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SEC. 1

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STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

A STUDY OF STATE
PETROLEUM LEASING METHODS
AND POSSIBLE ALTERNATIVES

A REPORT TO THE STATE OF ALASKA, JAY S. HAMMOND, GOVERNOR,
DEPARTMENT OF NATURAL RESOURCES, GUY MARTIN, COMMISSIONER,
AND TO THE
ALASKA STATE LEGISLATURE, INTERIM COMMITTEE ON OIL AND
GAS TAXATION AND LEASING POLICY, CHANCY CROFT, CHAIRMAN

FEBRUARY 1977

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER / 11TH FLOOR, STATE OFFICE BLDG.
POUCH M - JUNEAU 99811

February 17, 1977

The Honorable Jay S. Hammond
Governor of Alaska
Pouch A
Juneau, Alaska 99811

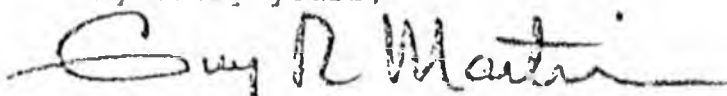
Dear Governor Hammond:

The following report regarding State oil and gas leasing has been prepared by the Department of Natural Resources as a part of a joint Administration-Legislature effort to evaluate the present leasing system and to explore alternatives for the future. The overall study effort, for which I served as Project Director, also includes other Department documents, the reports of independent consultants and miscellaneous other information.

The information in this report, and the entire study, is intended to serve as basic background material to illuminate alternative State objectives and leasing methods which may be desirable for the future. Although some conclusions are reached in parts of the various studies, no final comprehensive conclusions or positions have been reached, pending further analysis of the results of the study project and discussion thereof.

The complexity and importance of the oil and gas leasing issue for the future of the State has thus far sustained an ideal level of constructive cooperation between the Administration and Legislature, and I am hopeful that this report will contribute to an informed outcome on this matter.

Very truly yours,



Guy R. Martin
Commissioner

Acknowledgements

This study was prepared in sections by different people in the Department of Natural Resources. Staff members active in the preparation of the specific sections include:

For the Sensitivity of State Petroleum Income to Various Leasing Methods

Patrick Dobey Blair Wondzell

Beverly Thompson Kristina O'Connor

Karen Gibson Kelly Duncan

Victoria Burgess

For the Variation of Petroleum Leasing Criteria with Geographic Location

Patrick Dobey Victoria Burgess

For the History of Leasing in Alaska

Pedro Denton Pete Nelson

Judy Rhodes Duke Lung

Linda Gardner

For the Staff and Budgeting Needs of Some Leasing Methods Considered

Jack Roderick Ted Fons

Foreword, Statutory, and Administrative

O. K. Gilbreth, Jr.

In addition, Michael Scott of the Institute of Social and Economic Research and Frank McMordie and David Cook of Garrett Computing Services provided invaluable consulting services.

FOREWORD

This report has been prepared in response to Departmental and Legislative interest in the methods and policies of competitive leasing of state lands for oil and gas purposes. A fairly complete history has been compiled showing pertinent information on past practices of the State. Summaries of all lease sales, bonuses, rentals, receipts and results of drilling and royalty awards are discussed. As a result of this report, it can be concluded that some types of bidding will theoretically yield greater income to the State under specific circumstances than other types will. From strictly a monetary point of view, this study reveals that four major factors will determine which method of bidding would be most advisable for the State to follow. The amount of income to be derived by the State will be determined by the level of risk, the size of the reservoir, the cost of exploration and development, and the value of the oil at the wellhead.

This report has revealed some areas that require further study and this will be done in the coming months. For example, the study reveals that with current economic, royalty, and tax conditions, the minimum size field that an oil and gas operator can afford to look for in Alaska must exceed 55 million barrels in close in areas such as Cook Inlet and could be 100 million barrels or more in remote areas. Also since special cases arise from marginal fields, more detail analysis should be made of effects of reducing royalties to encourage production in sub-economic fields.

Since the purpose of this report is to show variations that can result from various types of bidding most of the emphasis is on types of bidding

other than the cash bonus system. It should not be construed however, as condemning cash bonus bidding nor recommending any alternate type of bidding. The analyses are presented merely to show relative income under specific sets of assumed conditions. A change in some of the input factors can give substantial changes in results.

Risk is the most significant of the variables which would affect income to the State. In unknown, undrilled, untested areas, where the information level is low the risk will be extremely high and these analyses indicate that the cash bonus bidding method would yield greater income to the State. As more information becomes available and as the risk decreases, the method which yields the greatest monetary return revolves around some type of royalty bidding. After a discovery is made, any open acreage on the structure in essence becomes drainage acreage, risk will be low and royalty or some other type of bidding may yield a far greater income to the State than the cash bonus type of bidding. Somewhere then between the extremes of no information and maximum information the method yielding the greatest income probably will switch from cash bonus bidding to some other type of bidding. A significant result of this study indicates that state income can be increased for all leasing methods studied by using a percentage acreage option which is withholding a portion of the structure for later leasing. Other types of bidding are discussed to accomplish other purposes.

There are increasing pressures on government to secure more information about state lands and to know more about the possibilities of petroleum occurrences before the lands are leased. These analyses have been made on the assumption that more information will be available to the State

and if those conditions exist we feel that the values shown give reliable indications of benefits to be derived from one method as compared to another method of bidding.

Risk is dependent on the amount of information available to industry and income to the State is dependent on the knowledge industry has in an area. This study assumes that geological and geophysical information is available to the State at a level above that which it now has. Obtaining this additional information will require expenditure of larger sums of money than in the past. The reader is cautioned not to use the values shown as indicative of all conditions, because as mentioned above, significantly different results are obtained as input factors change. The uncertainty of crude oil prices in remote areas could cause input parameters to change significantly with corresponding changes in analysis results. Therefore, the information presented is to compare one method of bidding versus another method of bidding for a specific set of circumstances.

Administrative costs and number of personnel can vary greatly depending on the leasing method used. An ad valorem type of leasing could cost up to \$240,000 more per year to administer where a net profits system might add \$500,000 with the same number of operators and leases as we now have. In Alberta it is pointed out that 100 people administer 50,000 lease agreements and 60 people are involved with auditing in a cost sharing leasing system.

From an administrative cost standpoint, the present method of operation results in the lowest total operating cost at about \$1.1 million per year. Depending on the level of data acquisition and analysis, costs will increase

from the present quarter million dollars per year. To obtain adequate seismic data for managing an area of 100 miles by 15 miles will cost from \$70,000 to over \$1,500,000. The present budget contains \$110,000 for the purpose in FY 78.

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SECTION I - GENERAL

STATUTORY PROVISIONS

Leasing of public lands for oil and gas is carried out under provisions of AS 38. Section 38.05.180(a) states as follows:

"All tide and submerged lands, mental health lands, school lands, and university lands shall be leased by competitive bidding, and whenever oil or gas is discovered in commercial quantities the Commissioner shall determine the extent of the area of lands in addition to the tide, submerged, mental health lands, school, or university lands in the same general area of the discovery well which, by reason of the discovery, the Commissioner reasonably believes to be capable of producing oil or gas, and the additional lands shall be leased to the highest responsible qualified bidder, by competitive bidding under general regulations, in units not exceeding 2,560 acres (except that tide and submerged lands shall be leased in units of not exceeding 5,760 acres), which shall be as nearly compact in form as possible, upon the payment by the lessee of such bonus as may be accepted by the Commissioner and of such royalty as may be fixed in the lease which shall not be less than 12.5% in amount or value of the production removed or sold from the lease. All lands other than those above provided to be leased by competitive bidding may be leased competitively or non-competitively as determined by the Commissioner to be

in the best interest of the State. Non-competitive leases shall be issued in units not exceeding 2,650 acres in any one lease. Non-competitive leases shall be conditioned upon the payment by the lessee of a royalty of 12.5% in amount or value of the production removed or sold from the lease." (Our emphasis added).

Section 38.05.335(c) states, "The Commissioner shall require each bidder for the competitive leasing of oil and gas lands to submit with his bid a deposit of money equal to 20% of the amount bid."

It is therefore apparent that the present statute provides that when oil and gas leases are to be sold competitively they must be sold by cash bonus bidding and a deposit of money is required to accompany the bid. Because 38.05.335(c) provides that a deposit of money equal to 20% of the amount bid, it is not possible to bid by other methods without determining the total monetary value of the bid at the time of bidding. Accordingly, it is not possible to make bids based on any other basis than cash bonus. There is no other provision which will permit disposal or leasing of the lands for oil and gas in any other fashion at this time. In the event it is felt necessary to change the statute to permit leeway for the Commissioner to accept other types of bidding.

ADMINISTRATIVE

At this time all of the responsibility for the management of the leasing program in the State has been delegated to the Division of Minerals and

Energy Management. This division works under the provisions of AS 38 and makes recommendations on mineral leasing policies and procedures. Within the division there is a leasing section and a petroleum section. In the leasing section there is a Minerals Leasing Manager, who supervises the section and seven other employees. The budget for this section approximates \$212,000 per year. It should be pointed out, however, that during past times when the State was active in leasing lands, this section had 13 employees. The decline in leasing activity has necessitated the transfer of five employees to other segments of the Division of Lands, leaving current personnel at eight. With anticipated increases in leasing activity in the future, it will be necessary to replace some of the personnel and enlarge the staff. The current staff is involved in servicing and maintenance of existing oil and gas, coal and mining claims and leases.

In the petroleum section there is a Petroleum Manager, who supervises the section which includes eight other permanent positions. At present we have not been able to fill all professional positions and two temporary employees are assisting in the petroleum work. This section is responsible for analysis and evaluation of oil and gas problems and making recommendations on future policies regarding leasesales. The current budget of this section approximates \$316,000 per year including approximately \$40,000 for acquisition of subsurface data. Request for next fiscal year includes funding of present positions and \$223,000 for acquisition of subsurface data.

PROCEDURES

In the past decision to lease has been based upon interest of the industry and needs of the State. In at least one instance, Governor William Egan

interrupted a lease sale to announce to the audience that the State had received enough money from the bids up to that point to run the State government on through that fiscal year and that there would be no need to have additional lease sales until sometime next year. This is indicative of the interest and need which the State had in leasing its land. To follow through on the lease sale, after it had been decided that one would be held, the Department of Natural Resources solicited nominations from the industry on prospective areas that they would like to see put up in a lease sale. The interest was gaged, based on the nominations of the various companies, and the area to be included in a lease sale was pared down to a manageable area, approximating 200,000 to 300,000 acres.

Various members of the Department concerned with oil and gas matters were advised that consideration was being given to a lease sale and appropriate representatives of Departments of Fish and Game and Environmental Conservation were contacted. After many meetings, basic leasing criteria and stipulations were agreed upon and approximately 60 days before the lease sale, this information was published and made available to the industry along with the area to be included in the lease sale. All lease sales have been held for bonus type bidding. Prior to 1969, a statutory provision included an award for the first discovery on a structure of $7\frac{1}{2}$ percent of all royalties paid for the first ten years of production.

Actual holding of the lease sale has been the responsibility of the Division of Lands and upon receipt of the bids, the Commissioner of Natural Resources with the aid of his staff, has determined if the bids were responsive to the advertisement and if an adequate price was received for the bids considering the information available at that time. The

Commissioner has had available all geological and engineering information on wells drilled in the State up to that time, however he has had very little geophysical information. In most of the lease sales, some bids have been rejected as being too low or non-responsive. Upon acceptance by the Commissioner money has been paid by the successful bidders into the General Fund and the leases executed by the State.

Upon issuance of the lease, the minerals leasing section, has established records and procedures to ensure that rentals are received in a timely fashion and that development occurs according to the terms of the lease. Close liaison is required with the Attorney General's office in interpreting the terms of the lease and in pursuing administrative actions to cancel leases in the event that rentals are not timely paid.

With the formation of the Division of Minerals and Energy Management we anticipate closer scrutiny of the performance of the operators and performance of the properties themselves, if production is obtained. By doing this, we hope to ensure that timely development is carried out and operations will provide the greatest recovery for the benefit of the State.

SEC. 2

OIL AND GAS LEASING HISTORY - ALASKA STATE LANDS

Introduction and BackgroundPurpose

The primary purpose of this report is to trace the history of oil and gas leasing in Alaska with primary emphasis on state lands and the legal, regulatory and practical framework under which it has developed. Special emphasis will be given to the background under which this system has been operated, so that its effect can be better understood.

Background

The history of oil in Alaska goes back to at least 1867 when the first oil claims were staked at Katalla and Yakataga. The first wildcat well was drilled in 1898 near Iniskian on the Alaska Peninsula, closely followed by the first test in the Katalla area, at Controller Bay in 1901. However, it was not until the second Controller Bay well was drilled in 1902, that the first successful oil producer in Alaska was found, a one foot sand at 250 feet. During the next 50 years, activity was sporadic with very little success. Oil wells were drilled in the Katalla-Yakataga area on the Alaska Peninsula and the Upper Cook Inlet Basin, and the North Slope. The North Slope drilling was to explore the Petroleum Reserve which was set aside by Congress in 1923. Only minor finds of oil and gas were discovered in this effort.¹

In the early 1950's, industry interest in Alaska was revived and with the discovery of the Swanson River Field by Richfield Oil Company in 1957, the oil industry in Alaska was established. In 1956, the year before the discovery at Swanson River, there was a little over 2.8

1. Edmondson, Cameron A., A History of Alaskan Oil, Alaska Petroleum and Industrial Directory 1970-71, Pgs. 11-13

million acres under oil and gas lease in Alaska. At the time of Statehood at the end of 1958, the total had grown to 19.5 million acres, and in 1960 almost 35 million acres were under lease.

The Swanson River discovery was just one of the many dramatic events that greatly affected the future of the oil and gas industry in Alaska. With Statehood, the State of Alaska acquired large blocks of land with oil potential and immediately began leasing them. This led to major important discoveries in Upper Cook Inlet, and there was no longer any question that Alaska had a viable oil industry. The State also acquired a large block of land on the Arctic Slope in the mid 60's which it immediately leased. After several years of drilling with very discouraging results, the Prudhoe Bay discovery was made in 1968, an event which attracted attention to Alaska as no other single event since Statehood had done. Closely paralleling in time the State's North Slope activity, was the Alaska Native Land Claims issue and the land withdrawals that the Secretary of the Interior imposed as a result. These withdrawals ultimately and completely shut down federal oil and gas leasing in Alaska. There has been no significant federal uplands leasing since 1966.

Federal Leasing System It is apparent that the origin of the State of Alaska's leasing system is closely tied to federal mineral leasing laws in effect at the time Alaska became a state. There was a deliberate attempt to conform Alaska's laws to federal laws as much as possible. This is apparent in the following quote from a memo from William E. Dyer, of the Division of Lands, to Phil Holdsworth, Commissioner, Department of Natural Resources on May, 5, 1959, regarding early drafts of the oil

and gas regulations:

"In as much as the State's statute is similar to the Federal procedures, we wonder whether or not it is too risky to introduce a program which is different from the Federal. First, state lands and federal lands will lie side by side. Two different systems might result in confusion to the public. Second, the personnel which the State will undoubtedly hire to administer the regulations will be from BLM. Such persons are already familiar with the Federal system. They would not have to be retrained in new methods. Third, the Federal regulations are long and laborious. They are long and laborious because, for one thing, they have over a period of years been developed to block as many loopholes as possible. The State might wish to take advantage of the Federal experience in that regard by using much of the phraseology contained in the Federal regulations. Fourth, there are considerable number of judicial and administrative decisions concerning the Federal regulations. These decisions would be helpful for those charged with the administration of the State regulations provided that the State regulations follow the Federal."

Mr. Dyer further noted, that Senate Bill #77, which is the basic origin of the 1959 Land Act, "might best be termed a little brother to the Federal system". In a paper prepared by Mr. Holdsworth, then the Commissioner of the Department of Natural Resources, and presented at the Fifth Annual Mining, Minerals, and Petroleum Conference, in College, Alaska in 1960, it is equally apparent that the basic State system is similar to the Federal system. The concern for making this system com-

patible with the Federal system can be easily understood when one realizes that many of the areas the State would eventually select under the Statehood Act would be under federal oil and gas leases and the leases, (under the terms of the Statehood Act), would be transferred to the State for administration. Even today, state noncompetitive lease areas are often interspersed with federally issued leases which must be administered under their terms under Federal law.

The comparison of federal and state oil and gas leasing provisions contained in the previously cited paper by Commissioner Holdsworth, Table 1, gives some of the basic provisions of the Federal leasing system in effect in 1960. For practical purposes, it is generally acknowledged that the Federal system, as it was applied in Alaska, was essentially a noncompetitive leasing system. Only two competitive sales have been held, both in the Arctic area with a total revenue of less than \$430,000 dollars. The reason for the lack of competitive activity is that the Mineral Leasing Act only provides for competitive leasing when the lands are in a known geologic structure. Since essentially all the lands in the State were open for leasing at the time of the revival of interest in Alaska in the early 50's, and because terminated leases were immediately released noncompetitively on the structures that have been proven were under lease at the time the known geologic structure was established.

Thus, at the time of statehood, most Alaska lands were available for federal noncompetitive oil and gas leasing, on a first come, first served basis, for a \$10 filing fee and the filing of the first year's rental.

Rental was \$.50 an acre for each lease year. A lease was issued for a five year primary term with the right to one five year extension. Royalty on production was set at 12.5% by law. The basic lease statistics on federal leasing are included in Table 3, and the statistics on revenue are shown in Table 4.

It is easy to understand how leasing flourished in the late 50's and early 60's on federal lands in Alaska as a result of the success of Swanson River and the attention being given Alaska by the major U.S. oil companies. The peak in leasing of 16, 547 leases, totalling nearly 35 million acres was reached in 1960. The 1960 total included leases in the North Slope, Bethel, Yukon Koyukuk, Bristol, Middle Tanana, Copper River, Yukon Kandik, Gulf of Alaska and Cook Inlet Basins. Most of the wells drilled during that year were in the Cook Inlet Basin, primarily on the Kenai Peninsula. However, wells were also spudded in the Katalla - Yakataga area and the Bethel Basin. The previous year, wells had been also drilled in the Nenana area and on the Alaska Peninsula.²

As can be seen from Table 3, federal leasing activity peaked in 1960 and began to drop off at a rate of several million acres per year. This can be explained in part by the widespread activity throughout the State in 1959 and the success of activity on the Kenai Peninsula. This activity had generated an excessive amount of leasing which, coupled with the fact that the initial wildcats in the other basins were unsuccessful, probably account for the major drop in leasing activity. However, a contributing factor may have also been a shift in emphasis to state lands. With Statehood, the State immediately set out with an aggressive

2. History of Drilling in Alaska Between 1953 and 1966, Alaska Petroleum Directory, 1966-67 Edition, Pgs. 97-119.

leasing program, primarily in Upper Cook Inlet Basin, which attracted considerable industry interest at the time.

State Leasing System

Even though the State leasing system is very similar to the Federal system, they have operated in essentially the same environment with drastically different results. As with the Federal system, the State laws have always provided for both a competitive and non competitive system.

The most significant difference in the systems, and the one that has had the most effect on revenue, is the ability of the State to classify lands as competitive. The initial Land Act, Chapter 169, SLA, 1959, provided, "all tide and submerged lands shall be leased by competitive bidding and whenever oil or gas is discovered in any well on Alaska land in commercial quantities the Commissioner shall determine the extent of the area of any lands in addition to tide and submerged lands in the same general area of the discovery which by reason of such discovery, the Commissioner reasonably believes to be capable of producing oil or gas and such additional lands shall be leased by competitive bidding." The Act was amended, Chapter 61, SLA, 1960, to include mental health lands, school lands, and university lands, in the category to be leased by competitive bidding. However, it still limited other uplands to competitive bidding only where the lands were in the vicinity of a commercial discovery, a concept very similar to the known geologic structure concept under the Federal rules. As is evidenced by the following quote, in a letter dated January 3, 1972, from Roscoe E. Bell, Director, Division of Lands, to Jalmar Kerttula, of the Alaska House of

Representatives, the State early recognized the limitations of the Federal system:

If the wording, "whenever oil or gas is discovered in commercial quantities, "were amended to add," or where sufficient geological or geophysical data were available to provide evidence of a favorable geological structure," there would be an opportunity for the State to encourage oil and gas exploration, to shorten the lapsed time between leasing and exploration, and to materially advance the financial well being of the State by leasing competitively areas that now must be leased noncompetitively.

This letter is also a good indicator of the Department thinking on noncompetitive vs. competitive leasing at the time and a copy is included with this report under Table 2. The law was amended in 1964 to the present language which provides that the Commissioner may lease lands competitively when he determines it to be, "in the best interest of the State."

The State was faced with a unique problem. Most people agreed that oil revenue was one of the best hopes of meeting the rising state needs. Even though the State would receive 90% of the Federal revenue from oil and gas leasing, much of the Federal revenue would be delayed because it would come in the form of future royalties. There was no significant bonus or rental monies associated with Federal leasing. With many well known potential petroleum areas throughout the State open to lease on a first come, first served basis, unique measures were necessary to attract

interest from the Federal lands to State lands. The geologic potential of the harsh offshore waters of Cook Inlet offered the most obvious potential to attract immediate development on state lands. Most of the other lands that the State had or could select immediately were under lease and would be tied up for several years in title transfer. The other offshore areas had not yet attracted much attention.

Therefore, they immediately proceeded with the leasing of Upper Cook Inlet under terms to encourage development as soon as possible and at the same time, earn revenue from the leasing. Major factors in accomplishing these objectives were the discovery royalty incentive on large lease tracts, a short lease term (5 years) and a favorable government attitude towards the industry. The first large sale in Cook Inlet, (#7 in 1961) earned nearly 15 million dollars in bonuses, and the second large sale, (#9 in 1962) earned over 15 million dollars in bonuses. As can be seen from the statistics attached to this report, these two sales alone grossed more than federal payments to the State for all of their leasing activity up to that time.

Of more significance than the lease revenue to the State's future economic wellbeing however, was that the industry immediately proceeded to explore and develop the leased areas. This activity resulted in discovery of the Cook Inlet oil and gas fields, which are the source of the present oil and gas royalty income from state lands. Four of the five oil fields in the Cook Inlet Basin, Middle Ground Shoal, Granite Point, Trading Bay, and McArthur River fields were discovered on leases issued at these sales. It was the discovery and development of these fields

along with the Swanson River field that firmly established Alaska as one of the important oil producing areas in the world.

Thus, the State system operating in essentially the same environment was able to produce considerably more royalty and lease revenue in a much shorter time and with less acreage than the Federal system. The statistics included with this report show the results of the two systems. State revenue from leasing alone through 1975, i.e., bonuses and rental, amounts to \$1,066,079,564. Through 1975 nearly \$210,000,000 have been paid in production royalties. This compares to federal receipts from 1959 through 1975 of nearly \$50,000,000 in oil and gas rentals and nearly \$66,000,000 in oil and gas royalty payments.

Description of Present System

Statutory provisions for Alaska oil and gas leasing are contained in AS 38.05 primarily in sections 38.05.130 through 38.05.180. The regulations are contained in Title 11 of the Alaska Administrative Code, under Chapters 82, 83, and 88. Under these provisions a lease may be issued either competitively or noncompetitively.

The regulations, 11 ACU 82.105, provide that all lands not required by law to be leased competitively or not classified competitive by order of the Commissioner are noncompetitive for mineral leasing purposes. Before lands are available for noncompetitive leasing they must be opened by publishing a notice declaring the lands open for lease. A notice of opening must provide a 30 day filing period. During this time any applications that are filed are considered filed simultaneously and the

top priority for the noncompetitive lease is determined by public drawing. Similarly, after lands are leased and the lease terminates the lands are again made available, unless classified competitive, through a 30 day simultaneous filing period with the winner again being determined by public drawing. Any lands that are not leased through both of these procedures become available, after the end of the 30 day filing period.

The statutes (AS 38.05.180) provide that noncompetitive leases will be for a primary term of five years and can be extended for two years if the lands are in a competitive classification at the time of expiration of the primary term or five years if noncompetitive. The statute further provides that the royalty rate shall be 12.5% in amount or value of the production and that the maximum size of the lease shall not exceed 2,560 acres. The lease shall continue until the end of its primary term or its extension and so long thereafter as oil or gas is produced in paying quantities. The annual rental rate is set at \$.50 an acre and is payable in advance or the lease automatically terminates under its terms and conditions.

Noncompetitive lease terms and regulations have remained essentially unchanged since statehood, except for the classification provisions which are discussed later in this report.

The statute requires that all tide and submerged lands, mental health lands, school lands, and university lands be leased competitively. It also provides that any lands which the Commissioner determines are capable of producing oil or gas as the result of a discovery in an area

must be leased competitively. In addition, the Commissioner may classify any lands competitive where he believes it is in the best interest of the State. Competitive leases are issued under the procedures of 11 AAC 82.400. The regulations provide that the method of bidding shall be either by public auction or by sealed bids. It is generally agreed that the provisions of the regulations and AS 38.05.335 require that the high bidder be determined on the basis of the highest cash bonus submitted at the sale.

Competitive leases are issued for a primary term of ten years except in the Cook Inlet sedimentary basin where the law provides that the leases shall be for a primary term of not more than ten years and not less than five years at the discretion of the Commissioner, and continue so long thereafter as oil or gas is produced in paying quantities. The royalty rate may not be less than 12.5% in amount or value of production. The maximum lease size is 2,560 acres for uplands and 5,760 for tide and submerged lands. The statute provides a rental rate of \$1 an acre, which by the terms of the lease and the regulations must be payable in advance. Some of the basic provisions under the competitive system have changed since statehood. These are discussed in detail later in this report.

Both noncompetitive and competitive leases provide that leases will be extended if drilling has commenced on or before the expiration date until the well has been completed and so long thereafter as oil or gas is produced in paying quantities. They both provide that leases proven capable of production may be extended by shutin production. Provisions for unitization and extension of leases included within a unit are also

standard to both procedures. Acreage that may be held at any one time may not exceed 500,000 acres on tide and submerged lands and 500,000 on all other lands. Producing lands in an approved unit agreement and lands operated under an approved drilling or development contract are excluded for acreage limitation purposes.

Land Availability

With the advent of the modern oil and gas industry in Alaska in the early 1950's, almost all lands in Alaska were open to oil and gas leasing except on the North Slope.

The lands on the North Slope had been closed by executive order to mineral leasing for many years. They were not restored until April 18, 1958, when all of the lands except Petroleum Reserve #4 were opened for mineral leasing. The Secretary of Interiors' opening order provided for leasing through a noncompetitive lease offering in a simultaneous filing period. This was done in a series of six offerings by the Federal Bureau of Land Management beginning in 1958 and ending in 1966. A total of 22,300,000 acres were offered with a little over 5,000,000 acres being issued as leases. See Table 12 included with this report.³

The next significant effect on availability of lands for oil and gas leasing was the creation of the Arctic Wildlife Range, totalling about 8.9 million acres and the Clarence Rhodes Wildlife Range, totalling about 3.1 million acres in 1960. Following this was the so called "land freeze". As a result of protests from the Alaska Natives, the Secretary

3. Jones, Daniel A., Oil and Gas Leasing On The North Slope Alaska; Paper presented at Seventh Annual Mining, Mineral and Petroleum Conference, College, Alaska, March 20, 1964. Pg. 6

of the Interior suspended issuance of oil and gas leases in 1966. Applications would be accepted but leases would not be issued. The Secretary continued accepting applications until January 17, 1969, when Public Land Order 4582 was issued withdrawing all Alaska lands from oil and gas lease applications. During the period from 1966 until the "super land freeze" in 1969, oil and gas lease applications were filed on approximately 21 million acres.⁴

The Federal land freeze did not affect state lands except that new lands could not be transferred to the State which might be made available for leasing. In addition to the tide and submerged lands that were acquired with statehood, the State acquired the right to select approximately 103 million acres. It proceeded to select petroleum lands immediately, primarily in the Cook Inlet Basin and along the fringes of the Gulf of Alaska. The North Slope lands were selected in 1964 and 1969. The 1964 block totalled approximately 1.75 million acres and the 1969 block totalled nearly 3 million acres. Most of the lands selected in 1964 were tentatively approved by the Federal government in 1964 and were thus available for leasing. Petroleum lands along the Alaska Peninsula on the Bristol Bay side were also selected in 1969, however, approval of these lands was not received until recently.

The State immediately proceeded with making newly acquired lands available for oil and gas lease, as can be seen from the sale statistics included with this report. Sales were held frequently throughout the State. The apparent policy was to lease acreage wherever significant industry

4. Simasko, Donald L., Native Land Claims and Their Effect on Leasing in Alaska, Paper Presented at 1971 National Institute For Petroleum Landmen, Pgs. 153-191

interest occurred. Most observers agree that this policy continued pretty much until the large Prudhoe Bay sale in 1969. This attracted considerable attention to the importance of leasing as a revenue earner for the State and leasing decisions became increasingly more involved. Since the Prudhoe Bay sale, the only leasing activity has been in the Cook Inlet Basin primarily in areas of previous leasing.

Noncompetitive lands were immediately opened for leasing upon receipt of title to the lands from the federal government. The early opening orders made all lands available for leasing to which the State had received title up to the date of the opening order. Except for procedural changes, this practice continued up until the State noncompetitive activity was discontinued late in 1975.

Competitive Classifications

As previously noted, the statute presently provides that the Commissioner may classify any lands competitive for purposes of oil and gas leasing, when he determines that it is the best interest of the State to do so. Prior to the amendment in 1964, the statute provided only for competitive leasing of certain types of lands and lands in the vicinity of a discovery. The letter from Roscoe E. Bell, then Director of the Division of Lands, to Representative Kertulla, previously cited in this report and included herewith, is a good indicator of the thinking on this point at that time. The first classification order effective January 8, 1963, was for lands primarily in the Beluga area in the Cook Inlet Basin, as a

result of the discovery of the Beluga Gas field. Since that date, there has been a total of 23 classifications. Most of them are in the Cook Inlet Basin. All of the lands selected by the State on the North Slope have been classified as competitive and most of the lands in the Cook Inlet Basin were classified competitive as company interest developed in the areas. The classification problem was somewhat simplified in the Cook Inlet Basin because many of the areas were interspersed with lands which were competitive by law and the classifications were based largely on the desire to provide only one leasing system in the area.

Comparison Between Competitive and Noncompetitive Leasing

As a consequence of the state's policy of classifying lands competitive where significant interest was indicated (see Roscoe Bell's letter to Jalmar Kertulla), comparisons of the activity and revenue generated by the two systems probably have little meaning, except from a historical viewpoint. From a total of 183 exploratory wells drilled on state issued leases, only 12 were drilled on noncompetitive leases. None of the 12 resulted in oil and gas in paying quantities. For a complete breakdown of wells drilled, see Table 10.

Revenue statistics are equally overbalanced. Approximately \$10,392,730 of the total \$37,826,590 rentals through 1975 were received from noncompetitive leasing. In addition, approximately \$2,647,760 have been received in filing fees from applications in simultaneous filing periods. All the bonus and royalty income has been from competitive leases with exception of minor royalty income from transferred federal leases.

In 1972, an area on the Kenai Peninsula which had previously been under

competitive classification was reclassified to noncompetitive. Competitive interest had been low in the area for several years, and even when areas were leased, bonus was not high. One of the highest interest areas when they were opened to application after the reclassification was Township I North, Range 12 West, Seward Meridian. Nine tracts in this township earned from \$1.13 per acre to \$11.00 per acre in filing fees. In comparison, the most recent competitive sales in that township drew bids of high bonus from \$2.00 to \$3.34 per acre.

A similar comparison can be made for areas on the lower Kenai Peninsula, which have always been noncompetitive except for interspersed lands which are competitive by law, i.e., school, university and mental health. Results on Township 3 South, Range 14 West, Seward Meridian, one of the more active filing areas, noncompetitive leasing earned from \$.75 to \$20.00 per acre in filing fees with most recent competitive sales in the township earning from \$3.15 to \$7.67 per acre in bonus.

It is also interesting to note that lands had been available for competitive leasing in both of these townships in previous sales but had not been nominated for lease, or had not been leased after being offered. The failure to lease through the competitive system would be higher in areas of less interest. This offers support to one of the common arguments for noncompetitive leasing that considerable revenue can be earned from lands that would not otherwise be leased.

Discovery Royalty

The original state land act provided for reduction of the royalty rate

to 5 per cent for the entire lease for ten years following the date of the discovery, for the first discovery of oil or gas in commercial quantities in any geologic structure. This provision was deleted from the law in 1969. To date, only 8 leases have been certified for discovery royalty; however, there may eventually be additional certifications since there are still active leases which were issued before the 1969 law change. See Table 9 for a listing of the certifications.

At the time of statehood, the federal law provided a 5% discovery royalty incentive for federal leases in Alaska issued prior to May 3, 1958. Many federal leases, especially in the Cook Inlet basin, were subject to the discovery royalty provision at the time of statehood. Thus, it was necessary for the state leases to carry a similar provision to be comparable. Most observers agree that the discovery royalty incentive in Cook Inlet on large lease tracts was a very significant factor in the early drilling and development of that area. The 10 year period for all of the leases certified in Cook Inlet has now expired. The total difference between actual payments on discovery leases and the 12½% rate amounts to \$8,754,000 for the 5 offshore leases involved. The total would have been much greater except that the first discovery on the Trading Bay structure was on one of the low quantity producing leases on that structure.

The reduced royalty rate for the discovery lease in the Prudhoe Bay field expires on December 31, 1977. Since production is not scheduled to commence until mid 1977, it is apparent that very little discovery benefits will accrue to this lease.

Bidding Methods

All state sales have been by sealed bid with the bidding variable being the highest cash bonus offered for the lease.

The original land act provided that competitive bidding would be "under general regulations" adopted by the commissioner. A statutory provision was adopted in 1966 to specifically "require each bidder for the competitive leasing of oil and gas lands to submit with his bid a deposit of money equal to 20 per cent of the amount bid", AS 38.05.335(c) (emphasis added). Thus, prior to the 1966 statutory change, the regulations controlled the bidding procedure, but after the law change it was apparent that a system very similar to the cash bonus bidding system was dictated.

The original oil and gas leasing regulations provided that the method of bidding be by sealed bids or at public auction by cash bonus, that the lease shall be awarded to the responsible qualified bidder offering the highest cash bonus, and that the bids must be accompanied by cashier's or certified checks, money orders or cash of at least 20% of the amount bid. These regulations were interpreted to only allow a bidding system where the only bidding variable was cash bonus. The regulations remained essentially unchanged in this regard until the 1974 revision, the last revision. The present regulations are much more general in bidding procedures, but the statutory limitations still apply.

The only alternative bidding method the record indicates has been considered is alternate or slide bidding. At a hearing held in Anchorage on June

30, 1969, the department asked for public input on the possibility of using a system similar to the "alternate" or "slide" bid system used in Canada for the 1969 Prudhoe Bay sale. Under the proposal, bidders who were unsuccessful on a tract would have been allowed to "slide" their bid to another tract. This method was explored as a possible method of allowing each bidder to use all his available money for the sale to his best advantage. The theory being that significant bidders might not have enough money to bid as high as they would like on all tracts. With the ability of "sliding" bids to alternate tracts, the possibility of pyramiding money on a few tracts was a possible benefit of the Canadian system. The availability of money did not prove to be as big a factor as originally anticipated. It was felt that the major bidders would be able to secure enough money to make their best bid on the major tracts in which they were interested and that the system would therefore not result in higher bonus revenue. The system was not adopted for this and other problems with the system, such as complicated mechanics of bidding and sale administration, the difficulty of public understanding and the possibility of charges of collusion between the bidders and the state. The oil industry was also almost unanimously opposed to it.

Royalty

Royalty on noncompetitive leases has always been set by law at 12½%. Competitive leases may be issued with higher royalty rates since the statute has always only provided the minimum royalty rate of 12½%. The first sale that utilized a higher rate was sale #28 in the Cook Inlet

basin. The rate used in this sale and in the last sale in this area was 16 2/3%.

Tract Sizes

The original land act provided a maximum tract size of 5760 acres for tide and submerged lands and 640 acres for all other lands. The law was revised in 1964 to increase the maximum size of upland tracts to 2560 acres.

The trend in the early offshore sales was to large tracts. Tract size in sale numbers 7 and 9, the first large Cook Inlet offshore sales, averaged 3760 and 3546 acres, respectively. There were many tracts over 5000 acres in size in these sales. The standard changed soon after this, however, to a four section block concept (about 2560 acres) when existing land patterns would allow.

Minimum Bid

Minimum bids have not been prescribed for any of the lease sales, except that most sales have provided that a bid of less than one dollar per acre will not be considered, primarily for the purpose of preventing nuisance bids. This provision was dropped in the 23rd sale (the 1969 Prudhoe Bay sale) and several insignificant nuisance type bids were received which caused considerable administrative expense, primarily legal, to resolve.

The regulations have always provided that the state may reject all bids on a tract when determined to be in the best interest of the state. Bids have been rejected in five of the sales under this provision. One high bid was rejected in the 8th sale, 8 rejected in the 9th sale, 3 rejected in the 14th sale, 33 rejected in the 21st sale and 15 bids rejected in the 23rd sale.

Conditional Leases

To avoid a long delay in development, the Statehood Act provided that upon receipt of tentative approval from the Federal government, the State could issue conditional leases on the land. There is often a long period between the determination of availability of the lands for state acquisition and the actual issuance of patent, primarily because of the survey problems.

A law was passed in 1960 to provide for extension of a conditional lease for a period equal to the period during which the lease was conditional. Almost all the Prudhoe Bay development was during the conditional period of the leases. The first leases were issued effective early 1965, but the first patents were not received until 1974. Thus, many of the leases in this area were extended for nearly ten years. Because of this development it was apparent that a conditional lease was not a deterrent to exploration and development and the extension provision was deleted from the law in 1969.

Lease Forms

The basic provisions of both of the lease forms have remained essentially the same. There have been several updates to conform to statutory changes and to correct errors. The original competitive lease form, DL1, was adopted late in 1959 and was revised April 1961, October 1963, April 1971, May 1973 and September 1974. The 1961 and 1963 revisions were apparently to correct typographical errors in the original form. The 1971 revision deleted the reference to water use in the granting clause to be consistent with the Water Use Act, AS 46.15; deleted the clause granting a conditional lease extension to be consistent with deletion of the provision from the statute; deleted the discovery royalty clause for the same reason and added a directional drilling clause and an employment clause regarding hire of Alaska residents.

The noncompetitive lease form, DL2, was first used in 1960 and was revised April 1961, May 1962, and May 1966. The changes in the non-competitive form were comparable to the changes in the competitive form.

Environmental Controls

When Alaska started its oil and gas leasing program, there were essentially no controls on oil and gas lease operators, except for controls on actual well drilling practices by the U.S. Geological Survey and under the Alaska Oil and Gas Conservation Commission. An operator could explore and develop on federal and early state leases without any approvals from other state or federal regulatory agencies. Operation on federal wildlife ranges such as the Kenai Moose Range were an exception. Very stringent surface use requirements were applied in these areas. When the state

started leasing offshore, however, as a result of concern by fishermen in Cook Inlet, they realized the need for more controls for tide and submerged land locations. A standard wildlife stipulation was adopted in August 1962 for inclusion in all offshore oil and gas leases. This stipulation required the written approval of the Department of Natural Resources "for the location and type of each structure before it is erected on tide and submerged lands". The stipulation was similar to the one that is presently used in all leases. Since 1968, a similar stipulation has been included in all leases issued, including both competitive and noncompetitive. In 1970, all lessees were ordered to obtain approval in accordance with the standard stipulation, even if the stipulation had not been included at the time the lease was issued. All operators have complied with this order.

There was also no control over seismic operations at the time of statehood. Neither the state or federal governments required permits or provided operating guidelines. except in wildlife ranges and park lands There was considerable public concern expressed in the late 1960's over damage done by seismic and other geophysical operations, and in 1968, the State Senate adopted a joint resolution requesting the department to adopt regulations. The primary concern was over excessive clearing of trails, damage done during trail construction, debris, damage from repeated use of the same trails, particularly in Arctic areas during the summer months, and disturbance and damage to fish and game resources.

Regulations requiring permits for all seismic operations were adopted

late in 1969. Since then, the major concerns have been taken care of by requiring operators to operate only during periods which will prevent or minimize disturbance, utilize existing trails when possible, remove all debris, utilize equipment which will do the least damage in cross country travel, avoid critical fish and game areas and rehabilitate any disturbed areas. In addition, the operators have gone back and cleaned up some of the debris left over from the past operations.

The state regulations are primarily for environmental control and operators are not required to file survey results. They are required, however, to file the location of trails, camps and seismic lines to facilitate field inspection.

Administration

The Minerals Section in the Division of Lands was the agency primarily responsible for the administration of the state's oil and gas leasing program until October 1976. The program received technical support and direction from the Division of Oil and Gas, and, to a lesser extent, the Division of Geological and Geophysical Surveys. Field surveillance support was also provided by the Division of Lands' District offices. The activity was consolidated with all the land owner mineral functions in a new division the Division of Minerals and Energy Management in October 1976.

The original Minerals Section had responsibility for all coal and locatable mineral activities on state lands, in addition to oil and gas.

They reached a peak of 13 employees in 1962, which gradually decreased to the total of 9 authorized positions at the time of consolidation into the Division of Minerals and Energy Management. There are no exact figures on the number of positions involved with the state leasing program in the other divisions, but it probably has not exceeded four, based on the number of positions transferred in the consolidation. In addition, less than two positions have been directly involved in the two mineral active district offices.

The administration of the present system is simple because of a well understood, highly predictable, and to a large extent, self executing legal and policy framework. The past administration of the present system placed considerable dependence on the "market place" to insure a fair return to the state for its oil and gas resources, thereby requiring a minimum of administrative expense and discretion.

TABLE NO. 1
COMPARISON OF FEDERAL AND STATE OIL AND GAS LEASING PROVISIONS*

<u>Provision</u>	<u>Existing Law (Federal Lands)</u>	HR 10455 (Federal lands)	State Law (State Lands)
(1) Maximum allowable acreage under oil and gas leases and options held by any one person or corporation (excluding leased acreage committed to cooperative or unit plan of development).	100,000 acres under lease and 200,000 acres under option	300,000 acres under lease & option, but not more than 200,000 acres under option, in each of 2 leasing districts.	500,000 acres on tide & submerged lands, plus 500,000 acres on uplds., without regard to lease or option status.
(2) Term of noncompetitive oil and gas leases.	5-year primary term with right to one 5-year extension	10-year primary term-no extension	5-year primary term with right to 1 5-year ext.
(3) Extension of lease term if actual drilling is underway at expiration date.	None provided	2-year extension	Extension until 90 days after such drilling has ceased
(4) Annual rental noncompetitive leases	50 cents per acre first year; 2nd and 3rd years waived; 25 cents per acre for 4th and 5th years; 50 cents per acre for 6th thru 10th years	50 cents per acre per year	50 cents per acre per yr.
(5) Royalties - (Minimum royalty of \$1/per acre in lieu of rental after discovery of oil or gas).	<u>Noncompetitive</u> 12½%	<u>Noncompetitive</u> 12½%	<u>Noncompetitive</u> 12½% except that royalty shall be 5% on production from lease containing discovery well on new geologic structure for 10 years following discovery date.
	<u>Competitive</u> Not less than 12½%	<u>Competitive</u> Not less than 12½%	<u>Competitive</u> Not less than 12½%, except that royalty shall be 5% on production from lease containing discovery well on new geologic structure for 10 years following discovery date.

*Taken from a paper presented at the Fifth Annual Mining, Minerals and Petroleum Conference by Phil R. Holdsworth, Commissioner, Dept. of Natural Resources, April, 1960

January 3, 1962

Mr. Jalmar Kerttula
 Alaska House of Representatives
 Star Route
 Palmer, Alaska

Dear Mr. Kerttula:

This is in response to the question raised by you in my office as to what changes in law would be required to give the Commissioner of Natural Resources more authority to declare lands competitive for oil and gas leasing. The law now provides, Section I, Article 8, Chapter 169, SLA 1959, "As hereinafter provided, lands may be withheld from lease application on a first-come, first-served basis, and offered only on a competitive bid basis when determined by the Commissioner to be in the best interests of Alaska." Thus, the Commissioner now has the authority to open the land for competitive bidding, but as provided in Section I, Article 8, (7)a, "All tide and submerged lands, mental health lands, school lands, and university lands shall be leased by competitive bidding----- and whenever oil or gas is discovered in any well in commercial quantities, the Commissioner shall determine the extent of the area of any lands in addition to tide, submerged, mental health lands, school or university lands in the same general area of the discovery well, which by reason of such discovery the Commissioner reasonably believes to be capable of producing oil or gas, and such additional lands shall be leased by competitive bidding."

If the wording, "whenever oil or gas is discovered in commercial quantities," were amended to add, "or where sufficient geological or geophysical data are available to provide evidence of a favorable geological structure," there would be an opportunity for the State to encourage oil and gas exploration, to shorten the lapsed time between leasing and exploration, and to materially advance the financial well being of the State by leasing competitively areas that now must be leased noncompetitively. At the same time it would not eliminate noncompetitive leasing in wildcat areas where geological or geophysical exploration has not been conducted.

Perhaps it would be worthwhile to review what has recently happened in the last noncompetitive area in the Tyonek. Because there were no producing wells in the area, and because the land was acquired under the general grant provision of the law, we could not offer to lease competitively even though intense interest was expressed by oil companies and suggestions were made by some company representatives that they would consider providing the State with geological and geophysical data if the land could be leased competitively.

We offered 82 tracts of approximately 2560 acres each during a 30 day simultaneous filing period. Following are the results of the opening, as compared with what might have been expected under the above legislative language:

<u>As Held Under Present Law and Regulations</u>	<u>Probable - If Legislation Were Amended</u>
Total number of leasing tracts, 82 of 2560 acres each	Approximately 320 of 640 acres each
Number of applications or bids per tract 15 - 703	0 - 10
Number of applications or bids from oil companies 1 - 30	0 - 10
Number of tracts leased noncompetitively to date 80	Probably 220
Number of tracts leased competitively None	Probably 100
Application fees Received \$267,640	\$100,000
Cost of Processing \$ 50,000	\$ 20,000
Rentals, noncompetitive @ 50¢/acre \$ 96,087	\$ 64,087
Rentals, competitive @ \$1.00/acre None	\$ 64,000
Bonus Bids None	\$7,990,000
Total State Revenue \$313,727	\$8,198,087

The bonus bids were estimated at the same average per acre rate as those received from the nearby Tyonek mental health sale, or \$124.85 per acre. It is believed the past experience in the mental health area might be somewhat comparable, although this cannot be verified. At least for discussion purposes it may be assumed that the mental health sale is a fair indication of the value of the land in the nearby noncompetitive area, providing you applied these values to lands considered to be sufficiently valuable by operating companies that they would nominate

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them for competitive bidding and back up the nomination with sufficient geological or geophysical data to convince the Commissioner of their oil and gas potential.

It is a known fact that leases actually have been assigned at three to seven dollars per acre with a three to seven per cent overriding royalty. As long as only three of the 82 leases were drawn by and issued to operating oil companies, it may be assumed that most of the leases will be assigned, in fact, 25 leases totaling 63,026 acres have already been assigned.

It can hardly be said that this so-called "noncompetitive lease open-int" was in any sense actually noncompetitive. The tabulation below demonstrates that it was highly competitive since one to thirty (or an average of twelve) oil companies filed on each tract along with the hundreds of other persons who filed:

<u>Tract #</u>	<u>Oil Com. App.</u>	<u>App. Filed</u>	<u>Tract #</u>	<u>Oil Com. App.</u>	<u>App. Filed</u>
S-13-4-1	7	67	S-13-5-1	19	309
2	8	54	2	20	204
3	7	73	3	10	173
4	8	83	4	16	86
5	11	100	5	8	70
6	10	97	6	7	39
7	9	78	7	6	36
8	7	89	8	10	91
9	9	90	9	18	157
10	11	83	10	24	165
11	10	52	11	25	311
12	6	41	12	25	417
13	7	37	13	21	572
14	3	29	14	20	316
15	4	30	15	24	250
16	5	28	16	21	172
17	3	22	17	15	97
18	5	32	18	8	40
19	4	39	19	2	21
20	2	22	20	3	23
21	5	42	21	7	31
22	4	45	22	9	55
23	12	102	23	16	112
24	16	124	24	23	191
25	16	117	25	27	451
26	17	151	26	27	533
27	16	145	27	30	716
28	11	106	28	24	689
29	8	56	29	26	679
30	2	24	30	26	504
31	2	19	31	19	215
32	1	15	32	15	139
33	5	29	33	8	77
34	7	65	34	4	52
35	16	103	35	4	36
36	15	141	36	2	34
37	20	198	37	3	38

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Tract S-13-5-38	2	63
39	4	64
40	7	83
41	7	150
42	19	273
43	23	586
44	26	632
45	29	703

From suggestions made by industry representatives, and from the number of applications filed by oil companies, it may be fairly assumed that sufficient geophysical or geological information was available to have justified substantial competitive bidding on at least one third of the tracts, if it had been possible for the State to offer selected lands competitively.

It should be noted also that competitive bidding, especially where bids are high, results in immediate action in exploration; witness the road building and drilling which has occurred in the Tyonek during the seven months immediately following the sale. On the other hand, the period immediately following noncompetitive leasing is occupied with negotiation of assignments to put together a large enough "package" (twenty to thirty thousand acres), to justify geological or geophysical exploration prior to drilling. If there were the possibility of self protection by competitive bidding, exploratory work would be carried out prior to leasing so that the company could properly evaluate bidding levels.

Any proposal for extension of competitive leasing will be objected to by some companies and many independents because it represents a change and because the "small man" cannot compete with the large companies in seismic exploration, or in dollars paid at the sale, thus, he must depend upon chance and skillful negotiation to block up acreage.

In strictly noncompetitive wildcat areas noncompetitive leasing and independent activity to "package" acreage may serve to promote exploration and ultimate development, thus, there is much to be said for preserving the noncompetitive system. The limited authority provided to the Commissioner by the above suggested legislative language would result in much land being left open to noncompetitive bidding, and probably would adequately protect the "small man". At the same time, the "undue enrichment" of a few individuals who contribute little or nothing to development could be replaced by substantial additional revenues for the State, without necessarily increasing the cost to the oil companies because, as I have pointed out above, the companies compete to buy individual assignments after a noncompetitive opening. The prices may be substantial on individual tracts - in the last sale amounting to more than \$20,000 per tract. In addition, the landman for the company may have to expend a great amount of time and travel to different parts of the United States to complete the negotiations for a block of land.

Mr. Jalmar Kerrettula

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January 3, 1962

I trust these thoughts will be of value to you. All that I have said above supports your expressed belief that it would be in the State's interest to increase the authority of the Commissioner to classify lands as competitive.

I shall be glad to discuss the subject further when you are in Anchorage. So that Commissioner Holdsworth will know of your interest, I am sending him a copy of this letter.

Very sincerely yours,

Roscoe E. Bell
Director

REB:dfo

cc: Phil R. Holdsworth, Commissioner

*This letter was retyped from a copy for reproduction purposes

TABLE NO. 3*
ALASKA OIL AND GAS LEASE STATISTICS
FEDERAL AND STATE LANDS

FY	NO. LEASES		ACREAGE IN EFFECT		RENTAL		ROYALTY		BONUS	
	FED.	STATE	FEDERAL	STATE	FEDERAL	STATE	FEDERAL	STATE	FED.	STATE
1950	9		19,014		3,680					
51	35		77,805		6,850					
52	139		182,379		22,818					
53	783		1,370,783		317,114					
54	1020		1,832,780		138,485					
55	1696		2,519,846		220,016					
56	1901		2,814,742		468,616					
57	3385		6,516,746		839,278					
58	9191		19,552,999		3,643,748					
59	15,083	77	32,100,429	104,917	5,702,639	84,123			223,795	4,020,342
60	16,547	305	34,908,143	306,419	3,006,228	264,297			206,027	7,885,059
61	13,109	567	26,813,368	1,352,561	3,358,582	493,941	499,165			14,978,818
62	10,655	889	21,188,109	1,608,279	5,412,241	1,113,789	2,478,178			19,850,338
63	7713	1122	15,005,988	1,712,559	5,477,454	1,299,258	3,806,851			3,042,681
64	6186	1534	11,006,461	2,251,613	6,150,363	1,924,237	3,749,559	120,475		5,537,101
65	5496	2151	10,046,833	3,196,401	3,805,992	2,664,554	3,629,330	2,606,398		10,819,817
66	5456	2799	9,777,022	3,546,432	4,760,014	2,888,509	3,789,513	2,654,854		8,655,937
67	4285	3420	7,940,751	3,732,036	4,710,585	3,067,195	3,710,258	2,829,571		21,766,565
68	3943	3784	6,902,966	3,939,602	3,215,878	3,123,346	5,505,108	3,444,597		1,042,220
69	4234	3787	6,909,121	4,328,463	3,256,870	3,454,160	5,765,477	3,161,993		900,041,605
70	3995	3379	6,528,138	4,041,249	3,171,575	3,199,772	5,995,666	2,875,755		455,641
71	3132	3282	5,574,400	3,936,600	2,722,038	3,073,624	6,120,799	3,047,279		
72	2794	3545	5,010,526	4,322,914	2,312,025	3,444,048	5,741,175	2,984,076		4,012,847
73	2443	3473	4,509,978	4,316,816	2,171,032	3,404,169	4,940,573	3,336,761		24,819,190
74	2223	3742	4,314,719	4,853,538	1,947,810	3,711,937	7,915,996	3,605,389		1,040,910
75	1955	3264	3,695,933	4,272,785	908,733	3,365,380	8,591,579	3,424,164		

*Based on data from BIA Public Land Statistics and State of Alaska, Division of Lands', Monthly Mineral's Section Reports

ALASKA OIL AND GAS REVENUE STATISTICS
FEDERAL AND STATE LANDS

Calendar Year	FED. REVENUE: O&G PYMTS.		MINERAL INCOME FROM STATE LAND			
	Rental	Royalty	O&G Rental	Oil Royalty	Gas Royalty	O&G Bonus
1959-64	\$23,383,432	\$11,483,598	\$ 3,855,753	\$ 120,475	\$	\$ 51,578,686
1965	3,425,393	3,266,397	2,606,398	96,233		14,889,797
1966	4,092,165	3,600,774	2,654,854	941,562		7,153,332
1967	3,526,398	4,070,551	2,829,571	3,517,136		20,256,124
1968	2,894,533	4,954,597	3,444,597	14,232,822	241,309	4,045,493
1969	2,931,183	5,188,929	3,161,993	17,395,223	391,048	900,046,372
1970	2,854,418	5,396,099	2,875,755	22,146,497	755,861	
1971	2,449,835	5,508,719	3,047,279	23,730,460	897,074	455,641
1972	2,055,751	4,755,461	2,984,076	24,539,420	961,821	1,620,146
1973	1,857,677	3,784,078	3,336,761	22,013,132	1,053,821	7,313,700
1974	1,756,831	5,951,182	3,605,389	35,193,392	1,235,014	20,891,159
1975	858,031	7,830,937	3,424,164	37,234,774	3,028,140	2,524
Totals	\$52,085,647	\$65,791,322	\$37,826,590	\$201,161,126	\$8,564,088	\$1,028,252,974

*Based on data in Division of Lands' Annual Report, 1975

TABLE NO. 5

COMPETITIVE OIL AND GAS LEASING OF STATE LANDS

Sale No. and Date	Acres Offered	Percent Leased	Acres Leased	\$/Acre	Tracts Offered	Tracts Leased	Bonus Received
1. Dec. 10, 1959	88,055.00	87.66	77,191.00	\$ 52.08	37	31	\$ 4,020,342.43
2. July 13, 1960	17,567.51	93.96	16,505.57	24.70	27	26	407,654.54
3. Dec. 7, 1960	73,047.70	31.30	22,866.70	1.54	26	9	35,325.31
4. Jan. 25, 1961	400.00	100.00	400.00	679.04	3	3	271,614.40
5. May 23, 1961	97,876.00	98.06	95,980.00	74.71	102	99	7,170,464.88
6. Aug. 1, 1961	13,257.00	100.00	13,257.00	8.35	6	6	110,671.55
7. Dec. 19, 1961	255,708.44	73.14	187,025.40	79.47	68	53	14,863,049.33
8. April 24, 1962	1,061.70	100.00	1,061.70	4.81	8	8	5,097.00
9. July 11, 1962	315,668.93	87.77	264,437.13	59.42	89	76	15,714,112.60
10. May 8, 1963	167,583.06	84.43	141,490.51	29.23	200	158	4,136,224.92
11. C A N C E L L E D BECAUSE OF U.S. PROTEST ON YAKUTAT BAY AREA							
12. Dec. 11, 1963	346,782.40	71.25	247,089.00	12.31	308	207	3,042,680.74
13. Dec. 9, 1964	1,194,373.00	60.51	722,659.00	7.66	610	341	5,537,100.94
14. July 14, 1965	754,033.00	53.45	403,000.00	15.25	297	159	6,145,472.59
15. Sept. 28, 1965	403,042.06	74.87	301,751.28	15.49	293	216	4,674,343.74
16. July 19, 1966	184,410.05	72.66	133,987.29	52.55	205	153	7,040,880.17
17. Nov. 22, 1966	19,229.70	96.67	18,589.70	7.33	36	35	136,279.67
18. Jan. 24, 1967	47,729.00	88.82	42,397.00	34.87	23	19	1,478,777.23
19. Mar. 28, 1967	2,560.00	R E J E C T E D 12-9-74					
20. July 25, 1967	311,249.89	82.39	256,447.31	73.14	295	220	18,757,340.88
21. Mar. 26, 1968	346,623.00	47.59	164,961.00	18.24	308	147	3,009,224.00
22. Oct. 29, 1968	111,199.48	54.20	60,272.15	17.29	230	125	1,042,219.90
23. Sept. 10, 1969	450,858.47	91.50	412,548.47	2,181.66	179	164	900,041,605.34
24. May 12, 1971	196,635.07	47.10	92,617.97	4.87	244	106	455,640.57
25. Sept. 26, 1972	325,401.42	54.78	178,244.71	7.43	259	152	1,324,673.40
26. Dec. 11, 1972	399,920.96	44.50	177,972.56	8.75	218	105	1,557,848.84
27. May 9, 1973	308,400.81	36.93	113,891.71	9.93	210	96	1,130,324.51
28. Dec. 13, 1973	166,648.04	58.69	97,803.69	253.77	98	62	24,819,189.91
29. Oct. 23, 1974	278,269.43	50.00	127,119.65	8.19	164	82	1,040,909.98
	<u>6,877,591.12</u>	<u>63.57</u>	<u>4,371,567.50</u>	<u>\$ 235.09</u>	<u>4,544</u>	<u>2,858</u>	<u>\$1,027,969,069.37</u>

STATE COMPETITIVE SALE AREAS

Sale#	Area	Sale#	Area	Sale#	Area
1.	Wide Bay; offsh. Kenai to Ninilchik; Kachemak Bay	11.	Yakutat Bay (Cancelled)	20.	Big Lake; Knik; Iliamna Mt; Beluga; N. Cook Inlet; Kalgin Isld; Ninilchik
2.	Kenai Penin; West Forelands; Nushagak Bay	12.	Below Forelands; Knik & Turnagain Arms; Upper Cook Inlet; Kenai Penin.; Tyonek to Katunu River	21.	Port Heiden & Port Moller
3.	Katalla; Kalifonsky Beach; Herenden Bay; offsh. Kodiak	13.	Fire Island; W. Forelands; Trinity Islds; Prudhoe west	22.	Big Lake; Knik; Beluga; West Forelands; Ninilchik; Kachemak & Kenai
4.	Uplds. Ninilchik	14.	Prudhoe west to Canning River	23.	Colville to Canning River
5.	Tyonek; Controller Bay; Pavlov Bay	15.	Fire Isld & N. Cook Inlet; Kalgin Isld & Redoubt Bay; Knik; So. Kenai Penin.	24.	Big Lake; Knik; Kenai; West Forelands
6.	Controller Bay	16.	Kenai Penin & Knik; Middleton Isld; Fire Isld; Redoubt Bay; Kalgin Isld; Iliamna Mt; No. Cook Inlet	25.	Big Lake; Knik; Beluga; North Cook Inlet
7.	Icy, Yakutat, Kachemak Bays; So. Kenai Penin; No. Cook Inlet	17.	Big Lake; Kenai	26.	Cook Inlet (between Forelands and Turnagain Arm)
8.	Big Lake	18.	Katalla; Prudhoe	27.	Tuxedni; Ninilchik; Kenai; Kalgin
9.	Tyonek; W. Forelands; Knik Arm; Kalgin Isld; Chisik Isld; South Kenai Penin; Wide Bay	19.	Lower Cook Inlet	28.	Ninilchik; Kachemak Bay; Beluga
10.	Tyonek; Kenai offsh. & uplds.			29.	Kalgin & West Forelands; Chisik; Ninilchik; N. Cook Inlet; Turnagain; Big Lake

COOK INLET OFFSHORE - COMPETITIVE LEASE SALES

<u>Sale #</u>	<u>Acres Offered</u>	<u>Acres Leased</u>	<u>% Leased</u>	<u>Bonus Paid</u>	<u>\$/PerAcre</u>
1	31,165.00	25,621.00	82.21	\$ 2,976,542.43	116.18
2	9,497.00	8,435.00	88.82	68,788.79	8.16
3	1,851.70	1,851.70	100.00	10,026.25	5.41
7	203,466.00	146,126.00	71.82	14,411,099.13	98.62
9	310,310.46	264,437.13	83.74	15,626,116.56	59.24
10	81,767.00	75,669.00	92.54	1,058,658.96	14.00
12	268,330.00	184,248.00	68.66	2,623,661.46	14.24
13	184,413.00	149,089.00	84.47	1,055,868.09	7.08
15	386,350.36	287,383.36	74.38	4,581,240.94	15.94
16	119,182.32	76,393.61	64.10	1,241,432.01	16.25
19	2,560.00	2,560.00	100.00	2,585.60	1.01
20	189,256.89	175,836.00	92.85	18,124,003.52	103.13
22	1,342.55	894.85	66.65	6,015.72	6.72
24	326.28	198.58	60.86	617.73	3.11
25	74,999.96	12,979.71	17.00	81,489.22	1.59
26	345,174.26	130,273.03	38.00	1,144,060.16	11.38
27	258,545.29	75,344.91	29.00	747,664.34	9.89
28	149,567.15	80,722.80	53.97	24,819,189.91	306.43
29	275,528.66	123,598.88	44.85	933,934.01	7.00
Total	2,893,633.88	1,897,573.56	65.57	39,512,994.83	47.17

TABLE 5-C

NORTH SLOPE COMPETITIVE LEASE SALES

<u>Sale #</u>	<u>Acres Offered</u>	<u>Acres Leased</u>	<u>% Leased</u>	<u>Bonus Paid</u>	<u>\$/PerAcre</u>
13	624,457.00	466,180.00	74.65	\$ 4,376,523.30	9.39
14	754,033.00	403,000.00	53.44	6,145,472.59	15.25
18	37,662.00	37,662.00	100.00	1,469,645.39	13.11
23	450,858.47	412,548.47	91.50	900,041,605.30	2,181.66
Total	1,867,010.47	1,319,390.47	70.67	\$912,033,246.58	691.25

TABLE 5-D

GULF OF ALASKA COMPETITIVE LEASE SALES

<u>Sale #</u>	<u>Acres Offered</u>	<u>Acres Leased</u>	<u>% Leased</u>	<u>Bonus Paid</u>	<u>\$/PerAcre</u>
3	12,275.00	5,257.00	42.83	\$ 5,777.81	1.10
5	23,508.00	23,508.00	100.00	66,203.88	2.82
6	13,257.00	13,257.00	100.00	110,671.55	7.67
7	50,457.00	39,207.00	77.70	269,390.20	6.87
12	6,635.70	0	0	0	0
16	30,969.00	27,152.00	87.67	4,457,131.30	1.64
18	10,067.00	4,735.00	47.03	9,131.84	1.92
<hr/>					
Total	147,168.70	113,116.00	76.86	\$4,918,306.58	4.35

TABLE 5-E

WIDE BAY AND KODIAK COMPETITIVE LEASE SALES

<u>Sale #</u>	<u>Acres Offered</u>	<u>Acres Leased</u>	<u>% Leased</u>	<u>Bonus Paid</u>	<u>\$/Per Acre</u>
1	56,890.00	51,570.00	90.65	\$1,043,800.00	20.24
9 (Uni.)	678.47	678.47	100.00	87,996.04	129.70
9 (Offsh.)	4,680.00	0	0	0	0
13 (Kodiak)	385,503.00	107,390.00	27.85	104,709.55	97.50
<hr/>					
Total	447,751.47	159,638.47	35.65	\$1,236,505.59	77.46

TABLE 5-F

BRISTOL BAY COMPETITIVE LEASE SALES

<u>Sale #</u>	<u>Acres Offered</u>	<u>Acres Leased</u>	<u>% Leased</u>	<u>Bonus Paid</u>	<u>\$/Per Acre</u>
2	4,341.00	4,341.00	100.00	\$ 11,937.75	27.50
3	58,921.00	15,758.00	26.74	19,521.25	1.24
5	16,093.00	16,093.00	100.00	65,727.62	4.08
21	346,623.00	164,961.00	47.59	3,009,224.00	18.24
<hr/>					
Total	425,978.00	201,153.00	47.22	\$3,106,410.62	15.44

TABLE NO. 6*

COMPETITIVE LEASES & ACREAGE BY YEAR

<u>Year</u>	<u>No. Lses. Iss.</u>	<u>Acreage</u>	<u>Cumulative Acreage</u>
1960	54	88,639	88,639
1961	117	132,388	217,970
1962	61	188,085	367,447
1963	161	143,354	487,530
1964	219	279,092	671,095
1965	699	1,387,351	2,035,648
1966	187	154,498	2,007,064
1967	242	300,764	2,103,709
1968	272	225,306	2,170,626
1969	163	410,025	2,415,783
1970	1	2,523	2,128,070
1971	106	92,616	2,063,396
1972	145	169,365	2,073,691
1973	211	301,714	2,291,295
1974	146	225,709	2,476,388
1975	0	0	2,470,013

*Data compiled from Division of Lands, Mineral's Section Monthly Reports

TABLE NO. 7*

NONCOMPETITIVE SIMULTANEOUS FILINGS BY YEAR

INCLUDING 1ST YEAR RENTAL & FILING FEE REVENUE

<u>Year</u>	<u>No. Aplus.</u>	<u>Filing Fees Received</u>	<u>Acreage Leased</u>	<u>1st Year Rentals</u>
1961	13,333	\$ 267,660	192,174	\$ 96,087
1962	13,966	279,320	462,466	231,233
1963	5,187	103,740	230,539	115,270
1964	1,336	26,720	116,971	58,486
1965	2,448	48,960	205,692	102,846
1966	5,585	111,700	203,880	101,940
1967	18,503	370,060	317,071	158,536
1968	13,162	263,240	334,073	167,037
1969	13,963	279,260	409,217	204,609
1970	5,456	109,120	458,400	229,200
1971	6,973	139,460	287,020	143,510
1972	9,420	188,400	391,477	195,739
1973	8,679	173,580	295,923	147,961
1974	6,531	130,620	233,130	116,565
1975	<u>7,796</u>	<u>155,920</u>	<u>189,301</u>	<u>94,651</u>
Totals	132,388	\$2,647,760	4,327,334	\$2,163,670

*Data compiled from Division of Lands, Mineral's Section Monthly Reports

TABLE NO. 8*¹
 NONCOMPETITIVE ISSUED LEASES AND ACREAGE BY YEAR*²
 INCLUDING CUMULATIVE ACREAGE & RENTAL

<u>Year</u>	<u>#Leases Issued</u>	<u>Acreage Issued</u>	<u>Cumulative Acreage</u>	<u>Cumulative Rental*³</u>
1960	72	51,519	51,519	\$ 25,760
1961	132	229,831	280,891	140,446
1962	248	489,654	748,934	374,467
1963	172	328,054	870,352	435,176
1964	124	125,375	782,399	391,200
1965	210	222,212	747,582	373,791
1966	446	559,383	1,192,871	596,436
1967	481	350,241	1,357,678	678,839
1968	273	341,265	1,559,605	779,803
1969	311	419,700	1,806,513	903,257
1970	306	461,487	1,794,434	897,217
1971	227	287,060	1,653,478	826,739
1972	337	391,477	1,666,241	833,121
1973	237	295,923	1,797,146	898,573
1974	423	764,535	2,373,324	1,186,662
1975	<u>243</u>	<u>395,500</u>	<u>2,102,485</u>	<u>1,051,243</u>
Totals	4242	5,713,216	20,785,452	\$10,392,730

*¹Data compiled from Division of Lands, Mineral's Section Monthly Reports

*²Including Transferred Federal Leases & Offers

*³Calculated at 50¢ per acre

TABLE NO. 9

OIL AND GAS DISCOVERY ROYALTY CERTIFICATIONS

<u>Well Name</u>	<u>ADL#</u>	<u>Acres</u>	<u>Structure</u>	<u>Lessee</u>	<u>Discovery Date</u>
Falls Creek Unit#1	00590	3660	Falls Creek	Socal, etal	5/1/61
MGS #1	17595	5106	MGS	Amoco, etal	7/1/62
Cook Inlet State#1A	17589	5002	Cook Inlet	Amoco, etal	9/1/62
Beluga River Unit#1	17599	5001	Beluga River	Socal, etal	1/1/63
Granite Pt. #1	18761	5089	Granite Point	Mobil	6/1/65
Trading Bay #1A	18731	3840	Trading Bay	Union, etal	6/1/65
Nicolai Creek State #1-A	17598	3023	Stedatna Creek	Texaco, etal	5/1/66
Prudhoe Bay State #1	28303	2560	ARCO, etal	Prudhoe Bay	1/1/68

1 10
EXPLORATORY WELLS STATE LEASES

<u>Lease ADL#</u>	<u>Type*</u>	<u>Well Name</u>	<u>Geographical Area</u>	<u>Discovered Oil/Gas in Paying Quantities</u>
00590	C	Falls Creek Unit 1	Cook Inlet Basin	Yes
00591	"	" " " 2	" " "	No
00592	"	Ninilchik 1	" " "	"
00608	"	Wide Bay Unit 1	Alaska Peninsula	"
01804	"	W. Foreland Unit 2	Cook Inlet Basin	"
03174	"	Chuit State 2	" " "	"
03178	"	" " 1	" " "	"
03193	"	Chuitna River State 1	" " "	"
03197	"	Stedatna Creek 1	" " "	"
03264	"	Three Mile Creek State 1	" " "	"
08878	N	Cottonwood State 1	" " "	"
17786	"	Kustatan River	" " "	"
17579	C	North Redoubt State 1	" " "	Yes
17580	"	State 17580 1	" " "	No
17582	"	SRS State 2	" " "	"
17582	"	SRS State 1	" " "	"
17582	"	Tyonek State 17586 2	" " "	"
17585	"	Nicolai Creek Unit 4	" " "	"
17587	"	Tyonek State 1	" " "	"
17587	"	Tyonek State 17587 2	" " "	"
17588	"	Tyonek State 17588 1	" " "	"
17589	"	Cook Inlet State 17589 1-A	" " "	Yes
17589	"	" " " " 1	" " "	No
17591	"	" " " 17591 1	" " "	"
17594	"	Grayling 1-A	" " "	Yes
17594	"	Grayling 1	" " "	No
17595	"	MGS State 17595 3	" " "	"
17595	"	MGS State 17595 2	" " "	"
17595	"	MGS State 1	" " "	Yes
17596	"	E. Trading Bay State 1	" " "	No
17597	"	Trading Bay State 1	" " "	Yes
17597	"	Trading Bay 2	" " "	No
17598	"	Nicolai Creek State 1	" " "	"
17598	"	" " " 1-A	" " "	Yes
17600	"	Ivan River Unit 23-12	" " "	No

*C=Competitive N=Noncompetitive

<u>Lease ADL#</u>	<u>Type</u>	<u>Well Name</u>	<u>Geographical Area</u>	<u>Discovered Oil/Gas in Paying Quantities</u>
17601	C	W. Foreland Unit 1	Cook Inlet Basin	No
17612	"	Coal Bay State 1	" " "	"
17797	N	Johnson Slough 1	" " "	"
17802	N	Bachatna Creek Unit 7	" " "	"
18716	C	Foreland Channel State 1-A	" " "	"
18716	"	" " " 1	" " "	"
18719	"	Oldman's Bay Street	" " "	"
18729	"	Kustatan 1-A	" " "	Yes
18729	"	" 1	" " "	No
18731	"	W. Trading Bay State 1	" " "	"
18731	"	Trading Bay 3	" " "	"
18731	"	" " 1-A	" " "	Yes
18731	"	" " 1	" " "	No
18731	"	Trading Bay State A-3	" " "	"
18740	"	Cook Inlet State 18740 1	" " "	Yes
18741	"	" " " 18741 1	" " "	No
18741	"	" " " 18741 2	" " "	Yes
18742	"	Tyonek State 18742 1	" " "	Yes
18745	"	N. MGS State 18745 2	" " "	No
18745	"	" " " 1-A	" " "	"
18745	"	" " " 1	" " "	"
18746	"	MGS State 18746 1	" " "	Yes
18751	"	E. MGS State 18751 1	" " "	No
18754	"	SRS MGS State 1	" " "	Yes
18755	"	N. Cook Inlet State 1	" " "	No
18758	"	W. Foreland Unit 4	" " "	"
18761	"	Granite Pt. 1	" " "	Yes
18763	"	Knik Arm State 1	" " "	No
18765	"	Tower 2	" " "	"
18765	"	" 1	" " "	"
18772	"	McArthur State 1	" " "	Yes
18774	"	N. Trading Bay 23-7	" " "	No
18775	"	Middle River State 95 1	" " "	"
18777	"	West Foreland Unit 3	" " "	Yes
18777	"	Middle River State 2	" " "	No
18788	"	Starichkof State Unit 1	" " "	"
18790	"	Starichkof State 1	" " "	Suspended
18791	"	Kalgin Island State 1	" " "	No
18775	"	Middle River State Unit 1	" " "	"
20424	N	Campbell Point 1	" " "	"
21067	C	Middle River State Unit 2	" " "	"

<u>Lease ADL#</u>	<u>Type</u>	<u>Well Name</u>	<u>Geographical Area</u>	<u>Discovered Oil/Gas in Paying Quantities</u>
21094	C	Kasilof Unit 2	Cook Inlet Basin	No
21095	"	" " 1	" " "	"
21095	"	Kasilof State 1	" " "	"
21136	"	Susitna State Unit 1	" " "	"
21154	"	Lorraine State 1	" " "	"
21184	"	Middle Lake Unit 1	" " "	"
21095	"	Kasilof State 2	" " "	"
22008	"	Turnagain Arm Unit 1	" " "	"
22064	"	Redoubt Shoal State 22064 1	" " "	"
22106	"	Kustatan Ridge 1	" " "	"
22119	"	Middle River State 1	" " "	"
22170	"	W. Tyonek 1	" " "	"
23601	N	Beaver Lakes State 1-B	" " "	"
25425	C	Kustatan River Unit 43-30	" " "	"
25514	"	Simpson Lagoon 32-14A	North Slope	Yes
25514	"	" " 32-14	" "	No
25518	"	Kavearak Point 32-25	" "	Yes
25532	"	Kalubik Creek 1	" "	No
25551	"	Colville 1	" "	"
25575	"	Kookpuk	" "	"
25633	"	Ugnu	" "	Yes
25635	"	Fast Ugnu	" "	"
25651	"	W. Sak River State 2	" "	"
25651	"	W. Sak River State 2	" "	Yes
25658	"	" " " 3	" "	Suspended
25662	"	" " " 5	" "	"
28239	"	N.W. Eileen State 2	" "	No
28239	"	" " " 1	" "	Yes
28241	"	W. Kuparuk State 03-11-11	" "	"
28248	"	W. Sak River State 6	" "	Suspended
28252	"	Hemi State 03-09-11	" "	No
28255	"	Beechey Point State 1	" "	"
28257	"	N. Kuparuk State 26-12-12	" "	Yes
28263	"	Kuparuk State 1	" "	"
28264	"	S.E. Eileen State 1	" "	No
28264	"	S.E. Eileen State 2	" "	Yes
28275	"	Kup River State 1	" "	Suspended
28281	"	Put River J-1	" "	"
28287	"	" " 33-11-13	" "	"
28289	"	Hurl State 05-10-13	" "	Yes

<u>Lease ADI.#</u>	<u>Type</u>	<u>Well Name</u>	<u>Geographical Area</u>	<u>Discovered Oil/Gas in Paying Quantities</u>
28301	C	West Beach State 2	North Slope	Suspended
28303	"	Prudhoe Bay State 1	" "	Yes
28309	"	Put River	" "	Suspended
28313	"	Put River State 1	" "	"
28315	"	Put River 24-10-14	" "	"
28316	"	Socal 31-25	" "	"
28328	"	Sag River State 1	" "	Yes
28332	"	Lake State 1	" "	"
28343	"	Sag Delta 31-11-16	" "	Suspended
28344	"	Delta State 1	" "	"
28349	"	Sag Delta 31-10-16	" "	"
28350	"	Kadler State 15-09-16	" "	No
28367	"	E. Mikkelsen Bay State 1	" "	"
28377	"	West Staines State 2	" "	"
28380	"	W. Staines State 18-09-23	" "	"
29690	"	Redoubt Shoal Unit 2	Cook Inlet Basin	Yes
29690	"	" " State 1	" " "	No
29691	"	Forelands State Unit 1	" " "	"
29715	"	Clam Gulch	" " "	"
29723	"	Drift River State 1	" " "	"
30021	N	Red Shirt Lake 1	" " "	"
33098	C	Horseshoe Lake State 1	" " "	"
33108	"	Long Lake Unit 1	" " "	"
33238	"	Middleton Island State 1	Gulf of Alaska	"
34101	"	Cohoe Unit 1	Cook Inlet Basin	"
34623	"	Point Storkersen 1	North Slope	Yes
34624	"	N. Prudhoe Bay State 1	" "	"
34625	"	Niakuk 2	" "	Suspended
34625	"	" 1	" "	No
34626	"	Gull Island State 1	" "	Suspended
34627	"	West Beach State 3	" "	"
34628	"	West Beach State 1	" "	"
34630	"	Niakuk 1-A	" "	"
34631	"	East Bay State 1	" "	Yes
34634	"	Sag Delta 33-12-16	" "	Suspended
34638	"	Katalla State 1	Gulf of Alaska	No
35225	"	Trading Bay State 2	Cook Inlet Basin	"
35323	"	West Foreland Unit 5-A	" " "	"

<u>Lease ADL#</u>	<u>Type</u>	<u>Well Name</u>	<u>Geographical Area</u>	<u>Discovered Oil/Gas in Paying Quantities</u>
35323	C	West Foreland Unit 5	Cook Inlet Basin	No
35431	"	Trading Bay State 1	" " "	Yes
35704	N	S. Caribou Hill Unit 1	" " "	No
36448	C	Bachatna Creek State 1	" " "	"
36465	"	State 36465 1	" " "	"
38314	C	Port Heiden Unit 1	Bristol Bay	"
41217	"	Ninilchik 1	Cook Inlet Basin	"
45592	N	Am. Quasar Big Lake 1	" " "	"
46938	"	Bachatna Creek Unit 1	" " "	"
47417	C	Colville Delta State 1	North Slope	"
47433	"	Milne Point 18-1	" " "	Yes
47465	"	Gwydyr Bay State A 1	" " "	No
47468	"	" " South 1	" " "	Yes
47470	"	Delta State 2	" " "	Suspended
47488	"	West Channel 1-3	" " "	No
47506	"	Foggy Island Bay Unit 1	" " "	Suspended
47542	"	Mikkelsen Bay State 13-09-19	" " "	No
47556	"	Alaska State A 1	" " "	Suspended
47440	"	Plagim Beechey Pt. 1	" " "	No
52638	N	Pretty Creek State 1	Cook Inlet Basin	No
53078	"	Bachatna Creek Unit 3	" " "	"
54195	C	Figure Eight Unit 1	" " "	"
54273	"	West Foreland State A 1	" " "	"
58761	"	Isla Grande 1	" " "	"
58784	"	E. Lewis River 1	" " "	"
58801	"	Lewis River 1	" " "	Yes
58838	"	N. Tyonek State 1	" " "	No
59313	"	West McArthur River 1	" " "	"
60579	"	Cape Kasilof 1	" " "	"

COMPARISON OF NONCOMPETITIVE VS COMPETITIVE LEASING
(EXAMPLE OF TWO HIGH INTEREST NONCOMPETITIVE AREAS)

T. 1 N., R. 12 W., S.M.

COMPETITIVE

Date	ADL #	#Bids	Acres	\$/PerAcre
7/67	36540	1	641	2.68
"	41	"	"	"
"	46	"	640	2.15
"	47	"	720	2.68
"	49	"	640	2.15
"	50	"	640	2.15
"	51	"	640	2.15
"	55	"	640	2.15
5/73	60611	2	160	3.34
"	60612	1	1040	2.00
"	13	1	160	2.00
"	14	1	476	2.00

NONCOMPETITIVE

Date	ADL #	#Aplns.	Acres	\$/PerAcre in Filing Fees
3/72	56985	71	641	2.22
"	86	169	558	6.05
"	87	72	1280	1.13
"	88	88	838	2.10
"	89	85	680	2.50
"	90	68	639	2.13
12/72	59609	207	540	6.47
"	59610	175	320	11.00
6/75	68140	135	1880	1.44

T. 3 S., R. 14 W., S.M.

COMPETITIVE

Date	ADL #	#Bids	Acres	\$/PerAcre
12/63	22089	1	80	3.15
10/68	41226	1	800	7.67
"	41227	1	389	7.67

NONCOMPETITIVE

Date	ADL #	#Aplns.	Acres	\$/PerAcre in Filing Fees
2/65	26329	3	80	.75
12/65	31447	190	800	4.75
1/67	34888	550	2560	4.30
"	34891	170	480	7.08
"	34892	499	1600	6.24
"	34894	877	2440	7.19
"	34895	571	2440	4.68
"	34899	91	640	2.84
3/67	35700	54	80	13.50
4/67	36011	71	120	11.83
8/68	40832	240	360	13.33
9/68	41880	180	240	15.00
12/68	43691	606	1280	9.47
"	43697	596	1560	7.64
6/69	47020	1085	1280	16.95
12/69	50171	93	120	15.50
12/71	56379	79	360	4.39
2/72	56591	200	677	5.90
12/72	59628	51	200	5.10
9/73	62677	40	40	20.00
3/74	63845	183	320	11.44
7/74	68140	135	1880	1.44

TABLE NO. 12

NORTH SLOPE

FEDERAL LEASING HISTORY*1

PLO 1621 restored PLO 82 to mineral leasing on April 18, 1958. This order provided for leasing through noncompetitive lease offering in a simultaneous filing period. This was done in the following order:

Drawing Date	Acreage Offered	Tracts Offered	Tracts Rec'd Offers	Offers Received	Acres Leased*2
1958	3,400,000	1364	608	-	1,520,000
6/11/64	3,600,000	1440	1000	14,725	2,500,000
5/13/65	4,000,000	1558	268	31,431	670,000
11/19/65	"	1960	148	1397	370,000
1966	3,000,000	1247	7	8	17,500
12/30/66	4,300,000	1817	215	500	537,500*3
Total	22,300,000				5,615,000

*1 Adapted from August 21, 1968 Alaska Scouting Service Report

*2 Estimated on basis of 2500 acres per parcel

*3 Leases not issued because of "land freeze"



Official Business

Alaska State Legislature

House of Representatives

Committee on Resources

Pouch V
State Capitol
Juneau, Alaska 99811

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3. "Study of State Petroleum Leasing Methods and Possible Alternatives" prepared by the Department of Natural Resources, February, 1977.

- 4a. Transcript of Milton Lipton's comments to the joint Senate/
House Resources Committees on State leasing policy (January
25, 1978).
 - b. Prepared testimony/comments on HB 854.

5. "Oil and Gas Leasing Policy, Alternatives for Alaska in 1977",
by Dr. Mason Gaffney, February 1, 1977.

SEC. 3

THE SENSITIVITY OF STATE PETROLEUM INCC
TO VARIOUS LEASING METHODS

SECTION III

SUMMARY

Four leasing methods and one option were analyzed in detail. Economic analyses were run on a computer for each of the studied leasing methods. Model field sizes used, ranged from 100 million to 5 billion barrels of recoverable oil. An analytical comparison shows that state income (immediate, long range, and discounted) varied considerably depending on the leasing method. However, different leasing methods have other advantages and disadvantages to the State such as to encourage or discourage investment capital, exploration, field development, production rates, economic field life, and competition at leasing auctions. The results of this study clearly indicate there is no "one-best-method" of leasing. The data does show that knowledge of the potential petroleum structure is essential and that leasing methods need to be tailored to the structures being leased and to the State's needs.

Bonus bidding maximizes immediate income to the State and is discussed on page II - 20. Sliding scale royalty with cash bonus bidding provides lesser immediate income to the State than does bonus bidding, but provides greater total income to the State as can be seen on Figure II - 10, page II - 22. Royalty bidding and Net Profits Bidding (both with fixed cash bonus) are similar as far as the income stream provided to the State; they generally provide the least immediate income but greatest amount of total income to the State of Alaska - this is shown on Figure II - 12, page II - 25. (Royalty Bid and Net Profits Bid provide increased state income by reducing Federal income tax and by reducing the amount of Oil Company Investment on which a rate of return is to be made.)