# SCOMM

# 104:9

James E. Eason

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March 11, 1998

Representative Mark Hodgins, Chairman
House Special Committee on Oil and Gas
Alaska State Legislature
State Capitol (MS) 3100
Juneau, Alaska 99801-1182

Dear Representative Hodgins:

I wanted to take the opportunity to reply to several concerns and/or requests for additional information made by members of the House Special Committee on Oil and Gas during the committee's hearing on H.B. 380 last Thursday, March 5, 1998. A listing of the additional information requested and concerns expressed is provided below:

- a list of the wells and pools involved in the six fields which would be candidates for royalty reduction under H.B. 380, a summary of the discovery history for each field and an estimate of each field's reserves;
- concern that stipulating a 10 year royalty reduction term could potentially lead to accelerated production of the field(s), and thus to waste of the resources;
- concern over the potential for "double dipping" of royalty reduction under both the provisions of H.B. 380 and AS 38.05.180(d)(4)(A), the current royalty reduction statute;
- concern over whether assignment of affected leases would be possible; and
- concern over the need to include a sliding scale formula based upon price variations to assure that lessees do not receive an unexpected windfall at the State's expense

Each of these issues is discussed below.

<u>History of Each Field—Wells Drilled, Productive Intervals and Estimated Reserves</u> [1]

1. <u>Falls Creek</u>:

The Falls Creek gas field, is located on the Kenai Peninsula near Clam Gulch. There have been four wells drilled on or near the Falls Creek structure. The discovery well, Falls Creek No. 1, was completed in April 1961. The discovery well tested gas at a rate of 1.8 million cubic feet (mcf) per day from the Tyonek Formation at a depth of approximately 7,600 feet. A subsequent well drilled about four miles to the southwest of the initial well in 1966 , the Falls Creek No. 2 well, was a dry hole. In 1973, Chevron drilled the 43-6 well

[1] Except for Redoubt Shoal field reserves, all reserve estimates are from the draft 1997 report entitled "Historical and Projected Oil and Gas Consumption", Alaska Department of Natural Resources, Division of Oil and Gas.

about 2,000 feet east of the Falls Creek No. 1 well. This well, which was located off structure, also was dry. In 1996, Marathon drilled the Corea Creek No. 1 well on the west flank of the Falls Creek structure. The Corea Creek well was plugged and abandoned. Gas reserves are estimated to be 12 billion cubic feet (bcf).

2. Nicolai Creek:

The Nicolai Creek gas field is located on the west side of Cook Inlet near the northwest corner of Trading Bay. The discovery well, Texaco's Nicolai Creek State No. 1-A well, discovered gas in both the Beluga and Tyonek Formations. A total of seven wells have been drilled in the area, with three of those wells being dry holes. Three of the seven wells encountered gas, and one well encountered oil. Estimated gas reserves are 2 billion cubic feet (bcf).

3. North Fork:

The North Fork gas field is located onshore, east of Anchor Point and north of Homer. Only one well has been drilled in the field, the Chevron North Fork No. 41-35 well, which was completed in 1965. The well tested gas from a zone in the Tyonek Formation. Other wells in the vicinity of the North Fork structure have been dry holes. The nearest existing gas pipeline is more than 50 miles away. Estimated gas reserves are 12 billion cubic feet (bcf).

4. Redoubt Shoal:

The Redoubt Shoal oil field is located offshore, to the east of the West Foreland and west of the Port of Nikiski. Six exploratory wells have been drilled in the unit area. Those wells include:

- Pan Am Redoubt Shoal St. 22064 No. 1 (June 1967), which was plugged and abandoned as a dry hole;

- Tenneco St. 36465 No. 1 (November 1967), which was plugged and abandoned as a dry hole with oil shows;

- Pan Am Redoubt Shoal St. 29690 No. 1 (December 1967), which recovered minor amounts of oil from the Hemlock Formation;

- Pan Am Redoubt Shoal Unit 29690 No. 2 (September 1968), which tested 1291 barrels of oil per day from the Hemlock Formation, and is the discovery well for the Redoubt Shoal field;

- Union Redoubt Bay Unit No. 1 (October 1976), which failed to recover significant quantities of oil although numerous drill stem tests were conducted in the well; and

- Mobil South McArthur River No. 1A (December 1982), which was plugged and abandoned as a dry hole.

The Division of Oil and Gas has not published oil reserves estimates for the Redoubt Shoal field. However, the engineering firm of Netherland, Sewell and Associates completed an independent assessment of the field in February of this year, using all available well data and the 3D seismic survey completed in the fall of 1997 to determine proven reserves for Securities and Exchange Commission reporting purposes. The firm's estimate of proven oil reserves at the Redoubt Shoal field is 8.9 million barrels.

5. Starichkof:

The Starichkof oil field is located offshore and about six miles north of Anchor Point. The discovery well, the Pennzoil Starichkof No. 1 well, was drilled in 1967. A second well drilled later that year two miles north of the discovery location, the Starichkof State Unit No. 1 well, was plugged and abandoned. The discovery well tested 57 barrels of oil per day.

6. West Foreland:

The West Foreland gas field is located on the shoreline of the West Foreland, west of the Port of Nikiski. The field was discovered in 1962 by the Pan Am West Foreland No. 1 well. Pan American Oil subsequently drilled the West Foreland Unit No. 1 well about four miles to the north and the West Foreland Unit No. 2 well about to the north without finding gas. Estimated gas reserves are 20 billion cubic feet (bcf).

The 10 Year Term and Its Potential to Cause Waste

Concern was expressed about the possibility that, given the limited period of eligibility, a company might produce a field too fast in order to increase its benefits from reduced royalty payments. Amending the bill to allow for extension of the 10 year period for this eventuality is not necessary. One of the Alaska Oil and Gas Conservation Commission's ("AOGCC's") primary responsibilities is monitoring development and production from the state's oil and gas fields to assure that wasteful operations do not occur. That independent agency's oversight will assure that field development plans are consistent with the goals of preventing waste and maximizing recovery of the resources.

Potential for "Double Dipping" of Royalty Reduction

Royalty reduction under the provisions of H.B. 380 would obviate the need for royalty reduction under AS 38.05.180(d)(4)(A) during the 10 year period of eligibility under the proposed bill. Thus, as a practical matter, there could be no "double dipping" during that period. If the royalty obligation was already five percent under H.B. 380, a reduction to five percent under AS 38.05.180(d)(4)(A) would not further reduce the royalty rate As the bill is drafted, however, it is conceivable that a field eligible for royalty reduction under its provisions could produce for 10 years at the five percent royalty rate, and thereafter, could qualify for continued royalty reduction under the provisions of AS 38.05.180(d)(4)(A). The only circumstances where that could happen, however, are instances in which the commissioner of the Department of Natural Resources makes an affirmative finding, based on the merits and under the stringent conditions of H.B. 207, that continued reduction was both appropriate and in the state's best interests.

Assignment of Lease Interests in Candidate Fields

Passage of H.B. 380 will establish a short period to qualify for royalty reduction, with eligibility ending on December 31, 2003. If production from a candidate field has not begun by that time, lessees holding interests in the field forfeit the opportunity to qualify. Under its terms, the bill is designed to insure that lessees either diligently pursue development or lose the potential benefit of paying the reduced royalties. Under these circumstances, it is entirely possible that the incentive provided by H.B. 380 may be insufficient to promote development of some or all of the candidate fields by their current owners, yet may lead to assignments of lease interests to others who are willing to pursue development.

The Need for a Sliding Scale, Price-Based Formula or Price Cap

For the following reasons, amendment of H.B. 380 to provide for pre-determined caps on the volumes of oil and gas qualifying for reduced royalty is preferable to using a sliding scale, price-based formula or price caps for determining royalties:

- each of the six fields has remained undeveloped for 30+ years, through wide ranges of prices, suggesting that short term spikes in prices, in and of themselves, are insufficient to spur production;
- applying volume limits equally to all the fields is the simplest, most direct way of implementing the incentive;
- fluctuating prices could lead to frequent activation and deactivation of royalty reduction, which could negatively impact long-term planning and investment decisions critical to a field's development; while
- a simplified incentive program will facilitate lessees' planning for capital allocation and minimize administrative costs for both the State and the lessees.

Based on the results of prior exploration, none of the field's potentially benefiting from passage of H.B. 380 are likely to have unexpectedly large reserves. Both the reserve estimates of the Division of Oil and Gas and those of Netherland, Sewell and Associates support this conclusion. As further evidence of the perceptions of others, including former and current lessees, more than three decades have passed since these discoveries were made—without development having occurred. Under these circumstances, the simplest and most direct incentive has the greatest likelihood of producing the desired effects.

In closing, Mr. Chairman, I believe passage of H.B. 380 has the potential to re-energize Cook Inlet exploration and development, and to extend the productive life of older producing fields. It would also encourage participation by a broad range of interests, including major oil companies, independent oil companies and local individuals in the development of the shut-in resources. On behalf of Forcenergy, I appreciate the careful review and consideration which you and members of your committee have given the bill, and I urge your continued support in passing the bill from the committee.

Sincerely,

James E. Eason

cc: Senator Drue Pearce
Representative Mark Hodgins
Members of the House Special Committee on Oil and Gas
Commissioner John Shively, DNR
Director Ken Boyd, DO&G

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# Alaska Conservation Voice
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To: Honorable Members, House Special Committee on Oil and Gas
From: Kay Brown, executive director, Alaska Conservation Voice
Subject: comments on HB 380, Cook Inlet oil and gas royalty reductions
Date: March 12, 1998

Thank you for the opportunity to comment on HB 380, which proposes Cook Inlet oil and gas royalty reductions. The Alaska Conservation Voice supports a fair return to the public treasury and Alaska's citizens from the leasing and development of state-owned oil and gas resources. We oppose HB 380 because it would unnecessarily diminish the state's return and possibly encourage the early export of gas that is likely to be needed for local use.

HB 380 proposes to reduce the state's royalty — from 12.5% to 5% — without adequate justification. It covers six Cook Inlet fields already discovered (Falls Creek, Nicolai Creek, North Fork, Point Starichkof, Redoubt Shoal, and West Foreland).

What is the compelling need for such carefully defined special consideration? What would be the extent of state revenue losses? Who owns the fields that might benefit? Why are these particular fields singled out for royalty relief?

If these fields were truly uneconomic, royalty relief could be considered and granted under statutory provisions already in place. Why give this blanket royalty relief without demonstrated need as proposed in HB 380?

The legislation presumes the state should reduce the royalty to get the resource extraction going by 2004. Why expedite production of gas that likely will be needed for local uses? Alaskans throughout the railbelt depend on Cook Inlet gas for electricity and heat. Less than one-third of Cook Inlet gas production is used for residential gas and electric power generation, and the rest is exported. Current projections indicate that additional Cook Inlet gas will be needed for local use around 2007.

The terms of competitively-bid leases should not be altered lightly. Prudent practice should be to enforce the terms of leases, exercising the state's option to take back non-performing leases and non-producing wells and put them out for competitive bid again. It is troubling that more and more leasees are attempting to gain concessions in their leases from the Legislature, circumventing the competitive process and undermining the sanctity of leasing agreements.

The legislation is unclear on whether the 5% reduced royalty would apply to any new horizons or discreet formations that might be discovered within these "fields" in the future. What definition of "field" would apply?

Thank you for taking a careful look at these and other issues that have been raised. We urge you not to make unnecessary concessions adverse to the interests of Alaskans.

Thank you for considering our views.

**DEPARTMENT OF NATURAL RESOURCES**

*DIVISION OF OIL AND GAS*

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March 11, 1998

Senator Rick Halford, Chairman
Senate Resources Committee
Alaska State Legislature
State Capitol
Juneau, Alaska 99801

Dear Senator Halford:

I would like to take this opportunity to offer some comments on SB256/HB 380 (bill) and to respond to the March 4 letter to you from James Eason. His letter misrepresents the division's position on the bill's fiscal effects and is somewhat "factually disadvantaged." Moreover, what is clear now that was not clear from the letter is that Mr. Eason is working for Forcenergy on the bill.

The bill's principal goal is not "to develop new sources of natural gas to help offset potential supply shortages which have been forecasted to occur in the next 10-11 years." As the representative of Marathon testified before both the Senate Resource Committee and the House Special Committee on Oil and Gas (committee), "[n]ew markets for uncommitted natural gas reserves are not available for the next several years, making it difficult to economically justify near term drilling expenditures [and] this Bill ... will [not] be enough to stimulate significant activity for natural gas development in the near future." Even Enstar acknowledges that it already has under contract enough gas to meet its demand through 2002. In the near future, the bill's only effect on the gas market will likely be the substitution of five percent royalty gas for 12.5 percent royalty gas. The picture that emerges strongly suggests that the bill's principal goal is to grant Forcenergy a royalty reduction for oil production from the Redoubt Unit, whether it is needed or not and without any economic or technical analysis.

About a year ago Forcenergy approached the division about forming a new unit, the Redoubt Unit. Two of the leases in the proposed unit would expire if they were not put into the unit and could be released in the next competitive lease sale. The division agreed to form the unit and extend the leases because the division believed, based on Forcenergy's representations, that Forcenergy would rapidly attempt to develop the leases under the existing lease terms, specifically the 12.5 percent royalty terms. Indeed, Forcenergy committed to shoot a 3-D seismic survey over the area and process it by the end of 1997, evaluate the data by the 1st quarter of this year, and drill a well by the end of 1999 or commit to construct a production platform by the end of 2001. The division always understood that Forcenergy could apply for royalty reduction under the statute amended by HB 207 where it would be required to show by "clear and convincing" evidence that "production ... would not be otherwise economically feasible."

It is disconcerting that Mr. Eason would be critical of the assumptions made in the division's fiscal note. First, Mr. Eason has recognized that making such a financial estimate "is difficult when all the information is on the table [and is] virtually impossible when neither reserves, nor the cost to produce those reserves are [available]." This latter situation is precisely what the division confronted in preparing the fiscal note and the reason for its caveat: "It is impossible to quantify the fiscal effect of this bill ...." Nevertheless, the division attempted, in good faith, to inform the legislature of the bill's possible financial consequences. Given the paucity of the data, the division stands by its fiscal note.

Next, by referring to a decline curve for the Hemlock Oil Pool, Mr. Eason criticizes the division's use of flat production. Again, the division was merely trying to give an idea of the magnitude of potential loss to the state. For this type of analysis, a flat decline curve over a specified range of production is perfectly acceptable. The division is well aware of how fields decline. Interestingly, Mr. Eason's depletion table is very misleading. It starts 10 years AFTER the start of production—in the first year of decline. The Hemlock's production graph shows that for the first 10 years there was NO production decline. The division can provide the exact numbers if you want them, but if the complete production history is considered, then the range of reduction is virtually identical to that presented in the division's fiscal note. Without better information, all anyone can do is speculate about the shape of a field's decline curve. What one can say with certainty, however, is that the bill creates an incentive to produce the field as rapidly as possible to minimize the decline curve in the field's early years

Finally, Mr. Eason criticizes the fiscal note by selectively picking and choosing parts of the division's analysis. Page 3 of the letter starts: "If one adopts the division's highest production rate ...." What it should say is that: "The author of this letter has chosen to adopt the division's highest production rate and ignore the rest of the division's analysis." The fiscal note provides two ranges of production and suggests that Cook Inlet oil fields would often fit somewhere in this range. Again, the division stands by its fiscal note, fully recognizing the uncertainties in these types of analyses.

Mr. Eason's letter also attempts to rationalize the bill's terms by equating them to those of two other recent bills. First, he suggests that the bill's terms are consistent with the recent royalty reduction bill, HB 207. Both do have a five per cent royalty rate provision. But, the bill's provision is a five percent ceiling while HB 207's provision is a five percent floor. Under the bill, the royalty cannot be increased during the ten year holiday. Moreover, this bill guts HB 207's protections: (1) a clear showing of necessity; (2) protection of the state's interest; and (3) upside potential for the state. As Representative Rokeberg noted, this bill is just an end run around HB 207.

Next, Mr. Eason attempts to link this bill to the recent discovery royalty bill because neither provides for changing economic conditions. But, they cannot be equated. The discovery royalty bill is intended to reward companies who risk substantial dollars drilling rank wildcat exploration wells and then act diligently to bring that field into production. This bill rewards those who had the good fortune to own the leases in question at the time of the bill's passage for bringing known oil and gas accumulations into production. This bill gives a bigger reward (because it applies to all pools within a field as opposed to a pool within a field) for a longer time (because the ten year period runs from the date of first production rather than from the date of discovery) to those who take less risk. Something is wrong with this picture. Mr. Eason's comparison of the bill's terms with these other two bills' merely veils the arbitrariness of the bill's terms.

One of the key provisions in HB 207 is that royalty relief cannot be granted unless there is a clear and convincing showing that without the relief the oil or gas production "would not otherwise be economically feasible." The bill grants relief whether or not the field needs relief. Mr. Eason suggests that one should assume that the showing has been made because fields that were discovered 30 years ago and are still not developed must ("it seems axiomatic") need royalty reduction. Apparently, not all the fields that were discovered 30 years ago need relief since only the six fields in the Committee Substitute are permitted this relief, even if other fields may meet the same criteria. Furthermore, all six fields must need identical amounts of relief over the same amount of time since the bill provides no options. Although these fields may have been discovered 30 years ago, the leases that comprise the two oil fields (Redoubt and Pt. Starichkof) were recently issued. Forcenergy recently acquired the Redoubt leases and applied for the Redoubt Unit within the past year. Arco, Anadarko and Forcenergy bought Pt. Starichkof leases in the last few lease sales. If they did not think these prospects were profitable bearing a 12.5 percent royalty, then why buy the leases and why form the Redoubt Unit?

As I outlined in my March 2 letter to Representative Hodgins, the recent Phillips press release regarding their new discovery (Tyonek Deep) indicates that that field is economic and states "[e]ngineering studies have been initiated for design of pipeline and production facilities capable of processing 5,000 barrels of oil per day as early as mid-1999." Perhaps "leveraging additional exploration and development in the vicinity of new infrastructure" does not require a 60% royalty reduction.

Moreover, the notion that a known accumulation, which has not been developed for twenty to thirty years, is uneconomic has been refuted. Technological advances and cost saving measures have more than offset declining oil prices in real terms. On the Alaska North Slope, for example, the minimum economic field size continues to be reduced. Between 1991 and 1996, operating expenses were reduced from $2.29 per barrel to $1.54 per barrel (a 33% reduction), development well costs were reduced from $3.0 million per well to $2.0 million per well (a 33% reduction), and well hook-up costs were reduced from $1.5 million per well to $0.6 million per well (a 60% reduction). Between 1996 and 1997, development well costs were reduced further reduced from $2.0 million to $1.7 million (another 15% reduction in one year). These costs are in "dollars of the day," and considering inflation over this period, these reductions are, to quote Arco, "even more dramatic."

Although the division does not possess similar statistics for the Cook Inlet, industry has also been recently reducing costs in the Cook Inlet and expects to continue to reduce costs over, at least, the next several years. Moreover, 3-D seismic and extended reach drilling has enabled the industry to drill "smarter" wells giving more reductions. "Smarter" means fewer wells drilled with a greater precision than could have been achieved even five years ago. 3-D seismic not only provides the explorationist a clearer view of the subsurface, it provides the production manager a tool to drill more efficient development wells. 3-D seismic also assists in designing water floods and other production enhancing techniques to maximize benefit and minimize cost.

Given these technological advances and cost saving measures, one must question the need for additional incentives in the Cook Inlet. Today the Cook Inlet is a busy place (see enclosures) with a lot of drilling and seismic activity. We have had two successful recent lease sales and exploration activities are the highest since Arco's work at Sunfish five years ago. The division expects this pace to continue for the near term.

In addition to these two factors, this high level of activity can be attributed to a favorable business climate. This favorable climate exists, in large part, due to an ongoing series of new legislation that has improved the state's stature in the world oil marketplace. Areawide leasing and discovery royalty are two examples. It may be wise to give these new technologies, cost saving measures, and new programs a chance to work before committing the state to any additional, and potentially unnecessary, financial obligation.

If the legislature nevertheless believes that an incentive is warranted, the division urges the legislature to select terms that are not, to use the Senate sponsor's word "arbitrary," and that provide for the "maximum benefit of [Alaska's] people" as the Alaska constitution requires. A bill that gives us away too much royalty does not benefit Alaska's citizens. It does not create Alaska jobs or provide local taxes since they would be created anyway. It increases profit for a company and revenues for the federal government at the state's expense.

If the legislature desires simple terms with certain relief, it should do so only after careful analysis. It is true, for example, that the federal Deepwater Royalty Relief Act has helped promote development in the Gulf of Mexico. But the terms were not adopted arbitrarily. They were only adopted after analysis of the costs and benefits to the federal government. The terms recognize that distance from the infrastructure and water depth increases costs and the act's royalty volume cap varies with depth. The forty million barrel cap in the committee substitute is a step in the right direction, but it does not recognize the significant difference in cost between onshore and offshore development in the Cook Inlet.

Moreover, it does not protect the state's interest if oil prices rise. The bill will either:

1. not reduce costs enough to get Redoubt developed;
2. reduce costs, but Redoubt would have been developed anyway; or
3. reduce costs such that Redoubt could be developed when it would not have otherwise been developed

If the latter is the case, consider this. Based on today's oil prices, the proposed sixty percent reduction in royalty equates to about a ninety cent per barrel reduction in oil price. In essence, Forcenergy is telling the legislature that they could develop Redoubt, but only if oil prices went up ninety cents. If the legislature reduces the royalty, and oil prices rise ninety cents, should the royalty return to 12.5 percent? If oil prices increase $1.80 over today's prices, should the state share in that upside? If oil prices rise from the current $12 level to the $22 level of just last year, should the state share in that upside?

I am available to answer any questions you or members of the Committee may have.

Very truly yours,

Kenneth A. Boyd
Director

Enclosures

cc: Senator Drue Pearce
Representative Mark Hodgins

# Cook Inlet – Recent Activity

- State Lease Sale 85A-W (re-offer) set for late February.
  - Sale 85A was held in December 1996
  - Included over one million acres, drew $3 million in bids
  - Joint DNR-Mental Health Lands Trust Sale
- North Middle Ground Shoal Unit established 1996.
- Redoubt Unit established, Forcenergy is operator.
- Forcenergy bought all of Stewart Petroleum assets.
- UNOCAL has proposed formation of Pioneer Unit.
- Growth Resources exploring for coalbed methane.
  - 3 shallow wells have permit-to-drills and are spudded
  - Locations are near Houston in south-central Alaska
- Ninilchik area 2D , Upper Cook Inlet offshore 3D and Swanson River 3D surveys completed in 1997.

# Cook Inlet - Future Activity

- Forcenergy plans gas exploration well, Coffee Creek #1.
  - West of Pretty Creek Field on CIRI land
- Forcenergy plans drilling Boulder Shoal prospect.
  - Adjacent to West McArthur River Unit.
- Frontier Petroleum plans gas exploration well, Aegis #1.
  - Onshore west of Trading Bay Field
- Anadarko has proposed a well, Lone Creek #1.
  - Near Tyonek on Moquawkie (surface)/CIRI (subsurface) land
- Phillips plans more drilling for Tyonek Deep accumulation.
  - Formerly known as Sunfish
  - Located at a level below North Cook Inlet gas field
  - Results of latest delineation well non-commercial
- N Middle Ground Shoal 3D/2D survey planned for later in 1998

**CS FOR HOUSE BILL NO. 380( )**

IN THE LEGISLATURE OF THE STATE OF ALASKA

TWENTIETH LEGISLATURE - SECOND SESSION

**BY**

**Offered:**
**Referred:**

**Sponsor(s):** **REPRESENTATIVE HODGINS**

**A BILL**

**FOR AN ACT ENTITLED**

**"An Act relating to a temporary reduction of royalty on oil and gas produced for sale from fields within the Cook Inlet sedimentary basin where production is commenced in fields that have been discovered and undeveloped or that have been shut in."**

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

*** Section 1.** AS 38.05.180(f) is amended by adding a new paragraph to read:

(5) notwithstanding and in lieu of a requirement in the leasing method chosen of a minimum fixed royalty share, or the royalty provision of a lease, for leases unitized as described in (p) of this section, leases subject to an agreement described in (s) or (t) of this section, or interests unitized under AS 31.05, the lessee of all or part of an oil or gas field **identified in this section** [IN THE COOK INLET SEDIMENTARY BASIN DISCOVERED BEFORE JANUARY 1, 1988, THAT HAS BEEN UNDEVELOPED OR SHUT IN FROM JANUARY 1, 1988, THROUGH DECEMBER 31, 1997, AND THAT, BEFORE JANUARY 1, 2004, BEGINS

PRODUCING FOR SALE PREVIOUSLY UNDEVELOPED OR SHUT-IN OIL OR GAS,] shall**, provided production for sale begins before January 1, 2004,** pay a royalty of five percent on [ALL PRODUCTION OF OIL OR GAS] **the first 35 million barrels of oil and the first 35 billion cubic feet of gas produced** for sale from that oil or gas field that occurs in the 10 years following the date on which the production for sale [OF PREVIOUSLY UNDEVELOPED OR SHUT-IN OIL OR GAS] commences [FROM THAT FIELD]**. The fields eligible for royalty reduction pursuant to this section, all of which are located within the Cook Inlet sedimentary basin, were discovered before January 1, 1988, and have been undeveloped or shut in from at least January 1, 1988, through December 31, 1997, are:**

**(1) Falls Creek;**

**(2) Nicolai Creek;**

**(3) North Fork;**

**(4) Point Starichkof;**

**(5) Redoubt Shoal; and**

**(6) West Foreland**.

## OWNERSHIP OF SHUT-IN AND UNDEVELOPED COOK INLET OIL AND GAS FIELDS IDENTIFIED AS POTENTIALLY QUALIFYING FOR TEMPORARY ROYALTY REDUCTION UNDER THE PROVISIONS OF SENATE BILL 256 / HOUSE BILL 380

| Field | Type | Discovered | Affected Lessees * |
|---|---|---|---|
| Falls Creek | Gas | 1961 | ARCO Alaska (50%); Cliff Burglin (22%); Other Private Individuals (28%) |
| Nicolai Creek | Gas | 1966 | UNOCAL (50%); Marathon (50%) |
| North Fork | Gas | 1965 | Gas-Pro Alaska (64.721%); ARCO Alaska (27.375%); and Marathon (7.904%) |
| Pt. Starichkof | Oil | 1967 | Mobil (25%); Pennzoil (25%); Placid (16.07143%); Rosewood Resources (4.726890%); Hunt Petroleum Corp. (4.201680); and Forcenergy Inc (25%) |
| Redoubt Shoal | Oil | 1968 | Forcenergy Inc (70%); UNOCAL(30%) ** |
| West Foreland | Gas | 1962 | Forcenergy Inc (100%) *** |

* For those fields which are within approved units—Falls Creek, Nicolai Creek. North Fork and Redoubt Shoal fields—includes both the identity of the Working Interest Owners (WIOs) and their respective ownership interests in the State of Alaska leases within the unit. For Pt. Starichkof Field, which is not unitized, WIOs and ownership interest percentages noted are for the lease upon which the discovery well was drilled. Additional delineation drilling in all fields may confirm reserves extending beneath adjacent leases. Accordingly, lessees in addition to those noted above may potentially be affected by expedited delineation and production of these fields.

** Forcenergy Inc currently holds 100% Working Interest in the Redoubt Unit. However, under the terms of an agreement between the companies, UNOCAL has the option, which it is expected to exercise, to acquire a 30% Working Interest in the unit.

*** The discovery well for the West Foreland Field is located onshore on a federal lease held by Phillips Petroleum Company. However, there is evidence to suggest that the gas accumulation confirmed by the discovery well may extend offshore onto one or more leases owned by Forcenergy Inc.

**ALASKA HOUSE SPECIAL COMMITTEE ON OIL AND GAS**

**PUBLIC COMMENT ON HB380**

**MARATHON OIL COMPANY**

**February 26, 1998**

Good morning Chairman Hodgins and members of the House Special Committee on Oil and Gas. My name is John Miesse and I am here today representing Marathon Oil Company. As most of you know, Marathon has been an operator in the Cook Inlet Area for over 30 years. We appreciate your interest and support of the oil and gas industry in the Cook Inlet area. I'd like to take a few moments to comment on House Bill 380, which is intended to provide an incentive for oil and gas development in Cook Inlet from fields that have previously been undeveloped or shut-in.

Marathon supports House Bill 380 and believes that in the long term, this incentive will have a positive economic impact on the State of Alaska and the local communities. I would like to point out however, that we believe this Bill would have a more immediate impact on undeveloped or shut-in oil fields because of the readily available market for this product. The ultimate incentive for adding additional reserve capacity, whether it be oil or natural gas, is the availability of ready and stable markets. While such a market is certainly available for new oil reserves in the Cook Inlet area, the same cannot be said for natural gas. New markets for uncommitted natural gas reserves are not available for the next several years, making it difficult to economically justify near term drilling expenditures. Although this Bill will provide some economic benefit to the industry, we don't believe by itself, will be enough to stimulate significant activity for natural gas development in the near future.

I would now like to ask the committee to consider points of clarification that we believe are needed in House Bill 380. It is our understanding that the intent of this legislation is to provide the temporary relief to fields that have been undeveloped "or" shut-in. We would like clarification on the definition of undeveloped. Specifically we would like to know if a field that has produced periodically over the last few years, but requires additional drilling to fully develop the field, would be eligible for the temporary royalty relief. Also we would like to clarify that royalty relief would apply to either a re-entry of an existing well or a new well needed to recover undeveloped reserves. Again, we understand the intent of the proposed legislation is to address these scenarios, but we would appreciate the Department's review to make sure the language is explicit.

In closing, many of the oil and gas producing states enacted similar incentives for oil and gas development in the early 1990's. These states have found the programs to be beneficial to all stakeholders involved and have maintained those programs. We believe incentive programs such as House Bill 380 will also lead to economic gain for our communities and the State, but we recognize that market availability is probably the overriding incentive for our industry to look for new oil or gas reserves. Therefore, we believe you will see a more immediate impact on the undeveloped oil fields in the Cook Inlet area as a result of this proposed incentive.

Thank you for the opportunity to share these comments with you today. I will be glad to answer any questions you might have.

TESTIMONY
OF
MR. GARY E. CARLSON, VICE PRESIDENT
FORCENERGY INC
HOUSE SPECIAL COMMITTEE ON OIL AND GAS
FEBRUARY 26, 1998 – 10:00 AM

Mr. Chairman, and members of the Committee, for the record my name is Gary E. Carlson. I am Vice President of Forcenergy Inc and manager of Forcenergy's Alaska division. Forcenergy is an independent oil and gas company that is a relative newcomer to Alaska oil and gas exploration and development. We have only been here for about fifteen months, so some members of the Committee may not be too familiar with who we are and what we have accomplished to date.

I would like to take a few moments to review some of our recent accomplishments and ongoing projects, because I believe they reflect a commitment of resources and revenue to finding new reserves, prolonging Cook Inlet's existing oil and gas production and employing new technology both to locate and to develop smaller and more economically challenging oil and gas accumulation. Don't get me wrong, we would love to find a substantial resource, but we can't count on it.

Forcenergy's financial commitments in Alaska to date total more than $180 million. This includes acquisitions, seismic projects, and drilling.

- We purchased Marathon Oil Company's crude oil properties in Cook Inlet, as well as its interests in the Prudhoe Bay Field on the North Slope;
- purchased Marathon Oil Company's interest in the Cook Inlet Pipeline System, thus providing Forcenergy with an ownership interest in the established Cook Inlet oil and gas transportation infrastructure;
- purchased new Cook Inlet leases in competitive oil and gas lease sales held by both the State of Alaska and the federal Minerals Management Services;

- purchased the leases overlying the Redoubt Shoal Field, a field which was discovered in 1968, but which has remained undeveloped since that time;
- purchased Stewart Petroleum's West McArthur River Unit property, and are continuing operations in that field to enhance oil production and to establish new reserves;
- purchased leases held by Trading Bay Energy;
- committed to spend $30 million for a joint account with Unocal for acquisitions, wells, and seismic; and in turn received access to their extensive database.

We opened an office currently staffed with 22 Forcenergy employees. Eighteen of these employees were already Alaska residents; 3 are reruns (like myself), and one was recruited from out of state. We also make liberal use of local contractors and consultants. Since early spring of 1997, we have contracted seismic crews; in the Inlet until ice drove us out for the season, and on frozen ground onshore. This includes two state-of-the-art 3D surveys. Our total expenditures to date for seismic activities approximate $10 million.

Currently, we are drilling our second and third wells in the area. Two of the three wells are on state acreage.

Collectively, these actions reflect Forcenergy's long-term commitment to Alaska, as well as its belief that Cook Inlet continues to provide opportunities for additional discoveries and development – particularly for companies that are innovative, technically adept and willing to accept the challenge and risk of exploring for smaller and smaller accumulations. That optimism is tempered, however, by the realization that, as production from the area's producing oil and gas fields declines, new production must be found and brought to market as quickly as possible if we are to maintain the area's infrastructure.

We believe that Cook Inlet's shut-in oil and gas fields can plan a key role in deferring production decline and in spurring new exploration and development. Accordingly, we are supportive of the proposed legislation, and believe that it can provide an effective incentive for encouraging production from Cook Inlet's shut-in and undeveloped fields, many of which were discovered more than thirty years ago. We are also encouraged by your consideration of this legislation which, if passed, will further level the playing field in Cook Inlet. By applying equally to fields in which there is diverse ownership interests, including independents like ourselves, majors such as ARCO, Phillips and Marathon, and small local companies such as Gas Pro and individual Alaskans; the proposed legislation will serve to encourage broader participation in the development and production of the fields eligible for royalty reduction under House Bill 380.

In addition to possibly stimulating the development of several known, undeveloped oil and gas fields, House Bill 380 also has the potential to leverage additional exploration and development in the vicinity of new infrastructure, including pipelines and associated facilities, required to develop those fields. Any new oil and gas production resulting from the development of these fields will in turn reduce the average cost of producing existing reserves, and will extend the economic life of both existing and new Cook Inlet production and transportation infrastructure.

We believe that House Bill 380 represents a straight forward, effective means of responding to several disturbing trends associated with Cook Inlet oil and gas production, including; 1) the continued decline of oil production, from a historical high of more than 82 million barrels per year in 1970 to less than 14.6 million barrels per year in 1996; 2) the associated decline in employment related to the oil and gas industry, as well as declining state and local taxes and royalties from Cook Inlet production; 3) the advanced depletion of Cook Inlet's principal producing oil fields, most of which now are more than 90% depleted; and 4) the approaching depletion of many of Cook Inlet's producing gas fields.

The proposed legislation provides an incentive for lessees owning leases overlying previously discovered oil or gas fields in the Cook Inlet basin, which have remained undeveloped or shut-in from at least January 1, 1988 through December 31, 1997, to develop those fields as rapidly as possible. In return, for new oil or gas production from those fields begun before January 1, 2004, lessees would pay a reduced royalty of 5%, instead of the 12-½% specified in the lease, for a period of 10 years following the date on which production begins. By its terms, however, House Bill 380 assures that the State stands to gain also.

By establishing a short period of eligibility – ending on December 31, 2003 – House Bill 380 ensures that lessees diligently pursue development of those fields or forfeit the opportunity to pay reduced royalties. By limiting the period of reduced royalty payments from qualifying fields to 10 years following the beginning of production, the legislation provides a reasonable and measurable limit to the state's foregone royalties in exchange for oil and gas production that may otherwise not occur. Both the State and all Cook Inlet lessees stand to gain from extensions to existing infrastructure which may result from the development of fields which are eligible under House Bill 380.

In closing, Forcenergy supports House Bill 380, and urges the members of the Committee to support its passage. This concludes my prepared testimony, but I will be happy to answer any questions that the members of the Committee may have.

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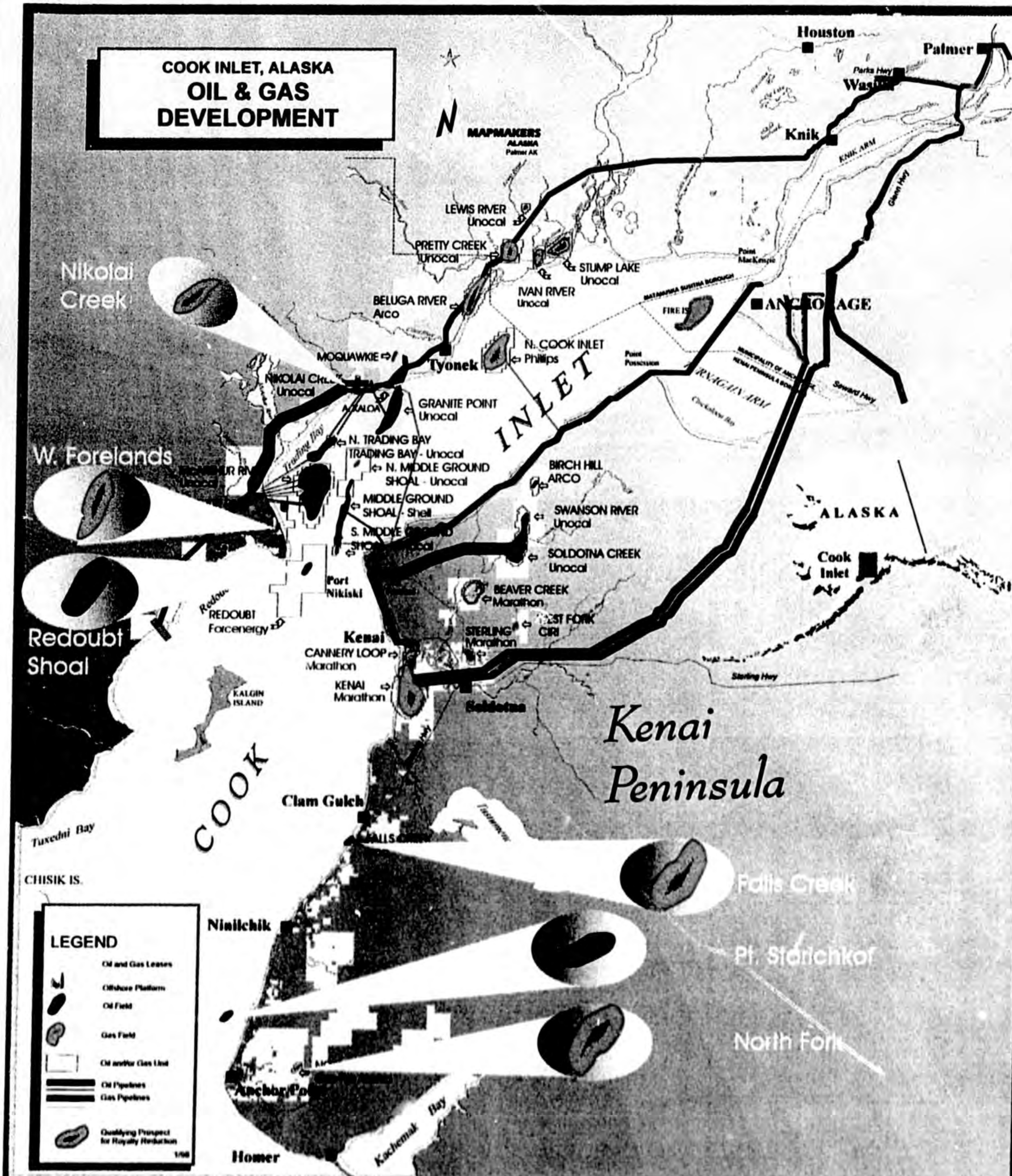
J:Kbdocs.TESTIMONYsb256


COOK INLET, ALASKA
OIL & GAS
DEVELOPMENT
MAPMAKERS
ALASKA
Palmer AK
Houston
Palmer
Wasilla
Knik
KNIK ARM
LEWIS RIVER
Unocal
PRETTY CREEK
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IVAN RIVER
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MOQUAWKIE
Tyonek
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N. TRADING BAY
TRADING BAY - Unocal
N. MIDDLE GROUND
SHOAL - Unocal
MIDDLE GROUND
SHOAL - Shell
W. Forelands
Trading Bay
BIRCH HILL
ARCO
SWANSON RIVER
Unocal
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Unocal
ALASKA
Cook
Inlet
Port
Nikiski
BEAVER CREEK
Marathon
REDOUBT
Forcenergy
Redoubt
Shoal
STERLING
Marathon
Kenai
CANNERY LOOP
Marathon
KENAI
Marathon
Sterling Hwy
KALGIN
ISLAND
Soldotna
Kenai
Peninsula
COOK
Clam Gulch
Tuxedni Bay
CHISIK IS.
Falls Creek
Ninilchik
Pt. Starichkof
North Fork
LEGEND
Oil and Gas Leases
Offshore Platform
Oil Field
Gas Field
Oil and/or Gas Unit
Oil Pipelines
Gas Pipelines
Qualifying Prospect
for Royalty Reduction
Kachemak Bay
Homer

# FISCAL NOTE

**STATE OF ALASKA** **BILL NO.** **HB380**
**1998 LEGISLATIVE SESSION**

| | | | |
|---|---|---|---|
| Revision Date: | | Dept Affected: | Natural Resources |
| Title: | An Act relating to a temporary reduction of royalty on oil and gas produced ... from ... Cook Inlet ... | BRU: | Resource Development |
| | | Component: | Oil & Gas Development |
| Sponsor: | Rep. Hodgins | | |
| Requestor: | (H) O & G | Component Serial No. | #439 |

Expenditures/Revenues (Thousands of Dollars)

| OPERATING EXPENDITURES | FY99 | FY00 | FY01 | FY02 | FY03 | FY04 |
|---|---|---|---|---|---|---|
| PERSONAL SERVICES | | | | | | |
| TRAVEL | | | | | | |
| CONTRACTUAL | | | | | | |
| SUPPLIES | | | | | | |
| EQUIPMENT | | | | | | |
| LAND & STRUCTURES | | | | | | |
| GRANTS, CLAIMS | | | | | | |
| MISCELLANEOUS | | | | | | |
| TOTAL OPERATING | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CAPITAL EXPENDITURES | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| CHANGE IN REVENUES (fund code) | 0.0 | ? | ? | ? | ? | ? |

FUND SOURCE (Thousands of Dollars)

| | | | | | | |
|---|---|---|---|---|---|---|
| 1002 Federal Receipts | | | | | | |
| 1003 GF Match | | | | | | |
| 1004 GF | | | | | | |
| 1005 GF/Program Receipts | | | | | | |
| 1037 GF/Mental Health | | | | | | |
| Other (Specify Type) | | | | | | |
| TOTAL | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

**Estimate of any current year (FY98) cost: $** none

**POSITIONS**

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

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

It is impossible to quantify the fiscal effect of this bill since some critical terms are not defined and no economic analysis has been provided.

Following on page 2 is an example of what we believe would be the fiscal impact of this bill on <u>one</u> particular project.

Prepared by: Ken Boyd, Director [signature] for — Phone: 269-8800
Division: Oil & Gas — Date: 20-Feb-98
Approved by Commissioner: [signature] for John Shively — Date: 2-20-98
Agency: Natural Resources

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HB380 Fiscal Analysis continued...

The State and an oil company have recently negotiated the creation of the Redoubt Unit in Cook Inlet. This Unit includes several abandoned wells and contains "undeveloped" oil and thus clearly, in our view, meets the criteria of the bill. This unit was created with the understanding that royalties would be 12.5%. There was never any discussion of reducing royalties as a condition of forming the Unit (although the company could APPLY for royalty reduction under HB-207). The company never indicated that royalty relief would be necessary to develop the Unit. The fiscal consequence of HB380 on the Redoubt Unit is:

1) If we assume 500 bbl/day production per well, $10/bbl oil price:

500 bbl/day x $10/bbl x 12.5% = $625/day x 365 days x 10 years = $2.28 million/well
500 bbl/day x $10/bbl x 5% = $250/day x 365 days x 10 years = $910 thousand/well

The State will receive $1.37 million fewer royalty dollars at 500 bbl/day per well.

2) If we assume 1,000 bbl/day production per well, $10/bbl oil price:

1,000 bbl/day x $10/bbl x 12.5% = $1,250/day x 365 days x 10 years = $4.56 million/well
1,000 bbl/day x $10/bbl x 5% = $500/day x 365 days x 10 years = $1.8 million/well

The State will receive $2.7 million fewer royalty dollars at 1,000 bbl/day per well.

Production per well will likely be somewhere between these two numbers, so the State will forfeit between $1.37 million and $2.7 million per well for just the Redoubt Unit.

Assuming (conservatively) that 10 wells are in production the State will "contribute" between $14 and $27 million to this project in the form of an unrequested royalty reduction.

Similar examples could be prepared for other fields. Estimates for reductions of royalty payments for gas are more difficult to prepare. But unless and until there are new markets for gas (and assuming the markets are not over-supplied) the 5% royalty gas will merely displace 12.5% royalty gas.

In general, for all production to which this bill applies, the State will receive (12.5% - 5%) = 7.5% fewer royalty dollars. This is a 60% royalty reduction given without any economic analysis or justification.

# ALASKA STATE LEGISLATURE

*Session:*
State Capitol
Juneau, Alaska 99801-1182
(907) 465-3779 – Phone
(907) 465-2833 – Fax

*Interim:*
145 Main St. Loop Suite 221
Kenai, Alaska 99611
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**REPRESENTATIVE MARK D. HODGINS**
**House District 9**

## SPONSOR STATEMENT
## HB 380

### Reduce Royalty on Cook Inlet Oil & Gas

The intent of House Bill 380 is to encourage the development of gas reserves within the Cook Inlet sedimentary basin. New gas reserves developed as a result of the proposed legislation could be instrumental in maintaining reliable and economically priced gas supplies for South-central consumers, including residential and commercial users.

In addition to stimulating the development of several known undeveloped fields, many of which were discovered more than 30 years ago, House Bill 380 has the potential to leverage additional exploration and development in the vicinity of new infrastructure, including pipelines and associated facilities, required to develop those known fields. Any new oil and gas production resulting from the development of these fields will in turn reduce the average cost of producing existing reserves, and extend the economic life of both existing and new Cook Inlet production and transportation infrastructure.

Under the terms of the proposed legislation, lessees owning leases overlying previously discovered oil or gas fields in the Cook Inlet basin which have remained undeveloped or shut-in from at least January 1, 1988 through December 31, 1997, would have an incentive to develop those fields as rapidly as possible. The legislation would provide that, for oil and gas produced from undeveloped or shut-in fields brought into production before January 1, 2004, lessees would pay a reduced royalty of five percent, instead of the 12 1/2 percent specified in the lease, for a period of 10 years following the date on which oil or gas production begins.

By establishing a short period of eligibility—ending on December 31, 2003 – House Bill 380 ensures that lessees diligently pursue development or forfeit the opportunity to pay reduced royalties. By limiting the period of reduced royalty payments from qualifying fields to 10 years following the beginning of production, the legislation provides a reasonable and measurable limit to the state's foregone royalties in exchange for oil and gas production that may otherwise not occur. The state's royalties from currently producing Cook Inlet oil and gas fields will not be effected by House Bill 380.

By encouraging the development of existing uneconomic oil and gas fields, House Bill 380 will benefit the state and local economies through taxation and royalties, encourage future development of new oil & gas discoveries by lowering the costs of industry infrastructure, as well as taking care of job #1 - providing jobs for Alaskans.

COMMITTEE: [redacted]

DATE: March 5, 1998

Subject of meeting:

[redacted] OIL

& [redacted]

# SIGN-IN

[redacted]

| NAME | [redacted] | PHONE | REPRESENTING | DO YOU WANT TO TESTIFY ? |
|---|---|---|---|---|
| James Eason | 8611 Leeper Circle, Anch. AK. 99504 | 337-3515 | Forcenergy | Yes ✓ |
| | | | | |
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THE SEAL OF THE STATE OF ALASKA

**COMMITTEE:**
HOUSE OIL & GAS

**DATE: February 26, 1998**

**Subject of meeting:**

HB 393 - DEVELOP STRANDED GAS RESOURCES

# SIGN-IN

**PLEASE PRINT!**

| NAME | ADDRESS (MAILING / ZIP) | PHONE | REPRESENTING | DO YOU WANT TO TESTIFY ? |
|---|---|---|---|---|
| RANDY CARTER | 3505 WOODLAND PARK DR. | 243-6744 | ALASKA CONSERVATION [redacted] VOICE | NO |
| Pam LaBolle ✓ | 217 2nd St #201 Juneau | | AK State Chamber | Yes |
| KEN ELMORE | 4000 DOROSHIN, ANCH | 345-7070 | ARCO | NO |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
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**COMMITTEE:**
HOUSE OIL & GAS

**DATE: February 26, 1998**

**Subject of meeting:**
HB 380 - REDUCE ROYALTY ON COOK INLET OIL & GAS

# SIGN-IN

**PLEASE PRINT!**

| NAME | ADDRESS (MAILING / ZIP) | PHONE | REPRESENTING | DO YOU WANT TO TESTIFY ? |
|---|---|---|---|---|
| GARY CARLSON ✓ | 310 K St. #700 Anchorage | 258 8600 | FORCENERGY | YES |
| James Eason | 8611 Leeper Circle Anch. AK 99504 | 337-3515 | " | NO |
| ~~RANDY CARTER~~ | ~~3505 WOODLAND PARK DR~~ | ~~243-6744~~ | ~~AK CONSERVATION VOICE~~ | |
| KEN BOYD ✓ | DNR - DIVISION OF OIL | | | YES |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

**Analysis for Fiscal Note SB 256 2/23/98**

It is impossible to quantify the fiscal effect of this bill since some critical terms are not defined and no economic analysis has been provided.

Following is an example of what we believe would be the fiscal impact of this bill on the particular projects shown on the sponsor's map. We provide some examples for typical oil and gas projects in Cook Inlet and extrapolate these to the various fields.

The State and an oil company have recently negotiated the creation of the Redoubt Unit in Cook Inlet. This Unit includes several abandoned wells and contains "undeveloped" oil and thus clearly, in our view, meets the criteria of the bill. This unit was created with the understanding that royalties would be 12.5%. There was never any discussion of reducing royalties as a condition of forming the Unit (although the company could APPLY for royalty reduction under HB-207). The company never indicated that royalty relief would be necessary to develop the Unit. The fiscal consequence of SB-256 on the Redoubt Unit is:

Assume 500-1,000 bbl/day production per well, $10/bbl oil price.

500 bbl/day x $10/bbl x 12.5% = $625/day x 365 days x 10 years = $2.28 million/well
500 bbl/day x $10/bbl x 5% = $250/day x 365 days x 10 years = $910 thousand/well

The State will receive $1.37 million fewer royalty dollars at 500 bbl/day per well.

1,000 bbl/day x $10/bbl x 12.5% = $1,250/day x 365 days x 10 years = $4.56 million/well
1,000 bbl/day x $10/bbl x 5% = $500/day x 365 days x 10 years = $1.8 million/well

The State will receive $2.7 million fewer royalty dollars at 1,000 bbl/day per well.

Production per well will likely be somewhere between these two numbers, so the State will forfeit between $1.37 million and $2.7 million per well for just the Redoubt Unit.

Assuming (conservatively) that 10 wells are in production the State will "contribute" between $14 and $27 million to this project in the form of an unrequested royalty reduction.

Following the examples for oil, here are two similar analyses for gas using the following assumptions:

Two flow rates:

| | | |
|---|---|---|
| Case 1 | 1MMcf/d | 1 million cubic feet per day = 1,000 mcf/d |
| Case 2 | 5MMcf/d | 5 million cubic feet per day = 5,000 mcf/d |

Gas price $1.50/mcf This is the Cook Inlet average price

Case 1

1,000 mcf/d x 365 days x $1.50/mcf x (.125 - .05) = $41,062/year/well

In ten years = $410,620/well

This is probably the minimum economic case.

Case 2:

5,000 mcf/d x 365 days x $1.50/mcf x (.125 - .05) = $205,312/year/well

In ten years = $2,053,120/well

This case would be typical of the North Fork, Falls Creek and West Forelands fields.

Assuming the 4 gas fields on the map are one-well fields then the state would forego about $8 million (4 x $2 million) in royalties over the ten year period of the royalty reduction.

Assuming the 2 oil fields on the map produce at a rate of 10,000bbl/day the state will forego about $54 million in royalties over the ten year period of the royalty reduction.

Total for the fields on the map is $62 million for the program.

THIS ASSUMES THAT NO OTHER FIELDS OTHER THAN THOSE SHOWN ON THE MAP QUALIFY FOR THE REDUCTION.

In general, for all production to which this bill applies, the State will receive (12.5% - 5%) = 7.5% fewer royalty dollars. This is a 60% royalty reduction given without any economic analysis or justification.

# PROPOSED CS FOR HB 380 (O&G)

**Section 1.** AS 38.05.180 (f) is amended by adding a new paragraph to read:

(5) notwithstanding and in lieu of a requirement in the leasing method chosen of a minimum fixed royalty share, or the royalty provision of a lease, for leases unitized as described in (p) of this section, leases subject to an agreement described in (s) or (t) of this section, or interests unitized under AS 31.05, the lessee of all or part of an oil or gas field **identified in this section,** *[in the cook inlet sedimentary basin discovered before January 1, 1998, that has been undeveloped or shut in from January 1, 1988, through December 31, 1997, and that, before January 1, 2004, begins producing for sale previously undeveloped or shut in oil or gas,]* shall, **provided production for sale begins before January 1, 2004,** pay a royalty of five percent on *[all production of oil & gas]* **the first 40 million barrels of oil and the first 35 billion cubic feet of gas produced** for sale from that oil or gas field that occurs in the 10 years following the date on which the production for sale *[of previously undeveloped or shut in oil & gas]* commences *[from that field]*. **The fields eligible for royalty reduction pursuant to this section, all of which are located within the Cook Inlet sedimentary basin, were discovered before January 1, 1988, and have been undeveloped or shut in from at least January 1, 1988, through December 31, 1997, are:**

**1) Falls Creek ;**
**2) Nicolai Creek;**
**3) North Fork;**
**4) Point Starichkof;**
**5) Redoubt Shoal; and**
**6) West Foreland.**

**New text underlined** *[Deleted text bracketed]*

Oil and Gas Operations, Management and Policy
8611 Leeper Circle
Anchorage, Alaska 99504

Telephone (907) 337-3515
Facsimile (907) 333-9087

March 4, 1998

Senator Rick Halford, Chairman
Senate Resources Committee
Alaska State Legislature
State Capitol (MS) 3100)
Juneau, Alaska 99801-1182

Dear Senator Halford:

I wanted to take this opportunity to reply to several concerns posed by Ken Boyd, Director of the Division of Oil and Gas ("division"), in his February 20, 1998 letter to you regarding S.B 256. Mr. Boyd's concerns were related to 1) the lack of a provision in the bill to account for changing conditions to protect the State's "upside" interests, 2) the basis for the selection of the royalty rate and term of eligibility used in the bill—five percent for 10 years, 3) a question regarding whether or not all fields and all lessees were similarly situated with regard to economic need, and 4) his desire to clarify which fields are potential candidates for royalty reduction under the proposed legislation. In addition to addressing each of these concerns, I have provided some comments that might be helpful in your evaluation of the division's document entitled "Analysis for Fiscal Note S.B. 256 2/23/96".

Five percent was selected as the floor to provide consistency with the minimum royalty provisions of the state's current discovery royalty program, AS 38.05.180(f)(4), which was enacted in 1996. Five percent also was adopted as the floor by the legislature for royalty reduction under AS 38.05.180(j)(4)(A), the existing statute governing royalty reduction. A 10 year period was selected to provide a reasonable amount of time for royalty relief, on the presumption that production rates and ultimate recovery are likely to be relatively small compared with currently producing Cook Inlet oil and gas fields. The 10 year period is also consistent with the period of royalty reduction applicable under the State's current royalty reduction statute.

The economic requirements of all companies having interests in the fields which may be developed under the proposed legislation are not equal. However, based upon the fact that more than three decades have passed since those fields were discovered, without commercial development of the resources, suggests that, regardless of any individual company's specific economic requirements, royalty reduction may be required to encourage development of these fields. Given the paucity of information about the potential reserves in these fields, it is questionable that applicants could provide the information required under H.B. 207 [AS 38.05.180(j)(4)(A)] to persuade the Commissioner of Natural Resources that royalty reduction is appropriate, although it seems axiomatic that the passage of thirty years without development demonstrates the need for relief.

The fact that S.B. 256 contains no provision to accommodate changing economic conditions is not unique. For example, the legislature made the policy choice in enacting the current discovery royalty statute in 1996 that, in the interest of encouraging new exploration and development in Cook Inlet, a five percent royalty for a 10 year period was appropriate for all new discoveries, regardless of their size. S.B. 256 is intended to provide the same incentive for another class of fields, those which have been discovered, but have not been developed and produced because of their perceived economics.

As a matter of policy, if the legislature wants to limit potential benefits which a lessee might realize if its reserves turn out to be considerably higher than expected, a simple and straight-forward way of doing that would be to amend the bill to limit the volume of oil and gas to which relief would apply. Similarly, to alleviate concerns that the bill may be construed to apply to fields other than those for which it is intended, the bill could be amended to define an explicit list of candidate fields.

In reviewing the division's February 23rd analysis of its Fiscal Note for S.B. 256, you may want to consider the following points. Oil production rates decline over time. Therefore, projecting a constant production rate for 10 years, as the analysis does, overstates the volume, and thus the value, of the state's royalty share. As a result, by implication, the "loss" to the State if it receives a five percent royalty instead of a 12-1/2 percent royalty is also overstated. The rate of decline can vary for a variety of reasons, and the initiation of decline can be deferred by such initiates as waterflooding, reinjection of produced gas and other measures—if there are sufficient reserves to justify the large capital investments required to do so. However, production decline cannot be avoided, and any estimate of production should reflect that reality.

The attached illustration reflects the decline curve for the Hemlock Oil Pool in the McArthur River Field.[1] During the early development of this field, five rigs were employed in drilling wells from three platforms to develop the oil reserves. In addition, waterflooding was initiated at the beginning of field life to prolong the production plateau—something that less economic fields may not be able to afford. As illustrated, since decline began in 1976, it has continued at a rate of about 16 percent per year, a rate which is a realistic minimum rate for Cook Inlet oil reservoirs. The table below demonstrates the effect of adjusting the division's assumed production profile for the two oil fields to reflect this conservative decline profile, assuming no secondary recovery.

| Year | Volume (bbls) | Gross Value ($) | 5% | 7.5% |
|---|---|---|---|---|
| 1 | 3,650,000 | 36,500,000 | 1,825,000 | 2,737,500 |
| 2 | 3,066,000 | 30,660,000 | 1,533,000 | 2,299,500 |
| 3 | 2,575,440 | 25,754,400 | 1,287,720 | 1,931,581 |
| 4 | 2,163,373 | 21,633,730 | 1,081,686 | 1,622,530 |
| 5 | 1,817,233 | 18,172,330 | 908,617 | 1,362,925 |
| 6 | 1,526,476 | 15,264,760 | 763,238 | 1,144,857 |
| 7 | 1,282,240 | 12,822,400 | 641,120 | 961,680 |
| 8 | 1,077,082 | 10,770,820 | 538,541 | 807,812 |
| 9 | 904,749 | 9,047,490 | 452,375 | 678,562 |
| 10 | 759,989 | 7,599,890 | 379,995 | 569,992 |
| | 18,822,582 | 188,225,820 | 9,411,292 | 14,116,945 |

1 Alaska Oil and Gas Conservation Commission, 1996 Annual Report, page 82.

If one adopts the division's highest assumed oil production rate—1,000 bbls/day—and the division's "conservative" number of 10 wells per field, but adjusts for a decline of 16 percent per year, a different picture emerges. The projected value of "foregone" royalties per field is about $14.2 million, instead of the $27 million estimated by the division. More importantly the table highlights something that is missing from the division's analysis—the $9.4 million value of the five percent royalty received by the State, which, based upon the evidence of more than 30 years of non-development, might not otherwise occur.

The division's analysis also does not address the bill's potential for leveraging additional exploration and development in the vicinity of new infrastructure. That infrastructure could include roads, platforms, pipelines and associated facilities, all of which could effectively reduce the average cost of producing existing reserves, and extend the economic life of existing and new Cook Inlet production and transportation infrastructure. While these benefits may be hard to quantify, no one can seriously doubt their value. Nor, in my opinion, should they be discounted.

As I have said before, I believe S.B. 256 is an important bill which has the potential to re-energize Cook Inlet exploration and development, and to encourage the participation of a broader range of interests, including major oil companies, independent oil companies and local individuals in that development. I urge your careful consideration and support, as well as that of other members of the Resources Committee, for the bill.

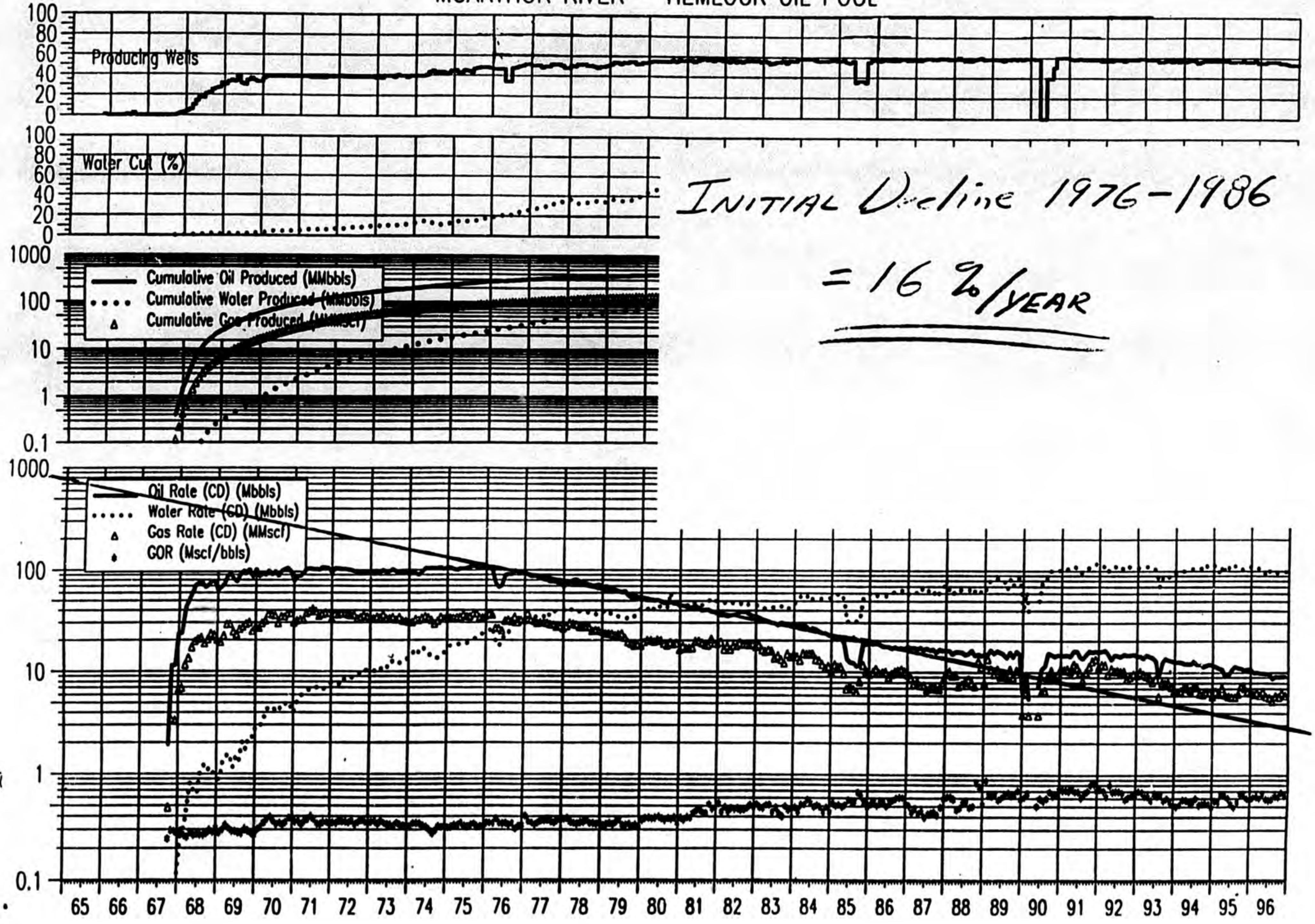
Sincerely,

Jim

James E. Eason

cc: Senator Drue Pearce
Representative Mark Hodgins
Commissioner John Shively
Director Ken Boyd

## MCARTHUR RIVER - HEMLOCK OIL POOL



# State of Alaska
# Department of Natural Resources
# Division of Oil and Gas

*Sale Results Summary*

Date of Sale: February 24, 1998

Preliminary Report

Competitive Oil and Gas Lease Sale: Sale 85A-W, Cook Inlet Exempt Reoffer

Bidding Method: Cash Bonus Bid, Fixed Royalty
Minimum Bid: $5.00 per Acre

| | | | |
|---|---|---|---|
| Tracts Offered: | 157 | Acreage Offered: | 757,878.13 |
| Tracts Sold: | 24 | Acreage Sold: | 98,010.77 |

| | |
|---|---|
| Total Number of Valid Bids | 35 |
| Total High Bonus Bids: | $828,807.37 |
| Total Exposed (Sum of All Valid | $944,873.71 |
| Average High Bonus Bid Per Acre: | $8.46 |

Highest Bid: $62,265.60
Tract Number: 117
Submitted By: Forcenergy 50 / Unocal 50

Highest Bid/Acre: $27.00
Tract Number: 116
Submitted By: Sexton 75 / Burglin 25

| Bidder Company or Group Name | Number of Tracts Bid On | Total of All Bids | Number of Tracts Won | Total of High Bids |
|---|---|---|---|---|
| Forcenergy 50 / Unocal 50 | 10 | $449,563.19 | 9 | $445,639.99 |
| Forcenergy Inc. | 3 | $108,874.25 | 3 | $108,874.25 |
| Marathon Oil Company | 1 | $27,069.54 | 1 | $27,069.54 |
| Monte J. Allen | 1 | $28,895.77 | 1 | $28,895.77 |
| Sexton 75 / Burglin 25 | 4 | $72,674.00 | 3 | $67,529.00 |
| Vondra 75 / Burglin 25 | 6 | $104,971.48 | 3 | $54,558.00 |
| Wagner 50 / Allen 50 | 1 | $42,938.22 | 1 | $42,938.22 |
| Wagner 50 / Gilbertson 50 | 9 | $109,887.26 | 3 | $53,302.60 |

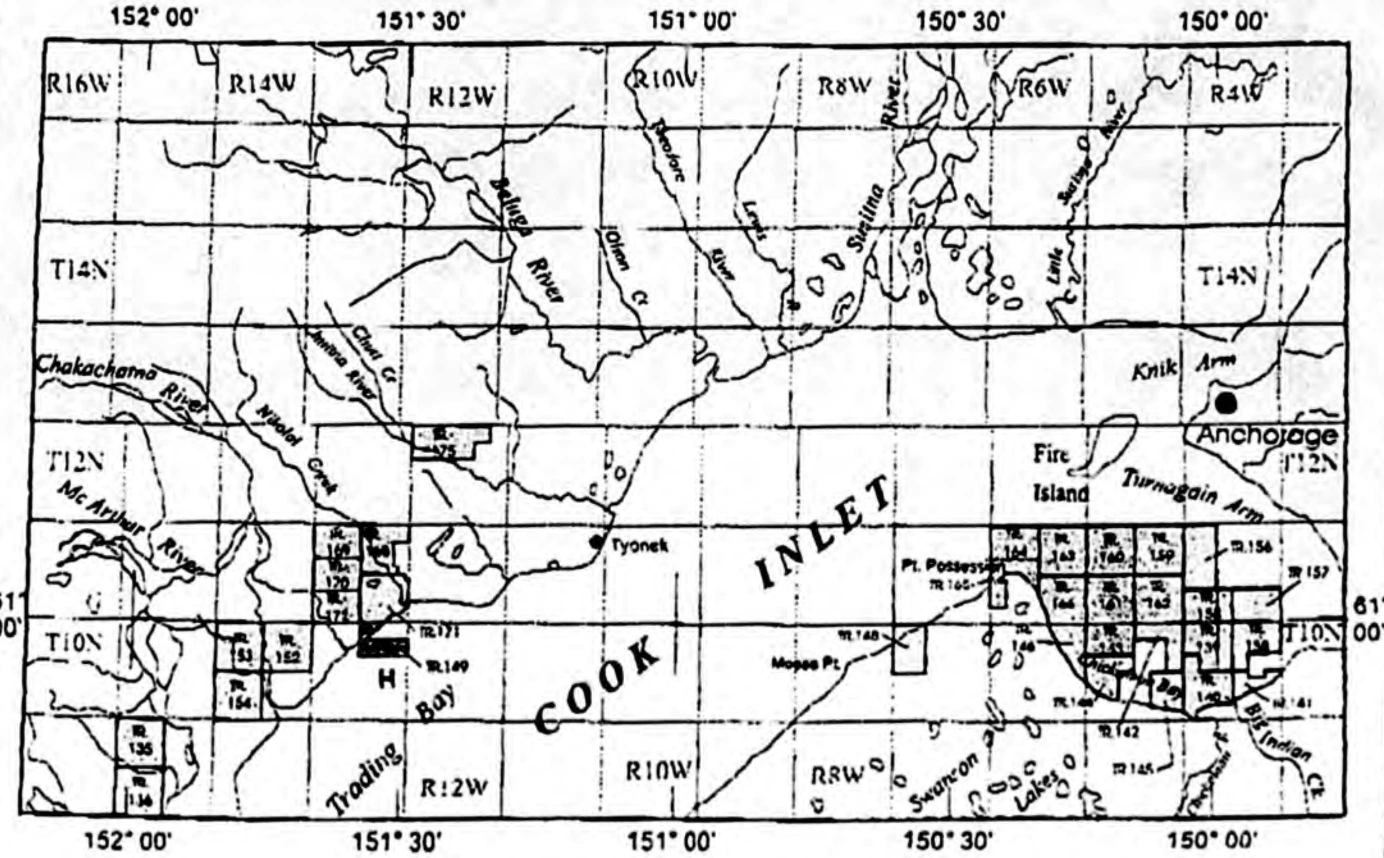
# State of Alaska
# Department of Natural Resources
# Division of Oil and Gas

*Winning Bids*

Date of Sale: February 24.1998 Preliminary Report

Competitive Oil and Gas Lease Sale: Sale 85A-W, Cook Inlet Exempt Reoffer

| Tract Number | ADL Number | Acreage | Amount | Bid / Acre | Bidder Name |
|---|---|---|---|---|---|
| 040 | 388740 | 2,475.80 | $23,520.10 | $9.50 | Wagner 50 / Gilbertson 50 |
| 041 | 388741 | 2,400.00 | $22,800.00 | $9.50 | Wagner 50 / Gilbertson 50 |
| 043 | 388743 | 735.00 | $6,982.50 | $9.50 | Wagner 50 / Gilbertson 50 |
| 065 | 388765 | 1,817.37 | $12,726.00 | $7.00 | Vondra 75 / Burglin 25 |
| 066 | 388766 | 2,946.37 | $20,629.00 | $7.00 | Sexton 75 / Burglin 25 |
| 067 | 388767 | 1,100.16 | $7,707.00 | $7.01 | Vondra 75 / Burglin 25 |
| 070 | 388770 | 2,532.23 | $27,069.54 | $10.69 | Marathon Oil Company |
| 091 | 388791 | 5,747.59 | $28,895.77 | $5.03 | Monte J. Allen |
| 094 | 388794 | 1,480.87 | $29,620.00 | $20.00 | Sexton 75 / Burglin 25 |
| 096 | 388796 | 4,874.43 | $34,125.00 | $7.00 | Vondra 75 / Burglin 25 |
| 097 | 388797 | 5,760.00 | $36,979.20 | $6.42 | Forcenergy 50 / Unocal 50 |
| 098 | 388798 | 5,706.00 | $54,834.66 | $9.61 | Forcenergy 50 / Unocal 50 |
| 101 | 388801 | 5,706.00 | $42,938.22 | $7.53 | Wagner 50 / Allen 50 |
| 108 | 388808 | 5,760.00 | $41,529.60 | $7.21 | Forcenergy Inc. |
| 116 | 388816 | 640.00 | $17,280.00 | $27.00 | Sexton 75 / Burglin 25 |
| 117 | 388817 | 5,760.00 | $62,265.60 | $10.81 | Forcenergy 50 / Unocal 50 |
| 118 | 388818 | 5,760.00 | $49,824.00 | $8.65 | Forcenergy Inc. |
| 119 | 388819 | 5,675.00 | $57,544.50 | $10.14 | Forcenergy 50 / Unocal 50 |
| 120 | 388820 | 5,691.00 | $46,267.83 | $8.13 | Forcenergy 50 / Unocal 50 |
| 123 | 388823 | 5,760.00 | $58,809.60 | $10.21 | Forcenergy 50 / Unocal 50 |
| 126 | 388826 | 5,760.00 | $41,414.40 | $7.19 | Forcenergy 50 / Unocal 50 |
| 128 | 388828 | 5,660.00 | $40,695.40 | $7.19 | Forcenergy 50 / Unocal 50 |
| 129 | 388829 | 5,760.00 | $46,828.80 | $8.13 | Forcenergy 50 / Unocal 50 |
| 149 | 388849 | 2,502.95 | $17,520.65 | $7.00 | Forcenergy Inc. |




## Sale Results

**APPARENT HIGH BIDDERS =**

**A = Marathon Oil Company**
**B = Lewis E. Vondra/C. Burglin**
**C = Richard E. Wagner/Dan R. Gilbertson**
**D = Michael R. Sexton/C. Burglin**
**E = Monte J. Allen**
**F = Forcenergy Inc./Union Oil Company of California**
**G = Richard E. Wagner/Monte J. Allen**
**H = Forcenergy Inc.**

MAP INDEX

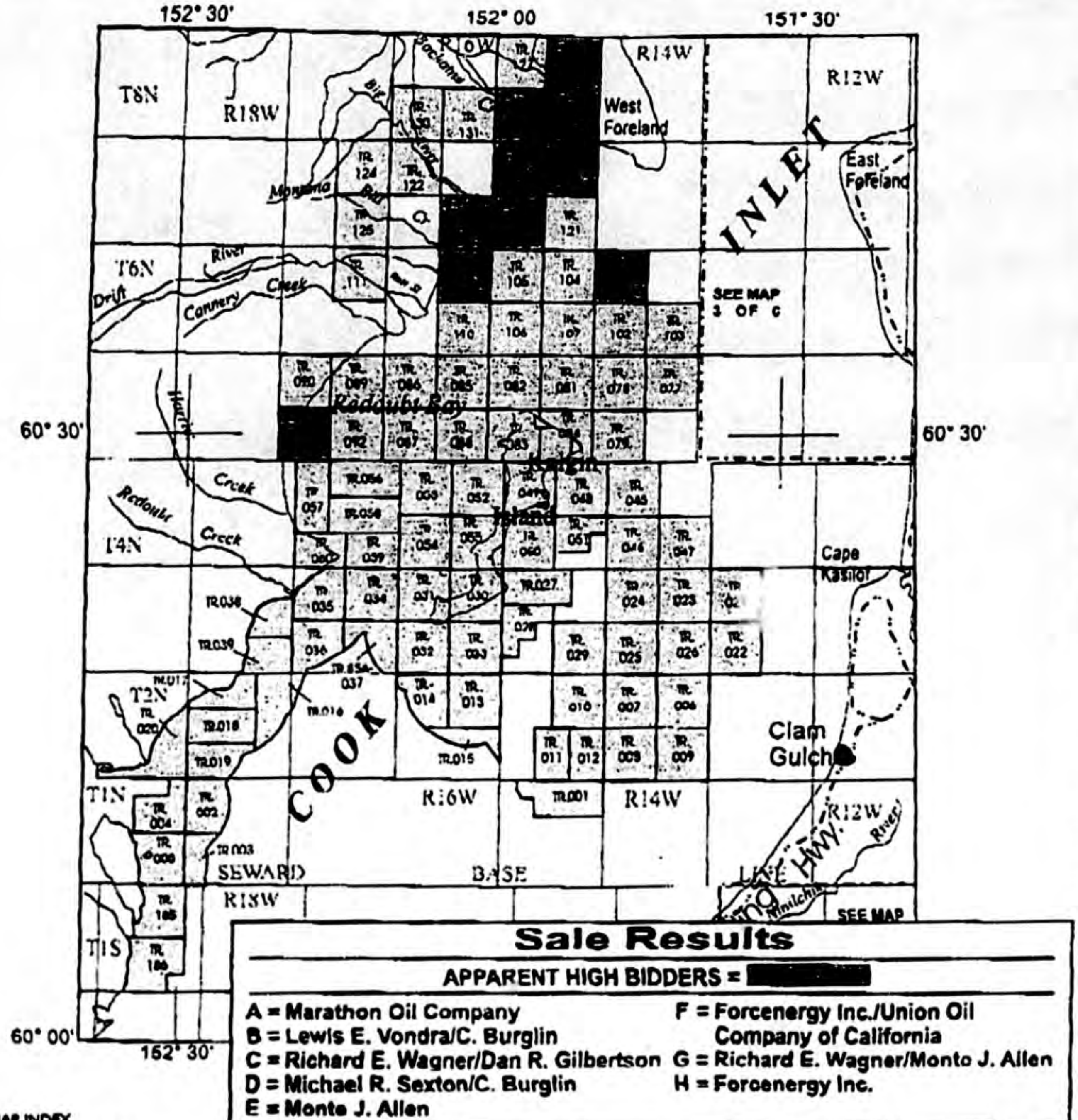

**STATE OF ALASKA**
**DEPARTMENT OF NATURAL RESOURCES**
**DIVISION OF OIL AND GAS**
**OIL AND GAS LEASE SALE 85A-W**
**COOK INLET REOFFER    FINAL SALE AREA MAP**

SCALE 1:700,000 ONE INCH EQUALS 11.3 MILES APPROX.
5 0 5 10 15 MILES

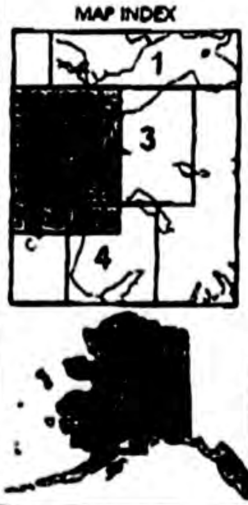
| | | |
|---|---|---|
| DIRECTOR, DIV. OF OIL & GAS<br>KENNETH A. BOYD ________ | DRAWN BY:<br>O.D.S. | DATE APPROVED: 2/24/98 |
| PETROLEUM GEOPHYSICIST<br>JAMES HANSEN ________ | CHECKED BY: | Albers Equal-Area Conic Projection Based On The Clark 1866 Ellipsoid Central Meridian -150 00 Origin Latitude 50 00 |

NOTE: THIS MAP IS NOT AN OFFICIAL TRACT MAP, BUT IS FOR INFORMATIONAL PURPOSES ONLY. A SET OF OFFICIAL TRACT MAPS IS AVAILABLE AT THE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL & GAS, 3601 C STREET, SUITE 1380, ANCHORAGE, ALASKA 99503 (907)-269-8805

FINAL SALE AREA MAP NO.1 OF 4




MAP INDEX




STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
OIL AND GAS LEASE SALE 85A-W
COOK INLET REOFFER FINAL SALE AREA MAP

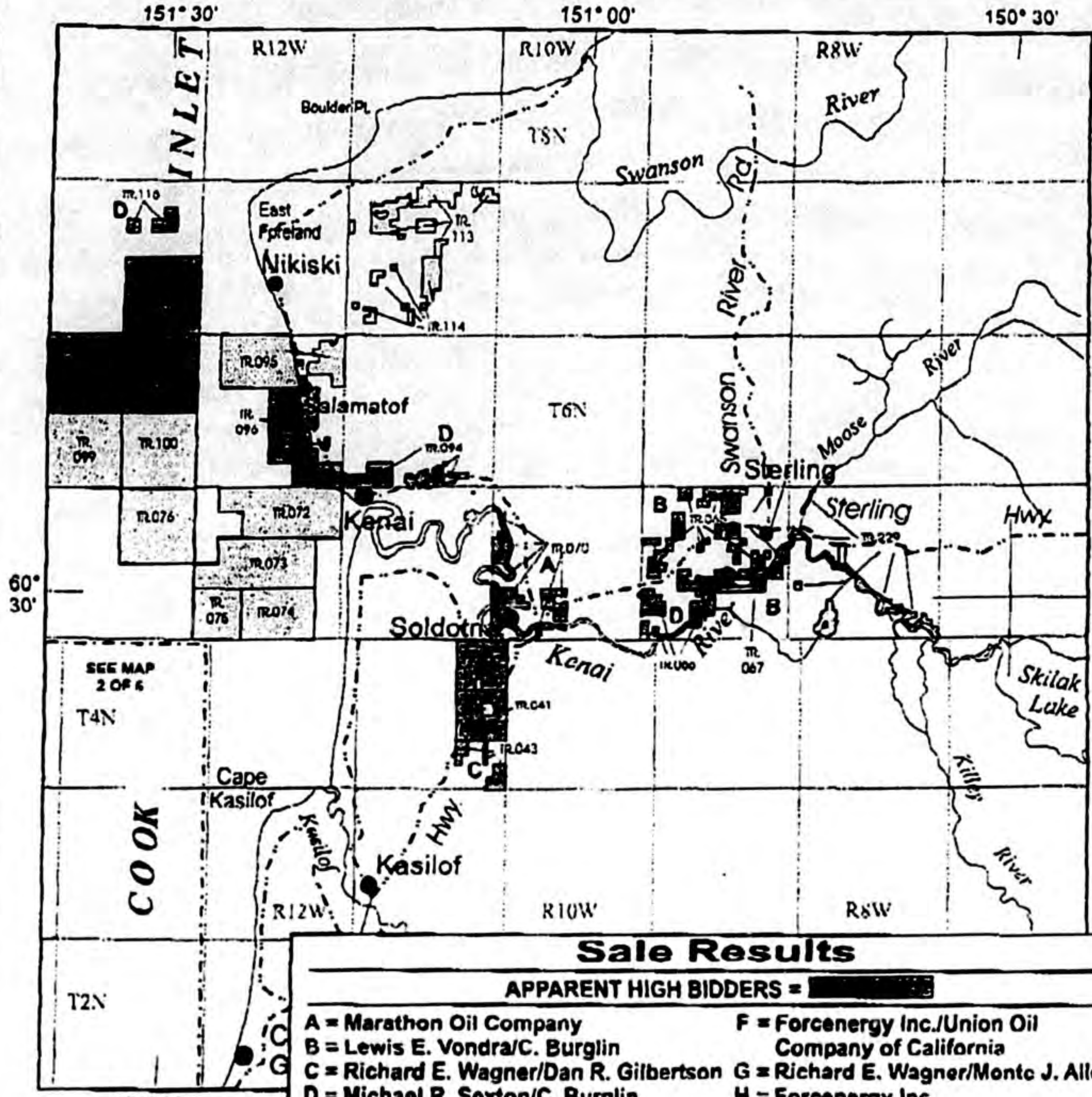
SCALE 1:570,000 ONE INCH EQUALS 9 MILES APPROX.

5 0 5 10 15 MILES

| | | |
|---|---|---|
| DIRECTOR, DIV. OF OIL & GAS<br>KENNETH A. BOYD | DRAWN BY:<br>O.D.S. | DATE APPROVED: 2/24/98<br>Albers Equal-Area Conic Projection Based On The Clark 1866 Ellipsoid |
| PETROLEUM GEOPHYSICIST<br>JAMES HANSEN | CHECKED BY: | Central Meridian: -150.00<br>Origin Latitude: 50.00 |

NOTE: THIS MAP IS NOT AN OFFICIAL TRACT MAP BUT IS FOR INFORMATIONAL PURPOSES ONLY. A SET OF OFFICIAL TRACT MAPS IS AVAILABLE AT THE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL & GAS, 3601 C STREET, SUITE 1380, ANCHORAGE, ALASKA 99503 (907)-269-8800

FINAL SALE AREA MAP NO. 2 OF 4




## Sale Results

**APPARENT HIGH BIDDERS =**

**A = Marathon Oil Company**
**B = Lewis E. Vondra/C. Burglin**
**C = Richard E. Wagner/Dan R. Gilbertson**
**D = Michael R. Sexton/C. Burglin**
**E = Monte J. Allen**
**F = Forcenergy Inc./Union Oil Company of California**
**G = Richard E. Wagner/Monte J. Allen**
**H = Forcenergy Inc.**


STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
OIL AND GAS LEASE SALE 85A-W
COOK INLET REOFFER FINAL SALE AREA MAP

SCALE 1:400,000 ONE INCH EQUALS 6.25 MILES APPROX.
5 0 5 10 15 MILES

| | | |
|---|---|---|
| DIRECTOR, DIV. OF OIL & GAS KENNETH A. BOYD | DRAWN BY: O.D.S. | DATE APPROVED: 2/24/98 |
| PETROLEUM GEOPHYSICIST JAMES HANSEN | CHECKED BY: | Albers Equal-Area Conic Projection Based On The Clark 1866 Ellipsoid Central Meridian -150.00 Origin Latitude 50.00 |

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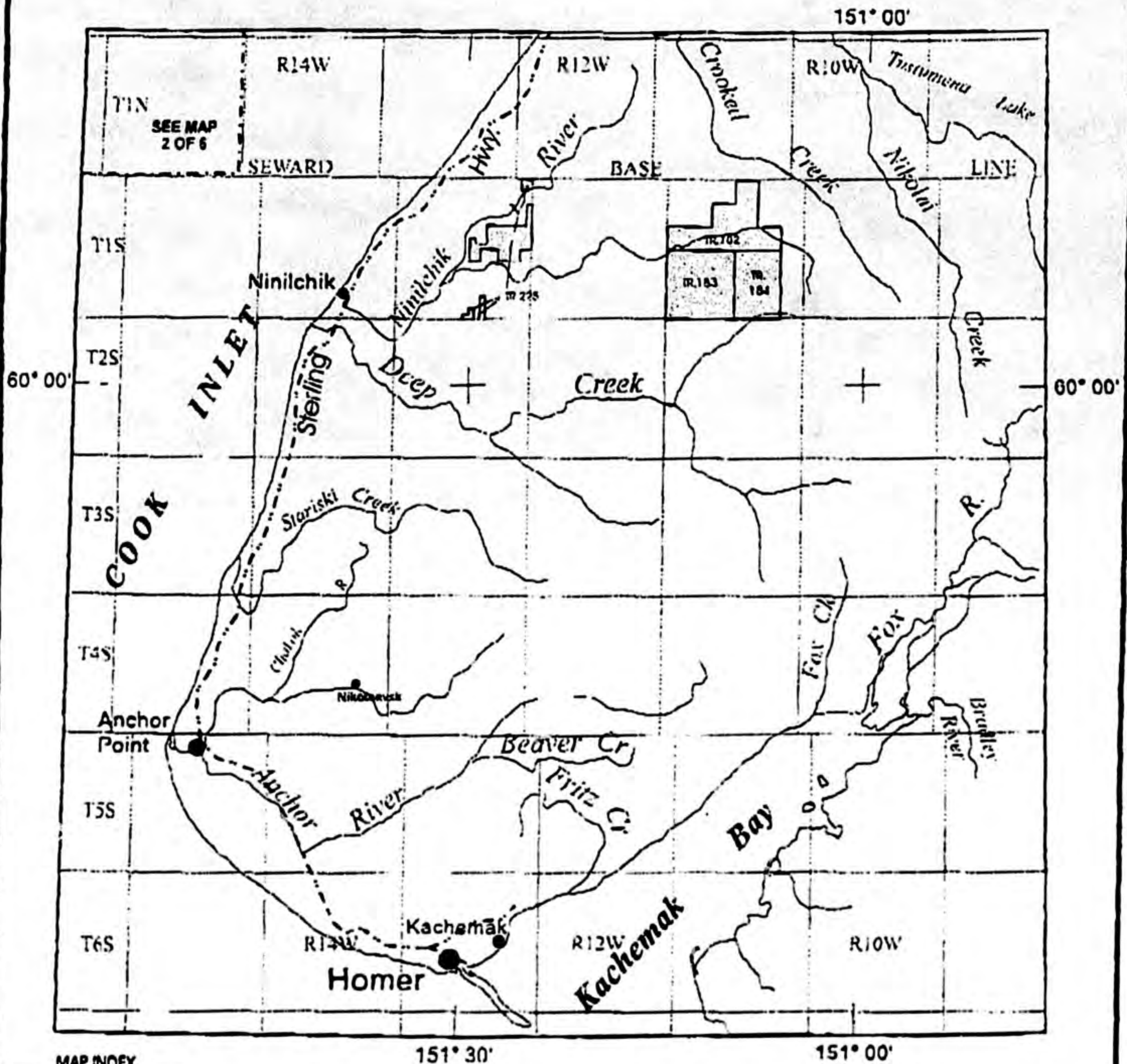
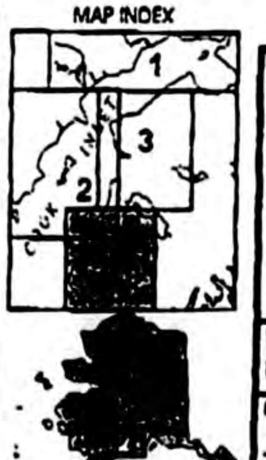
FINAL SALE AREA MAP NO. 3 OF 4




STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
OIL AND GAS LEASE SALE 85A-W
COOK INLET REOFFER FINAL SALE AREA MAP

SCALE 1:400,000 ONE INCH EQUALS 6.3 MILES APPROX.
5 0 5 10 15 MILES

| | | |
|---|---|---|
| DIRECTOR, DIV. OF OIL & GAS<br>KENNETH A. BOYD ____ ______________ | DRAWN BY:<br>O.D.S. | DATE APPROVED: 2/24/98<br>Albers Equal-Area Conic Projection Based On The Clark 1866 Ellipsoid |
| PETROLEUM GEOPHYSICIST<br>JAMES HANSEN ______________ | CHECKED BY: | Central Meridian: -150.00<br>Origin Latitude: 50.00 |

NOTE: THIS MAP IS NOT AN OFFICIAL TRACT MAP, BUT IS FOR INFORMATIONAL PURPOSES ONLY. A SET OF OFFICIAL TRACT MAPS IS AVAILABLE AT THE DEPARTMENT OF NATURAL RESOURCES, DIVISION OF OIL & GAS, 3601 C STREET, SUITE 1380, ANCHORAGE, ALASKA 99503 (907)-269-8805

FINAL SALE AREA MAP NO. 4 OF 4