier of ANWR for investigation of its oil and gas potential.** This 1.5 million acres, or the "1002 area", was chosen because it contains significant geologic evidence for major oil and gas deposits. Indeed, extensive USGS geologic studies on the area in 1998 confirm this assumption. The high potential 1002 area is well constrained geographically and geologically. The southern boundary of the 1002 area is the northern edge of the Sadlerochit Mountains, part of the vast Brooks Range which stretches across northern Alaska. Because of the heat and pressure generated in creating these rocks, the mountainous regions to the South are not prospective for oil or gas.

The 1.5 million acre 1002 area is the only part of ANWR that has any oil and gas potential.

ANWR Coastal Plain Oil =

>60% recovery rates not 37%
>$40 per barrel not $25
18 billion barrels, not 10 billion.

The 1998 USGS report on the ANWR Coastal Plain oil resources estimated between 6 to 16 billion barrels of oil with a mean average of 10 billion barrels. The report is based on two premises:

A technical recovery rate of only 37%

an economic recovery rate based on a $25 barrel of oil.

Today Arctic oil field technical recovery rates now exceed 60%. Using this figure for the amount of technically recoverable oil changes the average mean to...

18 BILLION BARRELS.

At current (>$40 per barrel), and reasonably forecast oil prices, ALL of this potential 18 billion barrels are economically recoverable.

Actual picture of ANWR Coastal Plain. Development restricted to 2,000 acres; less than .01% of ANWR.

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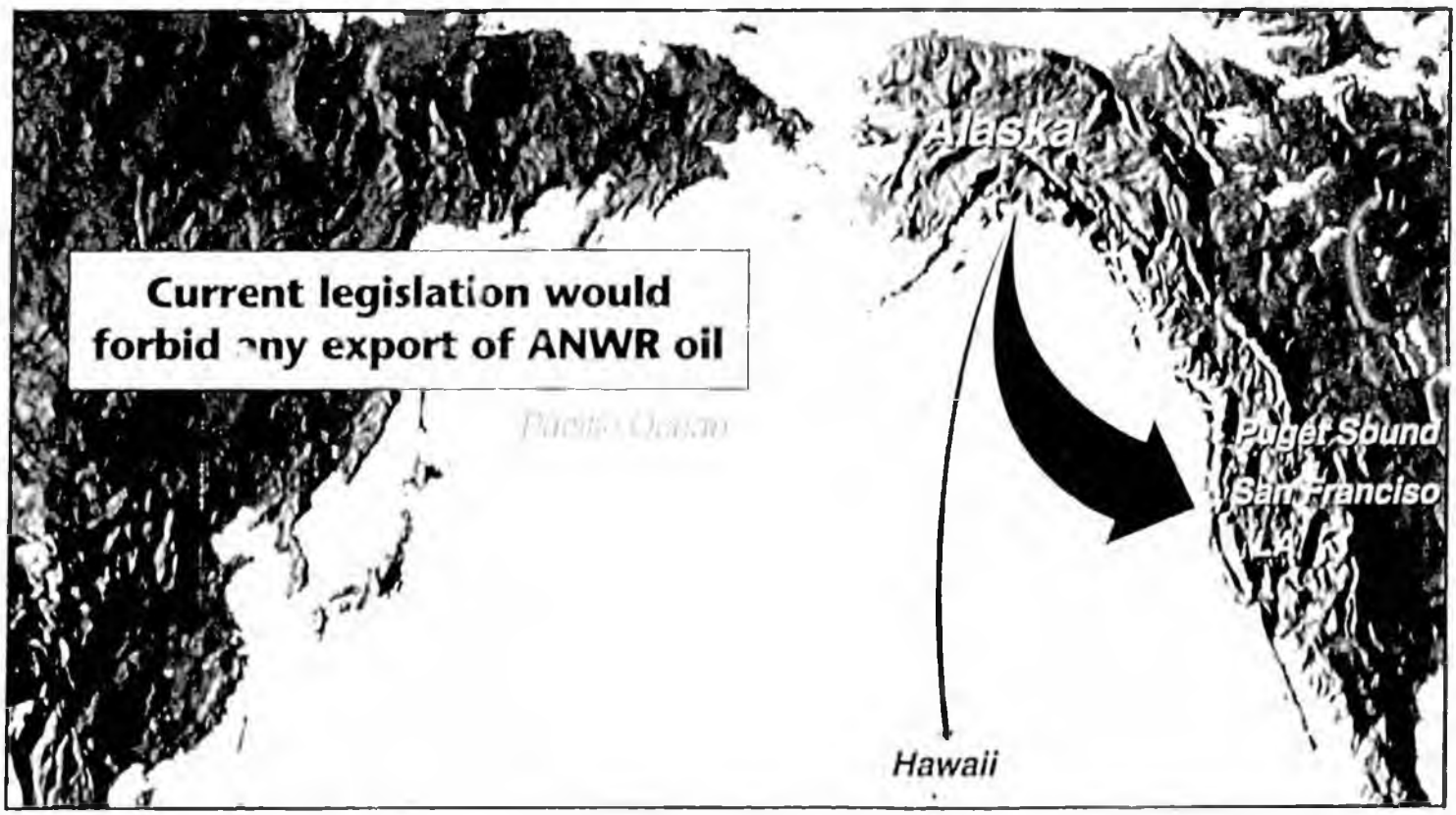
ALASKAN OIL POWERS AMERICA
ALASKA EXPORTS NO OIL ABROAD

The Facts: 100% of Alaskan oil is kept in America. This has been the case for all but 4 years of the nearly 3 decades of Alaskan oil production. Between 1996-1999 up to 5.5% of North Slope oil could be exported to Asian countries These exports were overwhelmingly supported by the US Congress and by the Clinton Administration to offset an oil glut in California at the time. In June 2000 Alaskan oil again ceased to be exported, and 100% of Alaskan production has stayed in America.

The jobs, the revenue, and the oil from Alaska's North Slope Production ALL STAY IN AMERICA.

Here is the breakdown of where Alaskan oil goes: 50% goes to California refineries near San Francisco and Los Angeles; 42% goes to Puget Sound refineries; and 8% goes to Hawaii. A fractional amount stays in Alaska. Today Alaskan oil provides America with 16% of its domestic oil needs. To put that in perspective, the 1973 oil crisis was caused by only a 3% drop in supply. ***At peak production Alaskan oil supplied America with 25% of its needs and with the opening of a small portion of the Coastal Plain of ANWR it could do so again.*** That's a big decrease in reliance of imports from abroad. America needs Alaskan oil. Opening the Coastal Plain of ANWR to oil exploration will ensure that America gets Alaskan oil.



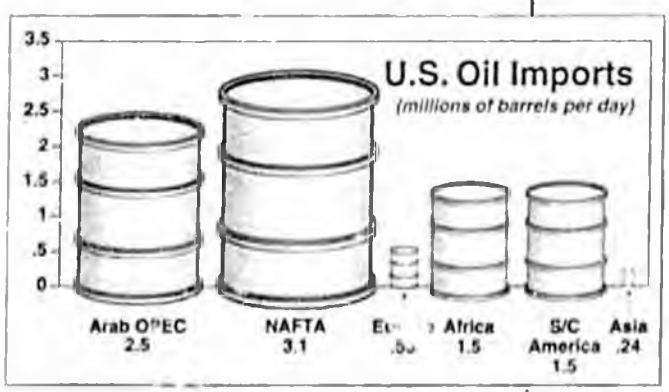
ANWR and the balance of trade

Exploration and development of oil and gas reserves of the Coastal Plain of the Arctic National Wildlife Refuge enhances the economy in other ways than job-creation.

Imports of crude oil and refined products now cost the nation over $150 billion annually and is the largest single commodity in the U.S. Balance of Trade deficit with other nations, according to the U.S. Department of Commerce. New domestic U.S. production would lessen this deficit caused by crude oil imports.

More imports of oil are needed because domestic U.S. production has been falling in recent years, and the nation's demand for fuels, buoyed by a strong economy, is growing. The older oil fields of the Lower 48 states have been declining for years and it was only the development of large new oil discoveries on Alaska's North Slope that temporarily slowed this decline.

In 1973 the U.S. was dependent on foreign oil for 36 percent of its needs. By 1991 the nation imported 46 percent of its oil needs. **In 2004 the U.S. imported over 58 percent of its oil requirements. Opening ANWR is the most beneficial and secure way for America to check this dependence.**



ANWR = Energy and Economic Independence for America

Where does your oil come from?

The U.S. spends $150 billion annually for imported oil and that doesn't include the costs to defend those resourses.

The real figures are much higher than you think. If you include refined oil products in 2004 the U.S. will directly spend over $170 billion on imported petroleum!* That's $170 billion out the door. Just think of how many jobs and services we could have with that money. However the cost is even greater still. Think of the price we are paying in lives of our service men and women to defend our sources of oil. Then think of the cost to maintain that defense. Studies of the actual cost of imported oil and the defense of that oil runs over $100 a barrel and the cost of our oil is really about $1 trillion**. **That makes Alaskan oil to be a $300 billion savings per year to America.** Yet is that anything compared to the lives we lose abroad to defend our foreign oil?

Oil from the Coastal Plain of ANWR could replace 50 years of Saudi Oil and save our economy billions of dollars a year. Think of that next time you fill up at the pump.

Fight back! Open ANWR!

** Energy Information Administration*
***Milton Copulus, Washington Times*

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Inuit children on the North Slope will share the benefits if ANWR's oil is developed.

A lot of us support ANWR development

We're the Inuit people of the North Slope, and despite what you may have been told, a lot of us support responsible oil and gas development in the coastal plain of the Arctic National Wildlife Refuge.

About 6,500 of us live in small communities on the Arctic Slope.

We've watched the petroleum industry operate in the Prudhoe Bay area for more than 30 years, and if the companies discover oil in ANWR's coastal plain, we think they'll develop it with care for the environment.

We hope to be partners with the industry. In fact, Arctic Slope Regional Corporation, our Native regional corporation for the Arctic in which we're all shareholders, owns subsurface rights in 94,000 acres of ANWR's coastal plain. If the rest of the plain is opened our lands can be explored too (federal law prohibits us from developing our lands until Congress approves exploration on the rest of the coastal plain.)

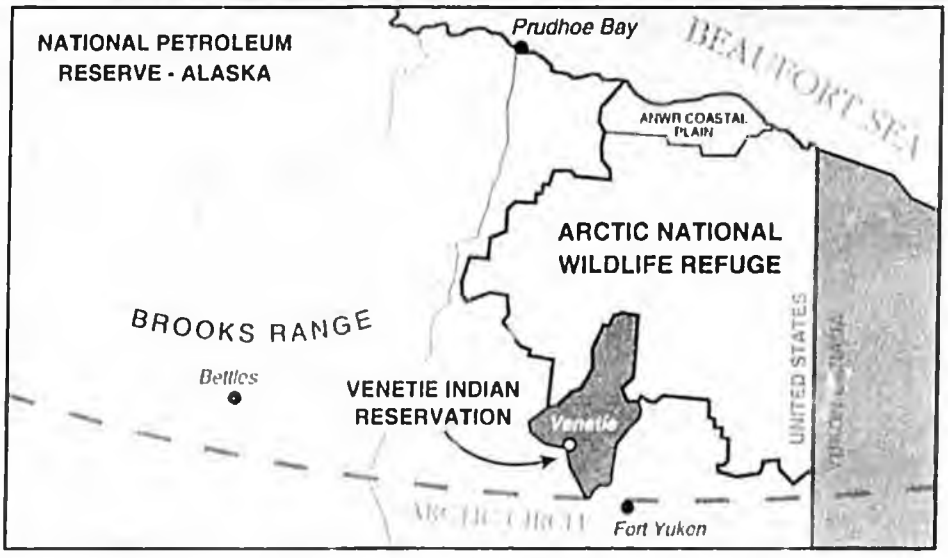
Our neighbors to the south talk sour grapes, however. Gwich'in Indians who live south of ANWR say they oppose development on our lands. But is that because they were unlucky when oil companies didn't find oil on their lands, after they leased them?

The fact is that oil development has brought many benefits to the people of northern Alaska. Living conditions were difficult in our villages before the oil companies came. We didn't have much in the way of schools or basic public services.

But thanks to the industrial tax base created by the oil fields, our local government is able to offer many excellent public services. Thanks to oil development on the North Slope, we have opportunities we couldn't have dreamed of 30 years ago.

But development of ANWR's coastal plain is important for the country, not just for us. America is going to need that oil, sooner than we think.

So don't let some people claim to speak for all Alaska Natives. If you want to know our opinions, come and ask us. We want ANWR developed responsibly, and we know it can be.



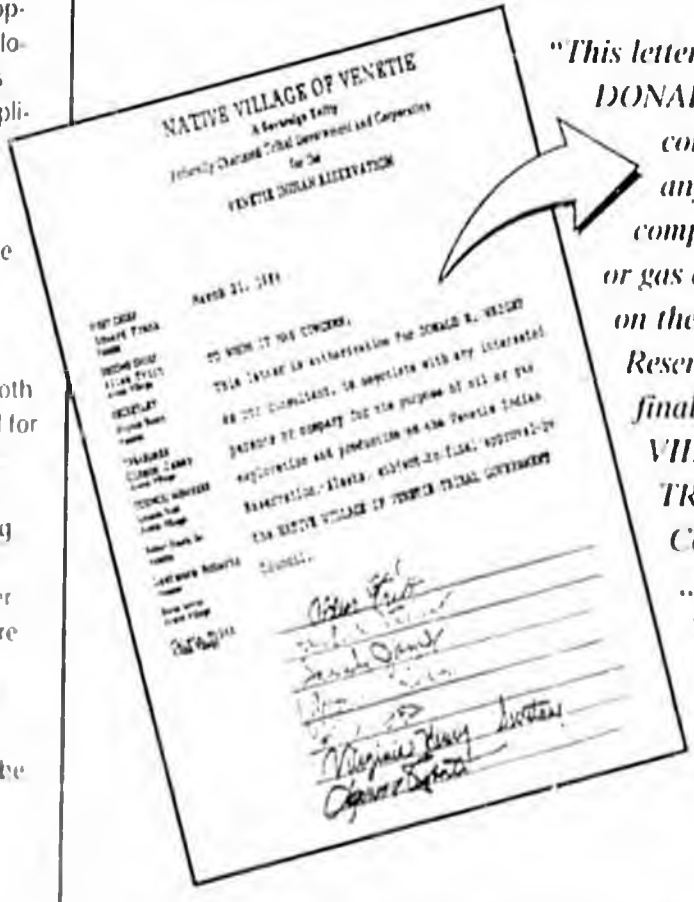
"The Borough supports the lifting of all restrictions on energy and other economic development of North Slope lands owned by the Arctic Slope Regional Corporations and village corporations, especially the 92,160 acres near our village of Kaktovik. We are puzzled by a federal policy that closes our land off to development while opening our seas to oil exploration and drilling. Depriving us of this development threatens to make us supplicants once again, begging for federal largesse to provide our people with the basic amenities taken for granted by a majority of the peoples of the rest of the country...

...Development of the Plains of ANWR is a sensible, viable solution to both the nation's energy needs and our need for continued jobs to protect our economic base. We feel this is an achievable goal with the North Slope Borough exercising its regulatory, permitting and zoning authority to advance development under strong environmental safeguards. We are not asking for the impossible or the improbable. We are only asking for the ability to use our land to provide for our residents. The result of our success will be of benefit not only to us but to all Americans."

Mayor George Ahmaogak Sr.
North Slope Borough

The biggest antagonists to safe, environmentally responsible development of the ANWR Arctic Coastal Plain have been the Gwich'in Indians of the Yukon Basin. They live over 150 miles away from the Arctic Coastal Plain, and yet wish to control oil drilling on land that is not theirs. Yet did you know that the Gwich'in leased their own land to oil companies 3 times. Only after unsuccessful attempts to find oil did they turn to try and prevent their neighbors from doing the same. The Mayor of the entire North Slope of Alaska calls this *"SOUR GRAPES"*.

The Venetie Tribal Gov. offered 1,799,927 acres for Oil and Gas lease.


NATIVE VILLAGE OF VENETIE

"This letter is authorization for DONALD R. WRIGHT as our consultant, to negotiate with any interested persons or company for the purpose of oil or gas exploration and production on the Venetie Indian Reservation, Alaska; subject to final approval by the NATIVE VILLAGE OF VENETIE TRIBAL GOVERNMENT Council...

...The Native Village of Venetie Tribal Government hereby gives formal notice of intention to offer lands for competitive oil and gas lease."

Unlike the Inuit, the Gwich'in included little provision for protection of the environment or caribou in their leases.

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Arctic Power is a non profit grassroots coalition of citizens, organizations and businesses from Alaska and across the nation advocating jobs and energy for America through responsible development of the resources of Alaska's coastal plain.

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