



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

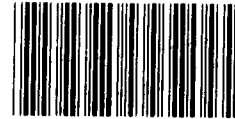
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B-199993

AUGUST 29, 1980

✓ The Honorable Henry M. Jackson
Chairman, Committee on Energy
and Natural Resources
United States Senate

SEN 06300



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✓ The Honorable Morris K. Udall
Chairman, Committee on Interior
and Insular Affairs
House of Representatives

HB 01900

Subject: Oil and Gas Exploration of the National
Petroleum Reserve in Alaska (EMD-80-111)

This report discusses the reasons why we believe a leasing program is the best approach to developing potential oil and gas resources in the National Petroleum Reserve in Alaska (NPR) and why we would encourage the Congress' early action on proposed legislation to accomplish this.

On December 5, 1978, the General Accounting Office issued a report to the Secretary of the Interior on the Department's federally-sponsored program for exploring NPR. Our basic concern was that exploration activity might be brought to a conclusion and a decision made on the future use of NPR without a true assessment of its oil and gas potential. Thus we urged that the Department of the Interior develop an overall plan for the Congress setting forth the status of the exploration program and its best estimate of the amount of additional exploration--along with time and cost--required to complete an assessment of oil and gas potential which would be sufficiently reliable for the Congress to use in deciding how to proceed on the program.

In addition, because of the high costs of federally-sponsored exploration and other management problems, our report suggested that, as an alternative, consideration be given to leasing out the Reserve for exploration by private industry. At the time of our report, the response to such an approach was mixed, but--more recently--both the Congress and the Administration have been receptive to the idea. However, several bills to do this are held up in congressional committees or have become overshadowed by the Alaskan lands bill. We feel early action and therefore early leasing could save Federal dollars and also possibly make more domestic oil and gas available sooner, thus helping to reduce this Nation's dependence on imports.

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RESOURCE POTENTIAL STILL UNKNOWN

The United States is not now producing nearly enough oil and gas from domestic sources to meet its own consumption, and our output is progressively slipping. Yet the potential exists to do better, if the Nation should choose to do so.

{ NPRA is a prime example of a frontier area that has potential for a major oil/gas discovery--yet, because of limited exploration activity, no one really knows the extent of its potential. The Reserve encompasses an area of about 37,000 square miles--larger than 12 States--and is located on Alaska's North Slope west of Prudhoe Bay. It was designated a naval petroleum reserve in 1923 based in part on oil seeping from the ground near the northern coastline. Since then, estimates of hydrocarbons in place have ranged up to 100 billion barrels, and even to "another Kuwait." [A recent assessment by Interior, however, indicates that estimated petroleum resources may only range from 550 million to 15.8 billion barrels, and gas resources from 2.5 to 27.4 trillion cubic feet.]

Exploration of NPRA was under the jurisdiction of the Navy until June 1977. Between 1944 and 1953, 36 test wells were drilled in and adjacent to the Reserve, resulting in the discovery of one oil field, one gas field, three other possible gas fields, and two minor oil deposits. Most of these early test wells, however, were not considered deep enough to be of any significant value in assessing the Reserve's potential. This program was "recessed" in March 1953 without discovery of petroleum reserves deemed large enough to justify the high cost of arctic development and transportation, although gas wells in the Barrow area provide fuel for local use. Between 1953 and 1975, seven shallow gas wells were drilled in the South Barrow field, and one was drilled southeast of Barrow.

In 1974, the Congress directed the Navy to resume exploration of the Reserve. Navy plans called for drilling 26 wells and conducting over 10,000 line-miles of seismic surveys over a 7-year period, ending with fiscal year 1980.

Through Public Law 94-258, the Congress transferred responsibility for management of NPRA from the Navy to the Department of the Interior. Starting June 1977, the Department was to continue exploration and to notify the Congress of any changes to ongoing (Navy) exploration plans. The United States Geological Survey assumed the Navy's contract for exploration which included the 26-well goal (subsequently reduced to 24) and the related fiscal year 1980 deadline for submitting a report and legislative proposal to the Congress.

Our 1978 report indicated that the program was falling short of its objectives. Detailed seismic data was not available in most areas of NPRA. Certain other tests, deemed advisable to help assure that the best sites were selected for drilling, had not been conducted, due in part to short time deadlines and limited technical staff.

In addition, our report pointed out that Survey officials were of the opinion that 26 wells would not represent an adequate sampling upon which to base a reliable estimate of hydrocarbon potential. Even upon completing the originally planned 26-well program, a drilling density of one well about every one million acres would result--an average of about 1.4 exploratory wells per 1,000 square miles. This compares with six wells per 1,000 square miles in the Overthrust Belt, before the major Pineview discovery.

Costs to the Government for the federally-sponsored exploration program have ranged between \$100 and \$200 million a year since 1977. As of July 1980, 22 of the 24 wells have been completed--only one of which, reportedly, has resulted in the discovery of significant oil or gas. The Congress is currently considering a proposal to drill four additional wells in fiscal year 1981 at an additional cost of approximately \$150 million.

RECENT PROPOSALS TO LEASE NPRA

While additional exploration in NPRA would seem desirable, both the Congress and the Administration are at the crossroads in deciding whether to continue the Government's exploration program or to allow leasing by private oil companies. President Carter, in January 1980, announced plans to open up NPRA to leasing by private oil companies and legislation has recently been introduced in both the Senate and the House to accomplish this.

Despite the less than optimum results from its own exploration program, the Department believes that the potential economic viability of NPRA as a petroleum province is favorable since its analysis indicates a better than 97-percent chance that oil or gas will be commercially produced if all of NPRA is opened to an Outer Continental Shelf-type leasing program for accelerated development. The Department also believes such private leasing can take place with adequate protection afforded to NPRA's delicate environment. }

While legislation to authorize the leasing of NPRA for exploration and development by private industry has been introduced in both houses of the Congress, there are indications that such legislation may not be acted on in the near future. One of the reasons cited is the higher priority given to the Alaskan lands bill which deals with other Federal holdings. Delay in authorizing leasing may spur action to continue a costly and marginally-effective Federal exploration program at costs up to or exceeding \$150 million a year--as an alternative to leaving NPRA in an unexplored and undeveloped state. This is illustrated by the dilemma currently faced by the Congress in authorizing funds for continued Federal exploration in fiscal year 1981. This dilemma may be faced again in the years ahead. Thus early passage of legislation authorizing private leasing would represent an opportunity to keep Federal budget costs down.

RECOMMENDATION

Because of its potential to provide needed domestic oil and gas resources at a critical time to the Nation--and also to help control future Federal costs--we recommend favorable action by your Committee on legislation to authorize the leasing of NPRA to private industry for exploration and development.

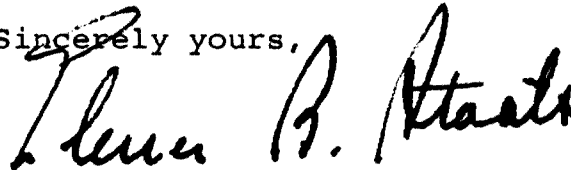
AGENCY COMMENTS

Department of the Interior officials expressed general agreement with a draft of this report, offering several suggestions which we have considered in preparing the final version.

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We are sending copies of this report to the House and Senate Appropriations Committees; other House and Senate committees and subcommittees having energy-related responsibilities; the Secretary of the Interior; the Secretary of Energy; and the Director, Office of Management and Budget.

Sincerely yours,

A handwritten signature in black ink, reading "Thomas B. Staats". The signature is written in a cursive style with a large, prominent initial "T".

Comptroller General
of the United States