

**SB**

**114**

## INITIAL SECTIONAL SUMMARY

3/8/95 by Kreitzer, Committee Aide

**SB 114:** "An Act relating to high cost marginal oil wells."

### **Section 1.:**

**Sec. 31.05.200** Amends the Oil and Gas Conservation Act to give the Oil and Gas Conservation Commission the authority to establish procedures for certifying producing wells as high cost marginal oil wells based on a formula of production.

**Sec. 31.05.210** Outlines the amount of credit allowed for a high cost marginal oil well and what the credit may be applied against.

**Sec. 31.05.290** Defines terms used in this new section.



# Alaska State Legislature

Official Business

State Capitol  
Juneau AK 99801

## SENATE RESOURCES COMMITTEE

\*expected to be present

\*Chairman: Senator Loren Leman  
\*Vice Chairman: Senator Drue Pearce  
\*Senator Steve Frank  
\*Senator Rick Halford  
\*Senator Robin Taylor  
\*Senator Georlanna Lincoln  
\*Senator Lyman Hoffman

Teleconference Sites: ANC

AGENDA  
3:30 to 5:00 p.m.  
Wednesday, February 7, 1996

SB 114: High Cost Marginal Wells  
SENATE RESOURCES COMMITTEE, Sponsor

Teleconferenced

### Expected Witnesses:

Senator Leman to present Committee Substitute LS0845G  
Ken Boyd, Department of Natural Resources

---

### NEXT MEETING:

Meeting Canceled for Friday, Feb. 9

Monday, February 12:

Leg Approve Perm't Recreat'nl Restrict'n (Senator Pearce)

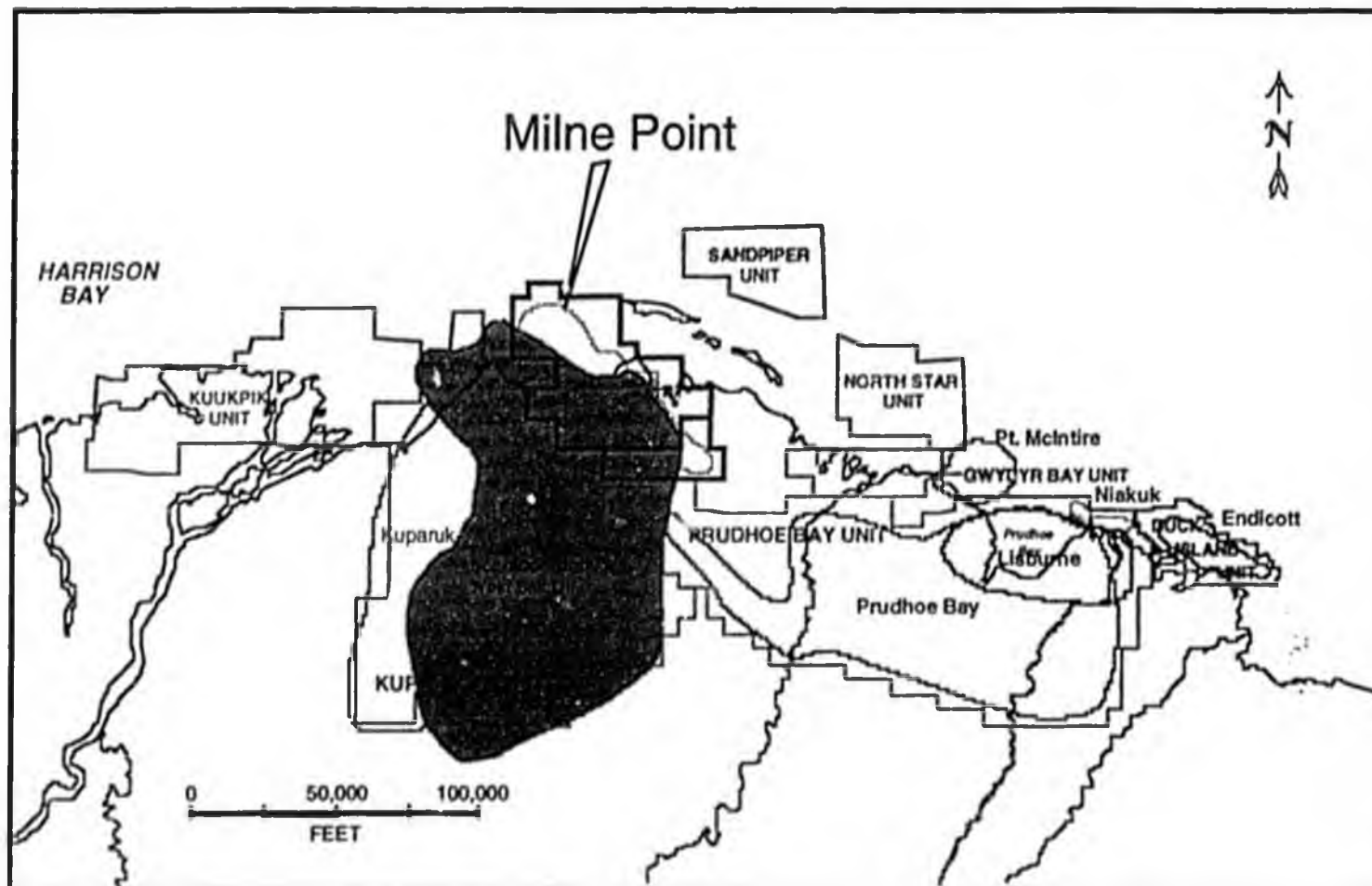
ADJOURN

# **Heavy Oil Potential at Milne Point**

**Presentation by BP Exploration (Alaska) Inc  
before the House Oil and Gas Committee**

**November 14, 1995**

# North Slope Fields



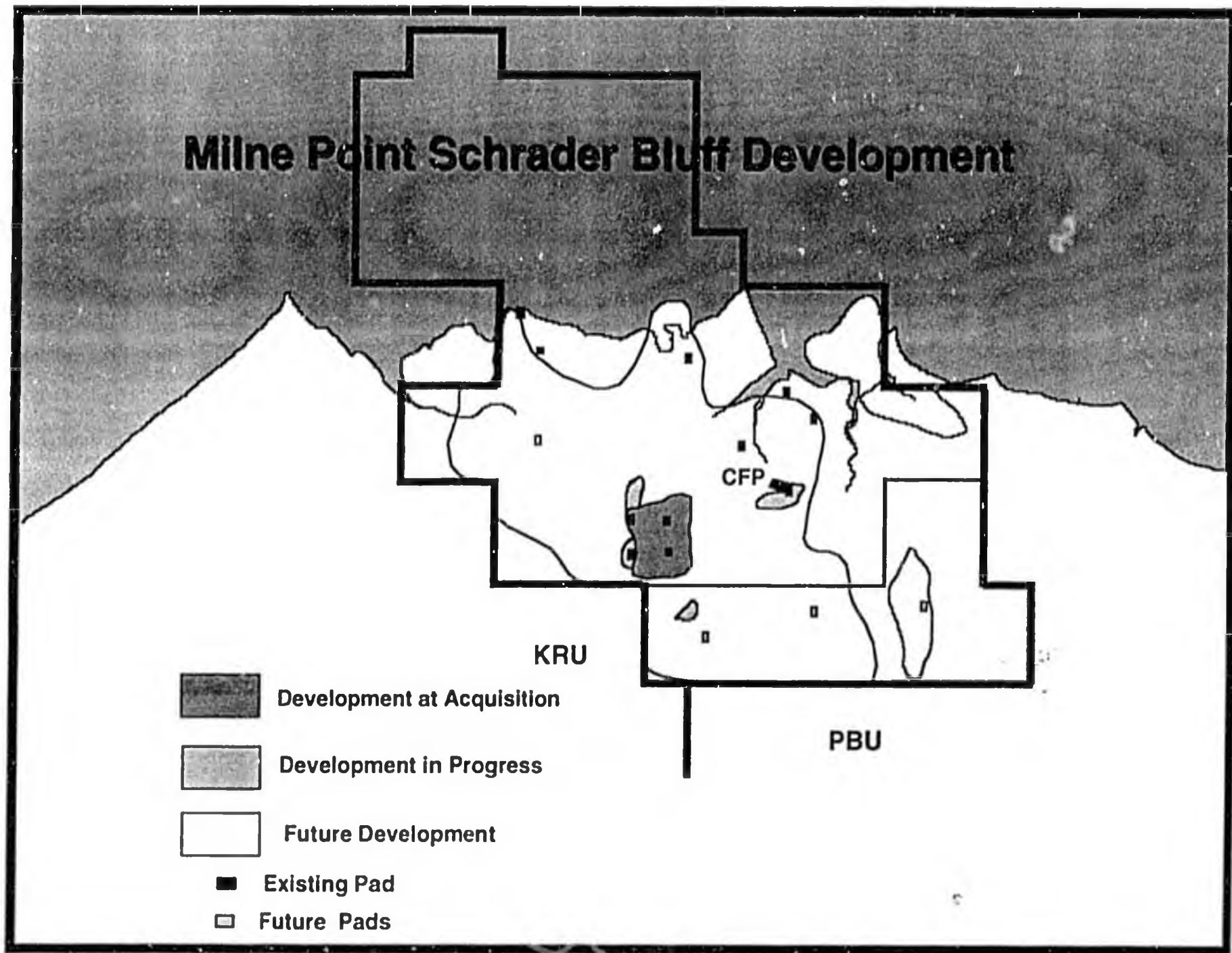
# Milne Point Schrader Bluff Development

-  Development at Acquisition
-  Development in Progress
-  Future Development
-  Existing Pad
-  Future Pads

KRU

CFP

PBU



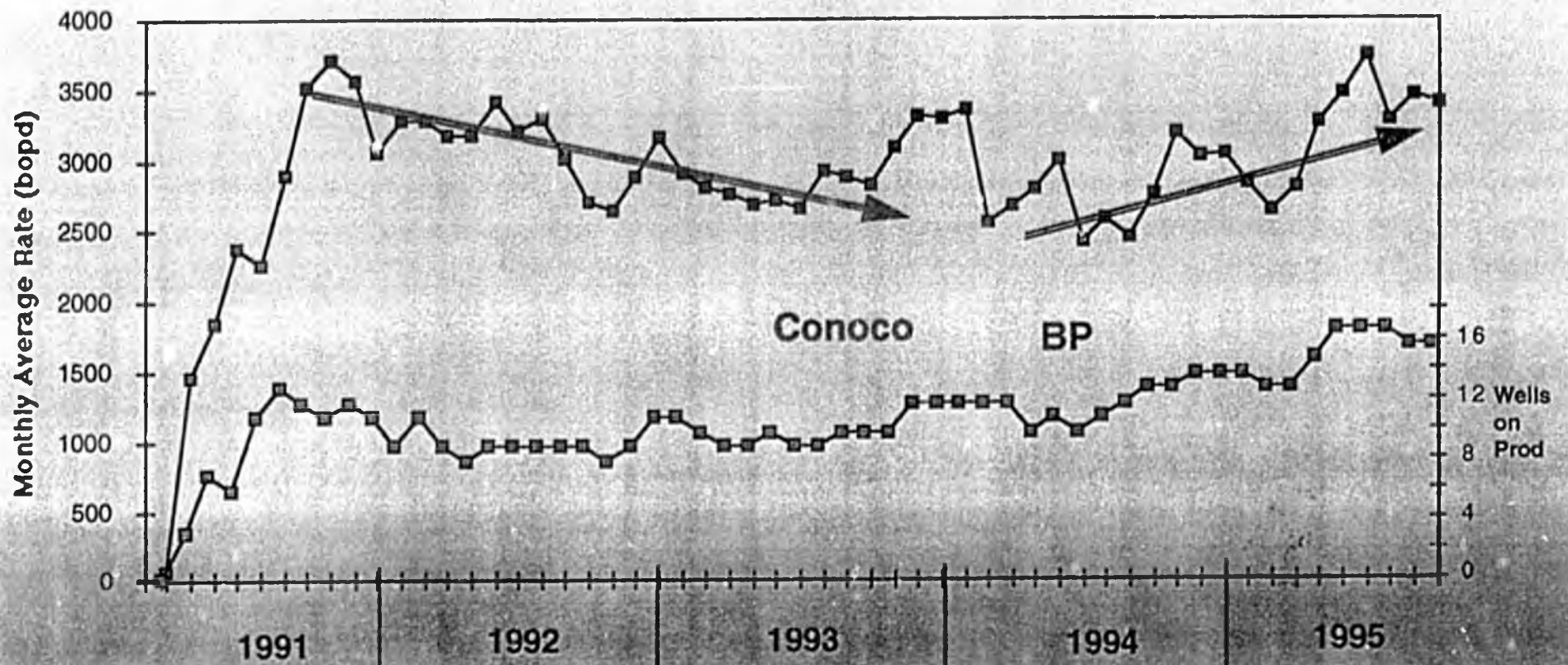
# MPU Heavy Oil - History

West Sak at MPU:  
(Schrader Bluff)

First production from pilot project in 1991.  
16 producers and 5 injectors drilled.  
Low average initial well rate ~ 350bpd.  
Not commercially competitive.  
Development stopped in '91.

Significant technical and commercial hurdles remain to be overcome

# Tract 14 Production



# MPU Schrader Bluff - Potential Program

1994

Drill Test Well

1995

Drill six "Test Wells"

?? - 1998 - ??

Potential Development  
Circa 200 to 300 Wells  
60,000 bpd Production

Key

Decisions

Determine viability and  
scope for '95 wells.  
Demonstrate increased  
rate and reduce costs.

Establish viability of  
larger scale  
development.

# 1995 Schrader Bluff Development

- **Objectives**

- Reduce capital requirements and operating costs
- Increased initial production rates from new wells
- Reduce development uncertainty

- **Progress - 1995 spend \$13,000,000 to \$15,000,000**

- Six wells drilled but not yet completed or on production
- Three wells recompleted
- Reservoir and facility technical studies initiated

- **Results**

- Drilling cost reduction demonstrated
- Improved submersible pump life realized
- Completion costs, well performance and technical study results not yet available

**SCHRADER BLUFF TECHNOLOGY:**

**HEAVY OIL TEST BED  
HIGH ANGLE FRAC PACKING  
ELECTRIC SUBMERSIBLE PUMPING  
HEAT TRACE TECHNOLOGY**

**OIL TO  
PROCESSING**

**PERMAFROST  
1800-2200'**

**HEAT TRACE FREEZE  
PROTECTION**

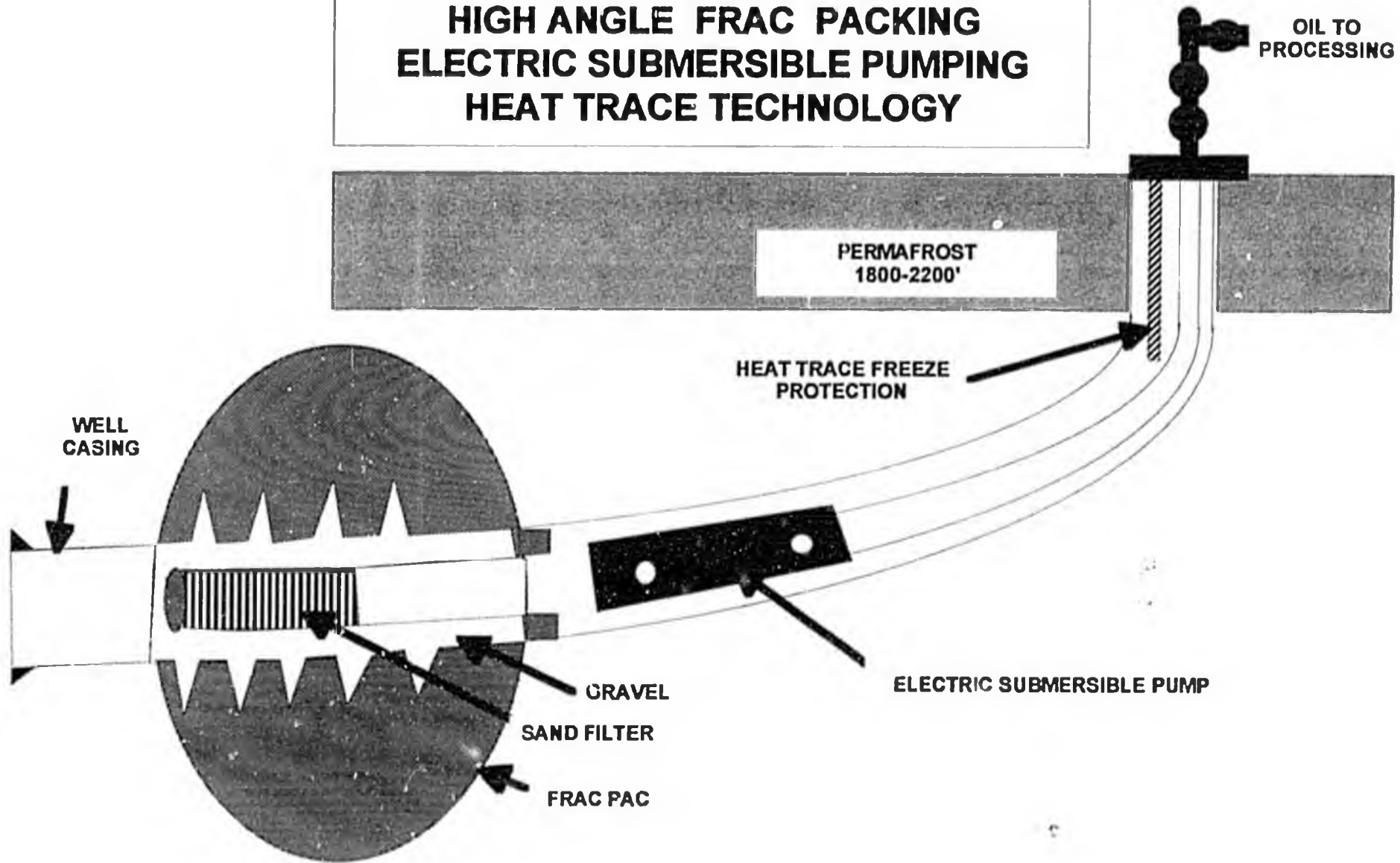
**WELL  
CASING**

**GRAVEL**

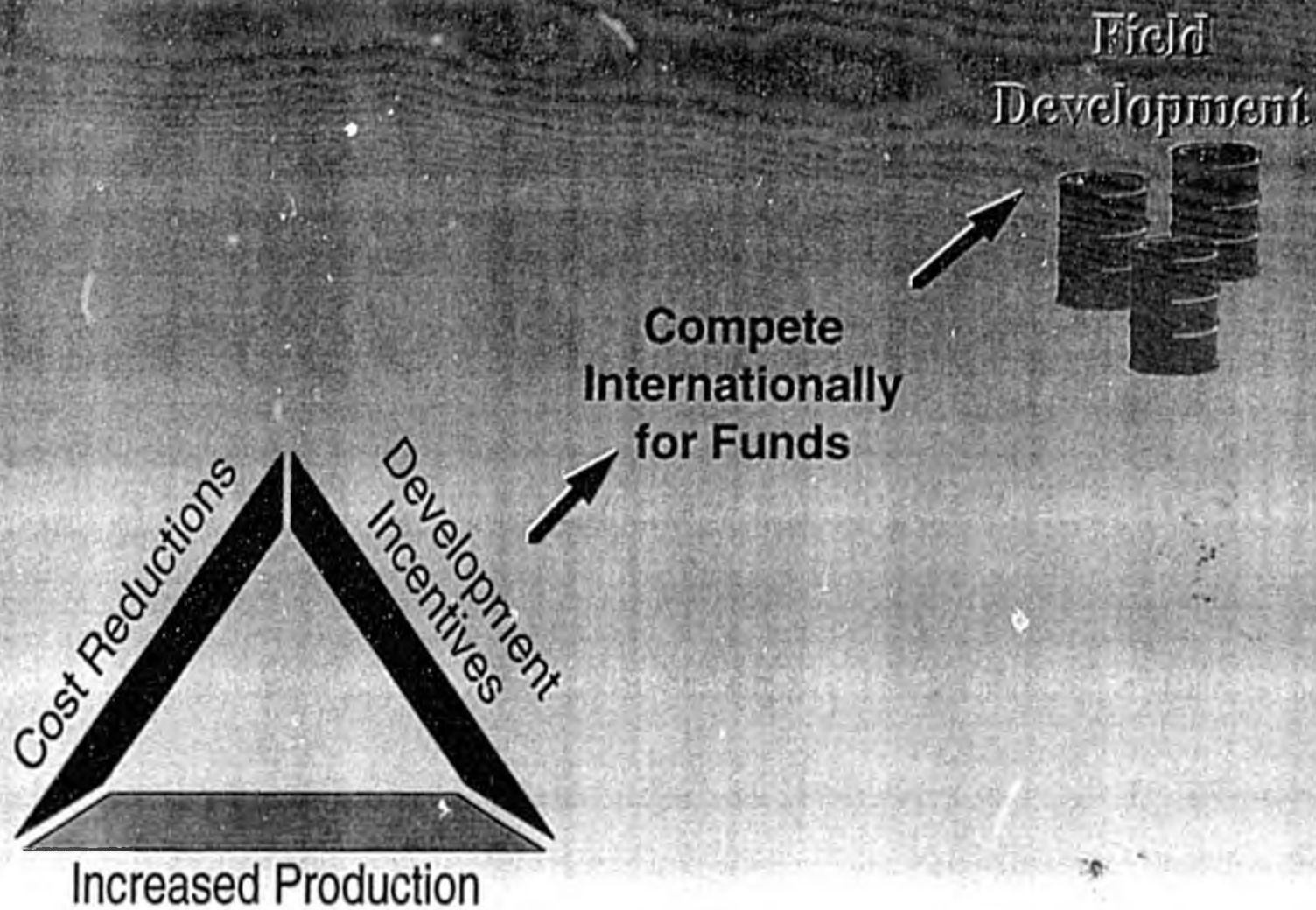
**SAND FILTER**

**FRAC PAC**

**ELECTRIC SUBMERSIBLE PUMP**



# Schrader Bluff Challenges

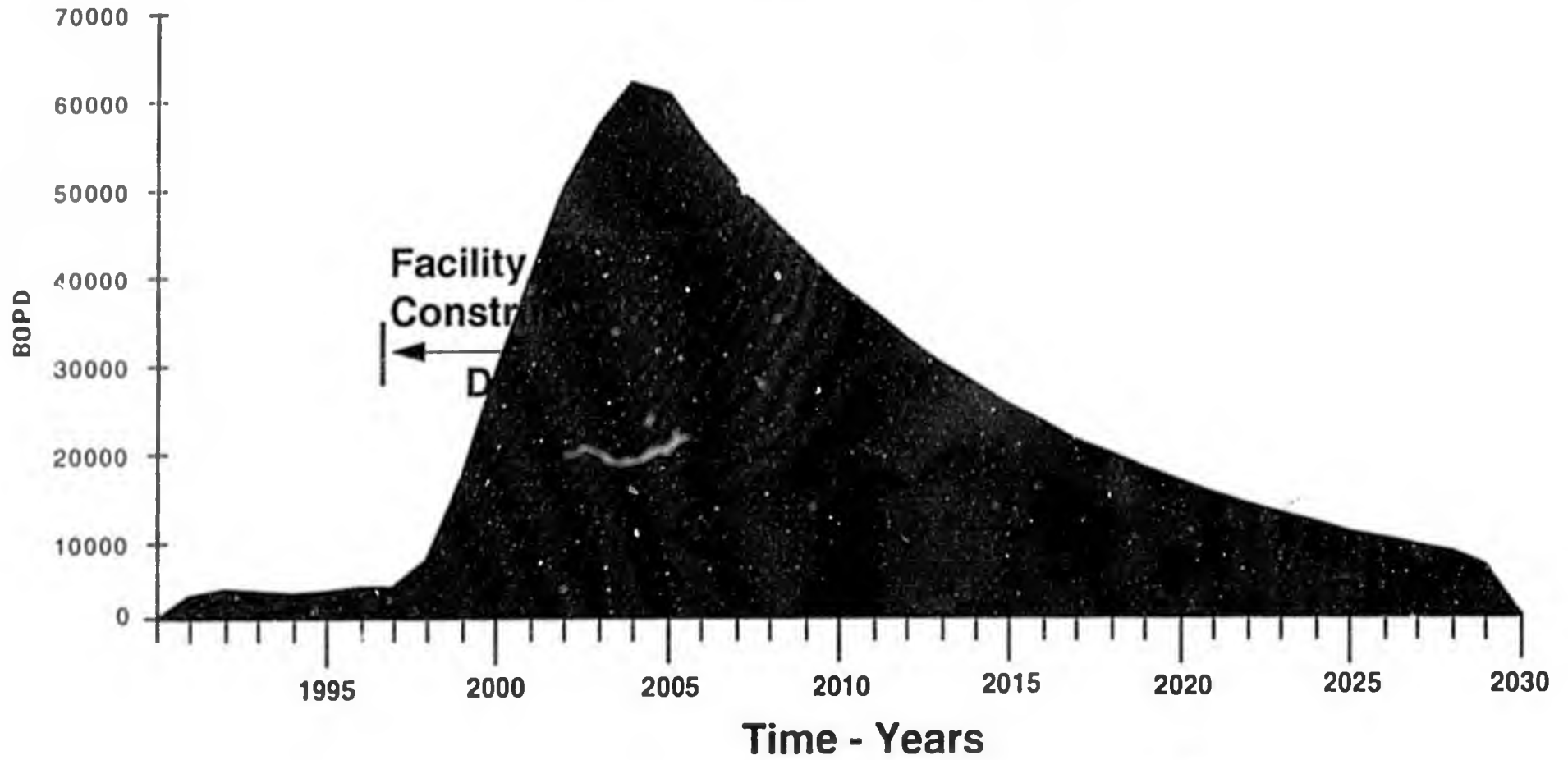


## **The "Prize" at Milne Point**

- **2+ Billion barrels of oil in place**
- **Potential ultimate recovery - 200 to 800 million barrels**
- **Expansion to adjacent fields**

# Schrader Bluff Development

(400 million bbls cumulative production)



- Ultimate impact on investment decisions
- Investment incentive will:
  - Improve economics
  - Reduce uncertainty
  - Provide positive signal to industry
  - Potentially accelerate development
- Time lag from incentive to start of investment is potentially short

## The Risk of Delay

- **Ultimate recovery placed at risk**
- **Project is less economic**
- **Current development momentum is lost**
- **Economic benefits deferred / value lost**

Previously under CS SB 114 (version F):

Certificates were good for one year.

API Gravity less than 15 degrees

Credit may be applied to suspend obligation to pay royalty on first 100 bbls daily production.

Credit can't be combined with any other program.

NOW UNDER CS SB 114 (version G):

Certificates good for five years.

API Gravity 20 degrees

Exemption from royalty payments for the first 300 bbls daily production.

Drilling must take place on or after July 1, 1996 and before July 1, 2006.

EQ

Law Offices of

**SIMPSON, TILLINGHAST, SORENSEN & LORENSEN, P.C.**

One Sealaska Plaza, Suite 300 Juneau, Alaska 99801

Telephone: (907) 586-1400      Telecopier: (907) 586-3065

E. Budd Simpson  
Jonathan K. Tillingham  
Stephen F. Sorensen  
Ronald W. Lorenson

Leslie Longenbach  
L. Merrill Lourden  
Daniel H. Inouye

**FAX COVER SHEET**

Date:	2 2/96	From:	Jon Tillingham
Fax #:		Client:	BP/OXY
# of Pages (Including Cover):	12	Case #:	840.2

Please Deliver To: Rick Poppiano & Ed Behm 915-685-5754

Message:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IF YOU DO NOT RECEIVE THE NUMBER OF PAGES LISTED ABOVE, PLEASE CALL Barb AS SOON AS POSSIBLE AT (907) 586-1400.

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

Revised 10/24/93

February 2, 1996

The Honorable Joe Green  
Alaska State House of Representatives  
State Capitol, Room 24  
Juneau, Alaska 99801-1112

Re: Application of HB 207 to Heavy Oil  
Our File No.: 840.2

Dear Representative Green:

OXY USA Inc. ("OXY") has asked us to respond to Division of Oil and Gas Director Kenneth Boyd's January 30, 1996 letter to Representative Bill Williams regarding the possible use of HB 207 to accomplish the goals of HB 325.

To begin with, OXY very much agrees with Mr. Boyd that HB 325 furthers the "primary purpose" of HB 207. OXY, in fact, entered the debate over heavy oil only in response to Governor Knowles' invitation to the private sector to explore new partnerships to develop Alaska's untapped energy resources.

However, HB 207 was never intended as the sole, nor even the principal vehicle for accomplishing that goal. Before each of the several legislative committees that considered HB 207 last session, DNR Commissioner John Shively stressed that HB 207 was only a tentative beginning, and that more concrete initiatives would follow. As Commissioner Shively explained to the Senate Resources Committee:

*There are a variety of ideas about how to provide the oil industry with the incentive to develop marginal oil fields. HB 207 was a compromise effort that can be implemented this year, as opposed to other ideas that can be studied by the Governor's Oil and Gas Policy Commission (sic).*

The Honorable Joe Green  
February 2, 1996  
Page 2

*Minutes, Senate Resources Committee, April 22, 1995 at 8. Commissioner Shively made the same point to your committee:*

*[Shively] said the Administration believes there are a number of things which can be done, both in the state's best interest and in the oil industry's best interest, to help encourage greater oil development. He noted part of that may be done now but the bulk of that will be done through the study the Governor's Oil and Gas Policy Council will be conducting over the next several years.*

*Minutes, House Resources Committee, March 32, 1995 at 3; emphasis added. As Commissioner Shively explained to the House Oil and Gas Committee, HB 207 was simply a quick first step from a new administration:*

*[Shively] said, he thinks there are other roads, and some other additional legislation. He stated it was his decision, at this point, given the newness of the Administration, that this is something we can do this year. However, the Governor has appointed the Oil and Gas Policy Council, and one of their responsibilities is to look at other methods of providing incentives for oil development, and for a healthy oil industry. He then stated they consider this to be just the first step.*

*Minutes, House Oil and Gas Committee, March 9, 1995 at 4. <sup>1/</sup>*

Heavy oil, in particular, was excluded from the HB 207 debate. Last April, OXY sought the advice of both the Administration, and the legislature, on the most appropriate vehicle for addressing heavy oil incentives. At the time, both felt that HB 207 was the wrong vehicle for that endeavor, and that the heavy oil issue should instead be treated separately, over the interim, through the Oil and Gas Policy Council and the appropriate legislative committees.

OXY appreciates the Administration's interest in encouraging heavy oil development, through HB 207 or any other means. That interest reinforces DNR's long-

<sup>1/</sup> Similarly, Commissioner Shively told the Senate Finance Committee that:

*A number of ideas have been proposed to provide incentives for development of marginal fields in Alaska. Early in this administration, the proposed royalty incentive was determined to be 'something we could do this year' while the oil and gas policy commission [sic] examines other methods of 'making the state more competitive, internationally.'*

*Minutes, Senate Finance Committee, May 8, 1995.*

The Honorable Joe Green

February 2, 1996

Page 3

held view that, under the existing fiscal environment, heavy oil development isn't likely to occur.<sup>2/</sup> The effort, unfortunately, is procrustean.<sup>3/</sup> The goals of HB 325 can't be forced into HB 207's structure for three reasons:

*I. Schrader Bluff is Ineligible under HB 207*

Mr. Boyd is correct that HB 207 does not authorize royalty relief in all circumstances, but rather under only three tightly-defined circumstances. Mr. Boyd argues that the second of those circumstances--the "Declining Field" circumstance set out in AS 38.05.180(j)(1)(B)--might be made to fit Schrader Bluff.<sup>4/</sup>

The "Declining Field" clause in HB 207 was intended to apply to older fields that are reaching their economic limit because production is declining, and per-barrel costs are correspondingly rising. It is, in short, the Cook Inlet clause, and was never intended to apply to stimulate initial development of new fields that had experienced only pilot drilling.

The limitations of that clause, and its inapplicability to Schrader Bluff, are apparent from three different angles:

*a. The language of the clause.* By its terms, the clause allows royalty relief only: (1) to "prolong the life" of an oil field; and (2) "as costs per barrel...increase."

The purpose of HB 325 is not to "prolong" Schrader Bluff's field life, for at the moment (and save for a pilot project) there is nothing to prolong. HB 325's purpose, rather, is to encourage *initial development* of an essentially untapped field.<sup>5/</sup>

<sup>2/</sup> As our white paper, *An Opportunity to Develop Alaska's Heavy Oil Resources*, explains, DNR's Spring, 1994 production forecasts concluded that the entire Milne Point Unit (inclusive of Schrader Bluff) would be abandoned in 2006, while that agency's Spring, 1995 forecasts predicted unit abandonment in 2011. Neither forecast assumed any heavy oil development, save for the minor production flowing from the Tract 14 pilot project. Some projected heavy oil development first appeared in the Department of Revenue's Fall, 1995 forecasts because of methodology changes that were unrelated to the actual likelihood of Schrader Bluff development.

<sup>3/</sup> Procrustes, you'll recall, was the villainous son of Poseidon who forced travelers to fit into his wooden bed by stretching them on a rack, or cutting off their limbs.

<sup>4/</sup> Mr. Boyd briefly argues that the third circumstance--where royalty relief may be granted to "reestablish production of shut-in oil"--might also be availing. There is no shut-in production at Schrader Bluff, and, through the Tract 14 pilot wells, the field produces and sells 3,000 bbls/day.

<sup>5/</sup> Indeed, one would think that, if any of HB 207's three bases for royalty relief were applicable to Schrader Bluff, it would be what Mr. Boyd calls the "New Pool" clause of AS 38.05.180(j)(1)(A). However, Mr. Boyd concedes that this basis is unavailable because it excludes any field which has "previously produced oil or gas for sale." The statute thus fails to account for new fields from which some production has occurred from test or pilot drilling. Whether that omission was intentional or inadvertent, it's still nonetheless fatal to Schrader Bluff's eligibility under HB 207.

The Honorable Joe Green

February 2, 1996

Page 4

Moreover, "costs per barrel" are not increasing at Schrader Bluff, as they are in Cook Inlet where constant operating expenses are being spread over fewer and fewer barrels. To the contrary, one essential goal of BP's and OXY's pilot efforts has been to reduce per barrel costs, and, as BP has testified before your committee, continued *decreases* in per barrel costs are as essential to field development as an effective legislative incentive.

b. *HB 207's legislative history.* Commissioner Shively explained to the Senate Finance Committee that the "Declining Field" clause was only intended to cover "fields that are declining or about to be shut in." <sup>6/</sup> The clause, the Commissioner added, addressed only fields "that might be abandoned" (*id.*), and DNR's position paper on HB 207 made it clear that the clause was aimed only at providing relief at the end of a field's life. The clause, the agency said, covered:

*Oil and gas fields whose economic life may be prolonged in light of increasing costs in the later stages of production.*

"CS for HB 207(FIN)AM QUESTIONS AND ANSWERS," (hereinafter "DNR Paper") undated at 1. These were what the agency called "mature producing fields," <sup>7/</sup> or what Chair Rokeburg more directly described as "old uneconomic fields...e.g. Cook Inlet." <sup>8/</sup>

The administration and the legislature knew what the "Declining Field" clause encompassed. The clause was directed at Cook Inlet fields, and not initial development of ANS heavy oil reserves.

c. *Prior DNR precedent.* HB 207 added only one category of fields eligible for royalty relief--Mr. Boyd's "New Pools," the most frequently cited example being the Badami Field. As DNR consistently reminded the legislature:

*The current law allows the commissioner to grant royalty reduction to prolong the economic life of a field or to reestablish shut-in production.*

DNR Paper at 1. Indeed, DNR often cited its pre-existing authority under the Declining Field clause as a defense to claims that HB 207 gave the agency excessive discretion. Granting royalty relief under the Declining Field clause, Commissioner Shively told the House Oil and Gas Committee, "is really not something new to the office." <sup>9/</sup> Indeed,

<sup>6/</sup> Minutes, Senate Finance Committee, May 8, 1995.

<sup>7/</sup> *Id.* at 3.

<sup>8/</sup> Memorandum, Chairman Rokeburg to Members of Senate Finance Committee, May 5, 1995 at 2.

<sup>9/</sup> Minutes, House Oil and Gas Committee, March 9, 1995 at 4.

The Honorable Joe Green  
February 2, 1996  
Page 5

and as Mr. Boyd explained to the Senate Finance Committee, the Conoco royalty relief application had been decided under that clause. <sup>10/</sup>

The Conoco decision, in which Conoco and OXY were denied any adjustment to the special royalty surcharge imposed on some Milne Point production at the time the Milne Point Unit was formed, concluded that relief could not be granted under the Declining Field clause until near the very end of field life. Until then, projections about field economics would be dependent on projections of future oil prices, and the inherent uncertainties in forecasting the future price of oil made it impossible for Conoco to make the requisite "clear" showing of entitlement to relief. Said the hearing officer:

*It is impossible to ascertain whether royalty relief granted after three years of production in a field with an estimated field life of twenty-five to twenty-eight years would compensate for, and be commensurate with, increasing costs in the later stages of production decline. Given the volatility of future oil prices and the remoteness of late stage costs, the department should not conclude that this standard would be met by granting the requested royalty reduction [under the Declining Field clause] at this time.*

*It is very difficult, if not impossible, to provide such ['clear'] evidence here, since the Milne Point field is in the very early stages of production. <sup>11/</sup>*

The Declining Field clause, DNR ruled, was available only to Cook Inlet fields, where but a few production years remained. Younger fields were ineligible. And given that:

- (1) the Declining Field clause, according to DNR, simply transferred intact into HB 207;
- (2) the former standard of requiring a "clear" showing was replaced by HB 207 with an even more stringent "clear and convincing showing" requirement; <sup>12/</sup> and
- (3) Schrader Bluff's potential future field life of perhaps 41 years is nearly twice as long as the Kuparuk Formation field life at issue in the Conoco decision,

<sup>10/</sup> Minutes, Senate Finance Committee, May 8, 1995.

<sup>11/</sup> Recommended Decision of the Commissioner of Natural Resources Regarding the Conoco Application for Royalty Reduction on ADL 47433, 47434, 47437, 47438, and 28231 (Kuparuk Participating Area, Milne Point Unit) (hereinafter "Conoco Decision"), December 28, 1990 at 15-16.

<sup>12/</sup> AS 38.05.180(j)(2).

The Honorable Joe Green

February 2, 1996

Page 6

Mr. Boyd's suggestion that the future development of ANS heavy oil ought to be adjudicated under the Declining Field clause does not give ground for optimism.

### *II. HB 207 Does Not Allow Royalty Suspensions*

Mr. Boyd has suggested an amendment to HB 207 that might obviate Schrader Bluff's eligibility problem, though even that amendment would fail to cure the seemingly insurmountable barrier imposed by the Conoco decision. The Conoco decision aside, however, amending HB 207's eligibility requirements would not lessen any of the other difficulties inherent in relying on that discretionary statute.

The first of these remaining problems is HB 207's mandatory 3% royalty floor for Declining Fields. AS 38.05.180(j)(4)(B).

As our white paper explains (*see n. 2, ante*) Heavy oil fields are materially different from the kinds of fields considered in the debate over HB 207. Their initial production rates are low; however, production declines quite gradually thereafter, and the field enjoys a remarkably long life—in Schrader Bluff's case, an estimated 41-years.

Thus, the white paper demonstrates, the State of Alaska would likely earn considerably more royalty income from a five-year royalty suspension at the outset production (which is what HB 325 envisions) than from a reduced royalty spread over the life of the field (as HB 207 envisions).

Indeed, the white paper estimates that the State of Alaska *would lose about \$800,000 per well* if it imposed a 5% field royalty under HB 207 rather than enacting HB 325. *Id.* at 39, Chart 16.

As the white paper also discusses, Arthur D. Little, in its report to the Oil and Gas Policy Council, faulted Alaska for insisting on a one-size-fits-all royalty policy that is insensitive to the peculiarities of particular marginal fields. HB 207's royalty floor may make sense as a general proposition, but it diserves both the public's and industry's interest in developing heavy oil. In this respect, then, HB 207 proves Arthur D. Little's point, and it also underscores the wisdom of Commissioner Shively's repeated cautions to the legislature that HB 207 was never intended to address every oil and gas incentive issue.

### *III. HB 207 Addresses Only Lease-Based Royalty Relief*

HB 207 only authorizes royalty relief for leases and unitized interests. AS 38.05.180(j)(1). It does not envision royalty relief targeted to individual wells.

HB 325, conversely, purposefully targets only individual new heavy oil wells. In so doing, it denies any incentive to production from pre-existing heavy oil wells, or production from other oil-bearing formations in the unit. In this way, it ensures that

The Honorable Joe Green

February 2, 1996

Page 7

incentives are offered only when they serve the bill's primary purpose—to encourage new heavy oil drilling.

Also, HB 325's five-year suspension limit applies on a per well basis, so that the state can begin receiving royalties early in the field's development. And it imposes its 500/bbl./day cap on a per well basis, because individual well production rates are the best measure of whether the heavy oil property as a whole requires the incentive.

HB 207's lease-based approach does not seem suited to the kind of targeted relief, and targeted safeguards, contained in HB 325.

#### *IV. HB 207 Is Burdened By an Unrealistic Economic Test*

In the Conoco decision, the hearing officer ruled that an oil company should invest in a prospective oil and gas development, and needs no incentive, if it projects a rate of return from that venture at least equal to the then-current yield on a risk-free 90-day U.S. Treasury bill. *Conoco Decision* at 10.

OXY thought this an unreasonable standard. If an investor can earn the same rate of return from: (1) a risk-laden oil venture; or (2) a T-bill, why would that investor not simply purchase the T-bills?

This standard was imposed by a prior administration. However, nothing in HB 207 expressly altered that standard. And unless and until DNR reconsiders the matter, this standard remains a formidable obstacle to any worthwhile development incentive.

#### *V. HB 207 Fails to Achieve Three Other Goals of HB 325*

Our white paper lists seven criteria for any effective heavy oil incentive. HB 207 fails each of these three:

*a. Immediacy.* As BP has testified before your committee, there is a window of opportunity for developing ANS heavy oil that, as experience has shown, may pass quickly. Mr. Boyd has testified that DNR could complete an HB 207 application for heavy oil in as few as three months. However, given that:

(1) Alaska's only prior royalty reduction proceeding required 15 months to complete; and

(2) HB 207's process is considerably more complex than prior law's,<sup>13/</sup>

<sup>13/</sup> Among the steps required by HB 207 are: (1) preparation of preliminary and final findings; (2) a mandatory 30-day public comment period; (3) possible selection of an independent consultant; (3) preparation and agency review of the consultant's report; (4) agency audits; (5) possible legislative committee review; and (6) gubernatorial review.

The Honorable Joe Green  
February 2, 1996  
Page 8

we believe that one year is a more realistic minimum;

(b) *Certainty.* As you know, HB 207 accords DNR considerable discretion. Indeed, no matter how compelling the applicant's economic case, DNR remains free to deny or limit relief under an open-ended "public interest" standard. AS 38.05.180(3)(A). As a result, no prudent investor would commit capital on the assumption that adequate relief under HB 207 would be granted. To the contrary, any investment decision made in 1996 would necessarily assume that relief would ultimately be denied; and

(c) *Credibility.* Our white paper argues that any heavy oil incentive should draw on successful experience in other oil producing jurisdictions. The Arthur D. Little report called royalty suspensions a tried and successful tool to stimulate investment in marginal fields, and the white paper lists the United States, and seven producing states, as jurisdictions that have employed royalty and tax suspension to do just that. In Texas alone, a high-cost gas well tax suspension resulted in a 400% increase in gas wells drilled an 104,000 new additional employment years over the suspension's four-year history. *Id.* at 35.

Conversely, Alaska's local history on discretionary royalty reductions is less encouraging. There has been only one such completed proceeding, and after nearly four years of agency and court proceedings, the principal applicant--Conoco--sold its interest in Milne Point and left the state.

Besides its certainty, HB 325, in contrast to HB 207, benefits from its simplicity. As we've seen, the only prior completed royalty reduction proceeding in Alaska consumed 15 months. As would be the case with HB 207, each individual lessee was required to present a complete, lessee-specific economic case. Even though it owns but an 8.81% interest in Milne Point, OXY was forced to bear six-figure fees and costs associated with the application, as well as a considerable disruption of company operations.

Independent companies with smaller interests in Alaska, or with only prospective interests in the state, will not be attracted to Alaska by potentially complex administrative proceedings with uncertain outcomes. Once again, Arthur D. Little's admonition is pertinent. Alaska, for too long, has built its royalty policies around large, profitable fields run by large interest holders. As a result, the gene pool of Alaska's oil industry continues to shrink, and reliance on HB 207 to spur ANS heavy oil development would do nothing to reverse that trend.

#### *VI. HB 325 Enhances the Legislature's Role in Setting State Royalty Policy*

HB 325 reflects the belief that, where it is possible to do so, the legislature itself should set royalty policy. That wasn't possible with HB 207, since its broad scope encompassed too many varying situations to admit to direct legislative management.

The Honorable Joe Green

February 2, 1996

Page 9

HB 325, on the other hand, focuses only on a known and well-understood development challenge. It well admits to a reassertion of legislative involvement in this sphere, if the legislature chooses to take that opportunity. In part, that's because there seems something of a consensus that ANS heavy oil is unlikely to be developed without an effective incentive. <sup>14/</sup> A better opportunity for direct legislative involvement is, in our view, unlikely to present itself.

On behalf of OXY, let me extend our thanks for the consideration that I know you, and the House Resources Committee members, will give to the thoughts expressed in this letter. If you or any committee member have any further questions, please don't hesitate to contact me.

Sincerely,

SIMPSON, TILLINGHAST, SORENSEN & LORENSEN

Jon K. Tillinghast

<sup>14/</sup> For years, the departments of Natural Resources and Revenue took that position, and nothing has changed since the Spring of 1995 when that view was last articulated. For their part, companies such as BP, OXY, Arco and Conoco have invested over \$270 million in ANS heavy oil pilot projects over the past decade. If, for example, Schrader Bluff could be economically developed without changes in the state's fiscal structure, its owners would have plainly seized the opportunity to recover that investment a long time ago. Our white paper discusses the technical, logistic and economic hurdles associated with heavy oil development in detail, and we've heard no one suggest that the case was overstated.

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

3601 "C" STREET, SUITE 1350  
ANCHORAGE, ALASKA 99503-5948  
PHONE: (907) 269-8784

January 30, 1996

The Honorable Bill Williams  
Alaska State Representative  
State Capitol, Room 128  
Juneau, Alaska 99801-1182

Dear Representative Williams:

You asked whether HB 207 passed last session, could be used to grant royalty relief for the production of "heavy oil." The division's short answer is yes. Nevertheless, because of the concerns expressed in the hearing on January 24 about the applicability of HB 207 to heavy oil production, the administration would support an amendment to HB 207 to provide explicitly that it applies to heavy oil production.

Subject to several provisions designed to protect the state's interests, HB 207 grants authority to the commissioner of the Department of Natural Resources to modify the existing royalty rate "to allow for production that would not otherwise be economically feasible" for any one of three types of oil or gas pools. In essence, the three are:

1. To allow production from an oil or gas pool that has been delineated, but has not previously produced ("New Pool")
2. To prolong the economic life of an oil or gas pool as costs per barrel or barrel equivalent increase ("Declining Pool")
3. To reestablish production from a shut-in oil or gas pool ("Shut-in Pool")

For purposes of HB 207, heavy oil production is no different from any other type of oil production. In other words, HB 207 would apply whether the oil production consisted of heavy, medium, or light production. If a company wished to produce heavy oil from a Shut-in Pool, it could be granted royalty relief under HB 207. For example, heavy oil production from ARCO's portion of the Schrader Bluff pool (which ARCO calls West Sak) that has been shut-in could be granted royalty relief. The same would be true for heavy oil production from a Declining Field or New Field.

Oxy and BP have a specific concern about whether heavy oil production from the Schrader Bluff pool within the Milne Point Unit could qualify under HB 207. Again the issue is not whether heavy oil production could qualify; rather it is whether the Schrader Bluff pool fits within one of the three types of pools listed in HB 207.

In the division's opinion, the Schrader Bluff pool does not meet the definition of a New Pool because the Schrader Bluff production has been sold. Arguably, the Schrader Bluff pool meets the definition of a Shut-in Pool. The Arco portion of the Schrader Bluff pool is currently shut-in. The Tract 14 pilot project for production from the Oxy and BP portion was shut-in from 1992 to 1994. If the production remains uneconomic, as the companies asserted in their testimony and the pilot project was stopped, the Schrader Bluff pool would clearly qualify as a Shut-in Pool.

The Honorable Bill Williams

January 30, 1996

Page 2

The most applicable definition to the Schrader Bluff pool is the Declining Pool definition, number 2 above. First, granting royalty relief could "prolong the economic life of" the Schrader Bluff pool production. Second, the costs per barrel increase with heavy oil production. Most importantly, granting relief, assuming it was justified, would be consistent with HB 207's primary purpose "to allow for production that would not otherwise be economically feasible." It appears that HB 207 could be applied to heavy oil production from the Milne Point Unit.

Nevertheless, some of the companies and representatives have expressed concern about the applicability of HB 207 to heavy oil production from the Milne Point Unit. To alleviate any concern about HB 207's applicability to the Milne Point Unit, the administration would support an amendment to HB 207 to make heavy oil explicitly included within the purview of HB 207. This could be accomplished by amending the language in AS 38.05.180(j)(1)(B) to read as follows:

(B) to prolong the economic life of an oil or gas field or pool as costs per barrel or barrel equivalent increase or to allow for the production from an oil pool containing heavy oil, defined as production with American Petroleum Institute weighted average gravity of 20 degrees or less, or

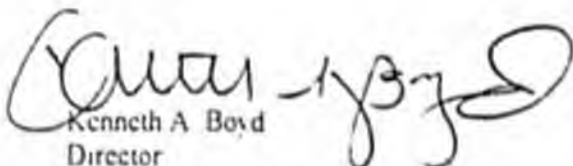
Such an amendment is preferable to HB 325 because it would subject any relief to the protection of the state's interests afforded by HB 207. Specifically, it would require a complete and thorough economic analysis of heavy oil royalty relief, which is lacking in HB 325. Indeed, no state agency has been given the detailed backup data that presumably supports the economic assertions contained in the white paper prepared by BP and Oxy. HB 207 would also provide for public and legislative comment before any relief is granted. Finally, it would allow any relief granted to be conditioned to change if the bases upon which the relief is granted change.

By passing HB 207, the legislature adopted a consistent policy that would treat all players fairly and equally. HB 207 allows for "fiscally efficient" royalty terms. HB 325 is not fiscally efficient because it is not sensitive to profitability. It reduces the state's royalty without a showing of necessity by the companies or a guarantee of anything in return to the state for granting relief. Despite the companies' contrary protestations, they can have certainty of relief under HB 207 before making any investment.

Undeniably, HB 207 is not as administratively simple as HB 325 because it requires a complete review. The long debate over HB 207 last session convinced me that although both the legislature and the governor want expedited development of Alaska's oil and gas resources, they want this done with proper scrutiny. This scrutiny, clearly present in HB 207, is lacking in HB 325.

I hope this information is helpful to you. If you have any further questions, please feel free to call me.

Sincerely,

  
Kenneth A. Boyd  
Director

9-LS0845G  
Chenoweth  
2/6/96

**CS FOR SENATE BILL NO. 114(RES)**  
**IN THE LEGISLATURE OF THE STATE OF ALASKA**  
**NINETEENTH LEGISLATURE - SECOND SESSION**

**BY THE SENATE RESOURCES COMMITTEE**

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

**Sponsor(s): SENATE RESOURCES COMMITTEE**

**A BILL**

**FOR AN ACT ENTITLED**

1 "An Act relating to high cost marginal oil wells on the North Slope, and  
2 authorizing an exemption from payment of royalty for initial production of a  
3 portion of the heavy oil produced from certified high cost marginal oil wells on  
4 the North Slope; and providing for an effective date."

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

6 \* Section 1. AS 31.05.030 is amended by adding a new subsection to read:

7 (i) The commission shall regulate and certify high cost marginal oil wells  
8 under AS 31.05.200 - 31.05.299. The authority granted by this subsection expires  
9 July 1, 2011.

10 \* Sec. 2. AS 31.05 is amended by adding new sections to read:

11 **ARTICLE 4. HIGH COST MARGINAL OIL WELLS.**

12 **Sec. 31.05.200. COMMISSION TO CERTIFY HIGH COST MARGINAL OIL**  
13 **WELLS. (a) The commission shall, by regulation, establish procedures under which**  
14 **a lessee of oil and gas rights on state land may apply to the commission and obtain**

1 from the commission a certificate under AS 31.05.210 that an oil well is a high cost  
2 marginal oil well.

3 (b) To obtain the certificate authorized by (a) of this section, a producer shall

4 (1) make application to the commission on a form provided by the  
5 commission; and

6 (2) provide to the commission the production or well data that the  
7 commission may require to determine whether the well qualifies for certification as a  
8 high cost marginal oil well.

9 Sec. 31.05.210. CERTIFICATION AS A HIGH COST MARGINAL OIL  
10 WELL. The commission shall grant the certificate authorized by AS 31.05.200 if the  
11 lessee demonstrates that the oil well for which the certificate is sought is a high cost  
12 marginal oil well for a field or pool and that

13 (1) actual drilling of the well began on or after July 1, 1996;

14 (2) the weighted average API gravity of oil produced from the well is  
15 less than 20 degrees API; and

16 (3) the well is located north of the Umiat baseline.

17 Sec. 31.05.220. DURATION OF CERTIFICATES. (a) Unless earlier revoked  
18 under (b) of this section, a certificate issued by the commission under AS 31.05.210  
19 is valid for five years.

20 (b) After notice to a lessee holding a certificate and opportunity for hearing,  
21 the commission shall revoke a certificate if the commission determines that the oil well  
22 fails to meet the criteria established for certification in AS 31.05.210.

23 Sec. 31.05.230. EFFECT OF HIGH COST MARGINAL OIL WELL  
24 CERTIFICATE. A lessee holding a certificate issued under AS 31.05.210 may claim  
25 the benefit of suspension of royalty payments under AS 38.05.180(dd). The  
26 suspension of payment of royalty under AS 38.05.180(dd) is available only for the  
27 duration of the certificate under AS 31.05.220.

28 Sec. 31.05.299. DEFINITION. In AS 31.05.200 - 31.05.299, "certificate"  
29 means the certificate of a well as a high cost marginal oil well under AS 31.05.210.

30 • Sec. 3. AS 38.05.180 is amended by adding a new subsection to read:

31 (dd) Notwithstanding any other provision of this section or any provision in

1 a lease, unit agreement, or other agreement between a lessee and the state that  
2 establishes an obligation to pay royalty on production, a producer who holds a  
3 certificate from the Alaska Oil and Gas Conservation Commission under AS 31.05.200  
4 - 31.05.299 is not obligated to pay royalty under the conditions and to the extent  
5 described in this subsection, for the production of heavy oil from a well that is  
6 certified under AS 31.05.200 - 31.05.299 as a high cost marginal oil well. For  
7 purposes of this subsection, "heavy oil" means oil having a weighted average ~~equal to~~  
8 ~~on~~ less than 20 degrees API gravity as the term "API gravity" is defined in  
9 AS 43.55.900. Under this subsection, the exemption from payment of royalty applies

10 (1) only to the portion of the value at the wellhead, net of eligible field  
11 cost deductions, as calculated for the month of production, for the first 300 barrels of  
12 daily production of heavy oil from the well, that, for the period beginning on

13 (A) the effective date of this section and until December 31,  
14 1996, does not exceed \$15 per barrel; and

15 (B) the first day of the calendar year during each calendar year  
16 beginning January 1, 1997, does not exceed the amount specified under (A) of  
17 this paragraph as adjusted for inflation or deflation; in making the adjustment,  
18 the department shall, not later than February 15 of each calendar year, calculate  
19 and apply to the amount set out in (A) of this paragraph a change in the dollar  
20 amount to the extent of the change in the producer price index for finished  
21 goods compiled by the United States Department of Labor; the index for  
22 January 1996 is the reference base index;

23 (2) only if the actual drilling of the well from which the heavy oil is  
24 produced began on or after July 1, 1996, and before July 1, 2006;

25 (3) only to heavy oil produced during the period in which the producer  
26 holds a valid certificate issued by the Alaska Oil and Gas Conservation Commission  
27 under AS 31.05.200 - 31.05.299; and

28 (4) for a well only if the lessee

29 (A) submits with its royalty report for the first month for which  
30 the exemption from royalty payment under (1) - (3) of this subsection is  
31 claimed and with subsequent royalty reports at quarterly intervals for so long

1 as the exemption continues, oil gravity test results performed during the period  
2 for which the royalty report is filed demonstrating that the oil tested is heavy  
3 oil; the report must be in accordance with the standards for measurement and  
4 testing set out in the regulations of the Alaska Oil and Gas Conservation  
5 Commission; and

6 (B) maintains, for a period of at least two years after the last  
7 day of the royalty payment exemption authorized by this subsection, records  
8 of production that show the actual date that drilling of the well started, the  
9 daily production from the well, and the API degree gravity data, and allows the  
10 department to inspect the records during regular business hours.

11 • Sec. 4. This Act takes effect immediately under AS 01.10.070(c).

9-LS0845F  
Chenoweth  
5/9/95

**CS FOR SENATE BILL NO. 114(RES)  
IN THE LEGISLATURE OF THE STATE OF ALASKA  
NINETEENTH LEGISLATURE - FIRST SESSION**

**BY THE SENATE RESOURCES COMMITTEE**

**Offered:  
Referred:**

**Sponsor(s): SENATE RESOURCES COMMITTEE**

**A BILL**

**FOR AN ACT ENTITLED**

1 **"An Act relating to high cost marginal oil wells."**

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

3 **\* Section 1. AS 31.05.030 is amended by adding a new subsection to read:**

4 (i) The commission shall regulate and certify high cost marginal oil wells  
5 under AS 31.05.200 - 31.05.299.

6 **\* Sec. 2. AS 31.05 is amended by adding new sections to read:**

7 **ARTICLE 4. HIGH COST MARGINAL OIL WELLS.**

8 **Sec. 31.05.200. COMMISSION TO CERTIFY HIGH COST MARGINAL OIL**  
9 **WELLS. (a) The commission shall, by regulation, establish procedures under which**  
10 **a lessee of oil and gas rights on state land may apply to the commission and obtain**  
11 **from the commission a certificate under AS 31.05.210 or 31.05.220 that an oil well is**  
12 **a high cost marginal oil well.**

13 **(b) To obtain the certificate authorized by (a) of this section, a producer shall**

14 **(1) make application to the commission on a form provided by the**  
15 **commission; and**

1 (2) provide to the commission the production or well data that the  
2 commission may require to determine whether the well qualifies for certification as a  
3 high cost marginal oil well.

4 Sec. 31.05.210. CERTIFICATION AS PRODUCING WELL. The commission  
5 shall grant the certificate authorized by AS 31.05.200 if the lessee demonstrates that  
6 the well for which the certification is sought is a producing well and that

7 (1) the well produces oil at a maximum average production of not more  
8 than 100 barrels of oil per day;

9 (2) the percentage of water produced from the well is not less than 70  
10 percent; and

11 (3) for the period for which the certificate is valid, the well is in  
12 production for at least 20 days.

13 Sec. 31.05.220. CERTIFICATION AS A NORTH SLOPE TEST OR  
14 DEVELOPMENT WELL. The commission shall grant the certificate authorized by  
15 AS 31.05.200 if the lessee demonstrates that the oil well for which the certificate is  
16 sought is a North Slope test or development well for a field or pool and that

17 (1) actual drilling of the well began on or after July 1, 1995;

18 (2) the weighted average API gravity of oil produced from the well is  
19 less than 15 degrees API; and

20 (3) the well is located north of the Umiat baseline.

21 Sec. 31.05.230. DURATION OF CERTIFICATES. (a) Unless earlier revoked  
22 under this subsection, a certificate issued by the commission under AS 31.05.210 is  
23 valid for one month. After notice to a lessee holding a certificate and opportunity for  
24 hearing, the commission shall revoke a certificate if the commission determines that  
25 the oil well fails to meet the criteria established for certification in AS 31.05.210.

26 (b) A certificate issued by the commission under AS 31.05.220 is valid for one  
27 year.

28 Sec. 31.05.240. HIGH COST MARGINAL PRODUCING WELL CREDIT.  
29 (a) A lessee holding a certificate issued under AS 31.05.210 obtains a high cost  
30 marginal producing well credit. The amount of the credit authorized by this subsection

31 (1) is equal to \$0.25 per barrel of production from a well for which the

1 credit is given; and

2 (2) may not exceed the lower of the following:

3 (A) \$125,000 per well; or

4 (B) \$500,000 per lessee.

5 (b) A credit extended under (a) of this section

6 (1) may be applied against

7 (A) an oil or gas rental or royalty payment payable to the state;

8 (B) taxes payable under AS 43.20 or AS 43.55; and

9 (C) oil and gas bonus payments due the state under  
10 AS 38.05.180(f);

11 (2) must be used within one year after the certificate is granted under  
12 AS 31.05.210; and

13 (3) may be assigned by the lessee to another person.

14 Sec. 31.05.250. HIGH COST MARGINAL NORTH SLOPE TEST OR  
15 DEVELOPMENT WELL CREDIT. (a) A lessee holding a certificate issued under  
16 AS 31.05.220 obtains a high cost marginal North Slope test or development well  
17 credit.

18 (b) Except as provided by AS 31.05.260(b), notwithstanding any provision of  
19 AS 38.05.180 or any provision in a lease, unit agreement, or other agreement between  
20 a lessee and the state that establishes an obligation to pay royalty on the production  
21 of oil, the credit authorized by (a) of this section may be applied to suspend the  
22 obligation to pay a royalty on the amount or value of the production removed or sold  
23 from the well for the production of the first 100 barrels of daily production from the  
24 well.

25 (c) The suspension of payment of royalty under (b) of this section is available  
26 only for the duration of the certificate under AS 31.05.220(b).

27 Sec. 31.05.260. LIMITATION ON USE OF WELL CREDITS. (a) The credit  
28 for a high cost marginal North Slope test or development well obtained under  
29 AS 31.05.250 may not be applied in combination with the high cost marginal  
30 producing well credit obtained under AS 31.05.240.

31 (b) The credit for a high cost marginal North Slope test or development well

1 obtained under AS 31.05.250 may not be taken against production for which the rate  
2 of royalty has been reduced under AS 38.05.180(j).

3 Sec. 31.05.299. DEFINITIONS. In AS 31.05.200 - 31.05.299,

4 (1) "barrel" has the meaning given in AS 46.04.900;

5 (2) "certificate" means the certificate of a well as a high cost marginal  
6 oil well, whether applicable to a producing well under AS 31.05.210 or to a North  
7 Slope test o. development well under AS 31.05.220;

8 (3) "credit" means

9 (A) the high cost marginal producing well credit authorized by  
10 AS 31.05.240; and

11 (B) the high cost marginal North Slope test or development well  
12 credit authorized by AS 31.05.250.

13 \* Sec. 3. If this Act takes effect after July 1, 1995, AS 31.05.220(1), added by sec. 2 of  
14 this Act, is retroactive to July 1, 1995, and applies to oil wells whose actual drilling began on  
15 or after that date.

## HIGH COST MARGINAL WELLS AND THE ALASKA SEVERANCE TAX

*Testimony prepared by Charles Logsdon for presentation to Senate Resources Committee  
March 17, 1995*

THE SEVERANCE TAX IS LEVIED ON ALL BARRELS OF OIL PRODUCED IN THE STATE OF ALASKA. THE TAX IS CALCULATED ON A FIELD BASIS BY MULTIPLYING THE BARRELS PRODUCED OF NON-ROYALTY OIL IN THAT FIELD BY THE WELLHEAD PRICE BY THE TAX RATE (EITHER 15% OR 12.25% — 1575 72) DEPENDING ON THE AGE OF THE FIELD) BY THE ECONOMIC LIMIT FACTOR (ELF).

THE ELF IS CALCULATED FOR EACH FIELD AND CAN HAVE A VALUE FROM 0.0 TO ALMOST 1.0. THE ELF IS THUS A PERCENTAGE REDUCTION IN THE SEVERANCE TAX. THAT IS, IF ELF IS 0.0 THEN THE SEVERANCE TAX IS 0.0 AND IF THE ELF IS NEARLY 1.0 THERE IS ALMOST NO REDUCTION IN THE SEVERANCE TAX..

ANOTHER WAY OF LOOKING AT THE ELF IS TO THINK OF IT AS A PERCENTAGE REDUCTION IN THE BARRELS SUBJECT TO THE TAX RATE. IT COULD ALSO BE THOUGHT OF AS A PERCENTAGE REDUCTION IN THE TAX RATE APPLIED ON ALL BARRELS.

AS WE SHALL SEE, THE ELF PROVIDES CONSIDERABLE TAX RELIEF TO MARGINAL WELLS AND TO SMALL OIL FIELDS

### WHAT IS THE ELF?

THE ELF IS A FACTOR WHICH REDUCES THE SEVERANCE TAX RATE AS BOTH PER WELL AND OVERALL FIELD WIDE PRODUCTION DECLINES. SIMPLY STATED THE BIGGER THE FIELD AND THE BETTER THE WELLS, THE HIGHER THE TAX. (CHART ONE AND CHART TWO)

### THE ELF FORMULA--THE THEORY (CHART THREE)

$$ELF = (1 - 300/WP)^{((150,000/TP)^{1.5333})}$$

WP IS THE AVERAGE PRODUCTION PER WELL IN AN OIL FIELD AND TP IS THE DAILY PRODUCTION FROM THE FIELD

### WHAT THE HECK DOES THIS MEAN?

BREAK THE FORMULA INTO TWO PARTS BY LOOKING AT THE TERMS IN PARENTHESIS.

THE FIRST TERMS IN PARENTHESES ESTABLISH WHAT I WILL CALL THE WELL PRODUCTION TAX ALLOWANCE.

FIRST, NOTICE THAT EACH WELL IN A FIELD GETS 300 BBL/DAY TAX FREE. THAT IS, IF YOU PLUG 300 INTO THE FORMULA THAT THE RESULT IS 1-300/300

OR 1 MINUS 1 WHICH IS ZERO. ALSO NOTICE THAT PLUGGING ANY WELL PRODUCTION ABOVE 300 GIVES A POSITIVE ELF AND AS A RESULT TAXES ARE DUE.

FURTHER, WELL PRODUCTION ABOVE 300 BBL/DAY IS SCALED PROPORTIONATELY TO THE 300 BBL/DAY TAXING LIMIT. THAT IS, AS WELL PRODUCTION INCREASES THE THE WELL PRODUCTIVITY ALLOWANCE BEGINS TO APPROACH A VALUE OF 1.0.

THE SECOND SET OF TERMS IS REPRESENTED BY THE EXPONENT. THIS IS THE FIELD SIZE FACTOR WHICH IS USED TO MODIFY THE WELL PRODUCTIVITY ALLOWANCE.

#### AN EXAMPLE (CHART FOUR)

ASSUME A FIELD WITH WELLS WHICH AVERAGE 1000 BBL/DAY PLUGGING INTO THE FIRST PART OF THE FORMULA THIS GIVES A FRACTION OF 700/1000 OR 70%. THIS ESTABLISHES A WELL PRODUCTIVITY BASE OF A 70% REDUCTION IN TAX RATE OR A 70% REDUCTION IN TAXED BARRELS.

THE EXPONENTS WHICH THEN ADJUST THIS BASE ARE THE FIELD SIZE FACTOR . THE EFFECT OF FIELD SIZE ON THE BASE CAN BE THOUGHT OF AS A TEETER TOTTER WHERE THE 70% IS THE FULCRUM. FIELD SIZES GREATER THAN 150,000 BBL/DAY PUSH THE RATE ABOVE THE 70% ESTABLISHED BY THE 1000 BBL/DAY WELL RATE. CONVERSELY FIELD SIZES LOWER THAN 150,000 BBL/DAY PUSH DOWN THE RATE BELOW THE 70% BASE.

LOOK AT THE GRAPH AND NOTE THAT THE EFFECT OF THE FIELD SIZE FACTOR ON OUR 1000 BBL/DAY WELL OIL FIELD IS TO PUSH THE TAX RATE UP VERY QUICKLY TOWARD 1.0 UNTIL SOMEWHERE AROUND 250,000 BBL/DAY THEN THE RATE INCREASE TENDS TO FLATTEN VERY CLOSE TO 1.0.

#### THE ELF TRACK RECORD

1. ONLY 5 OF ROUGHLY 21 PRODUCING ALASKAN OIL FIELDS PAY ANY OIL SEVERANCE TAX. (CHART TWO AGAIN)

2. THE OVERALL AVERAGE ELF HAS FALLEN BY ONE PERCENTAGE POINT SINCE 1990--FROM .92 TO .91. THIS RESULTED IN A TAX SAVINGS IN 1994 OF \$9.4 MILLION COMPARED TO THE RATE IN EFFECT IN 1990.

#### ELF AND THE FUTURE (CHART FIVE)

THE ELF SHRINKS AS PRODUCTION FROM OUR DEPLETING OIL FIELDS DECLINES. WE WILL CONTINUE TO GET A SHRINKING PIECE OF A SHRINKING PIE.

# CONSIDERABLE TAX RELIEF TO MARGINAL WELLS

- ▶ 300 FREE Barrels for "Every" Well
- ▶ Tax Benefits to Small Fields
- ▶ Most Fields in Alaska Pay "\$0" Severance Tax

# ALASKA SEVERANCE TAX

2

## SUMMARY TABLE

FIELD	TOTAL PRODUCTION (TP) MM bbl/day	WELL PRODUCTION (WP) bbl/day	ELF	<sup>Effective</sup> TAX RATE %	TAX PAID \$Million
Prudhoe	0.9630	1518	0.985719	14.79	462
Kuparuk	0.3055	882	0.863817	12.96	116
Pt McIntyre	0.1028	6021	0.904659	11.08	36
Endicott	0.0929	2608	0.750042	11.25	28
Lisburne	0.0191	618	0	0	0
Milne	0.0155	448	0	0	0
Niakuk	0.0123	2383	0.001918	.02	0
Schrader	0.0028	263	0	0	0
N Prudhoe	0.0021	3340	0	0	0
West Beach	0.0016	3929	0	0	0
Sag Delta	0.0010	542	0	0	0
Cook Inlet	0.0590	135	0	0	0

# ECONOMIC LIMIT FACTOR

$$\text{ELF} = \underbrace{\left(1 - \frac{300}{\text{WP}}\right)}_{\text{well production allowance}} \underbrace{\left(\frac{150,000}{\text{TP}}\right)^{1.5333}}_{\text{field size adjustment}}$$

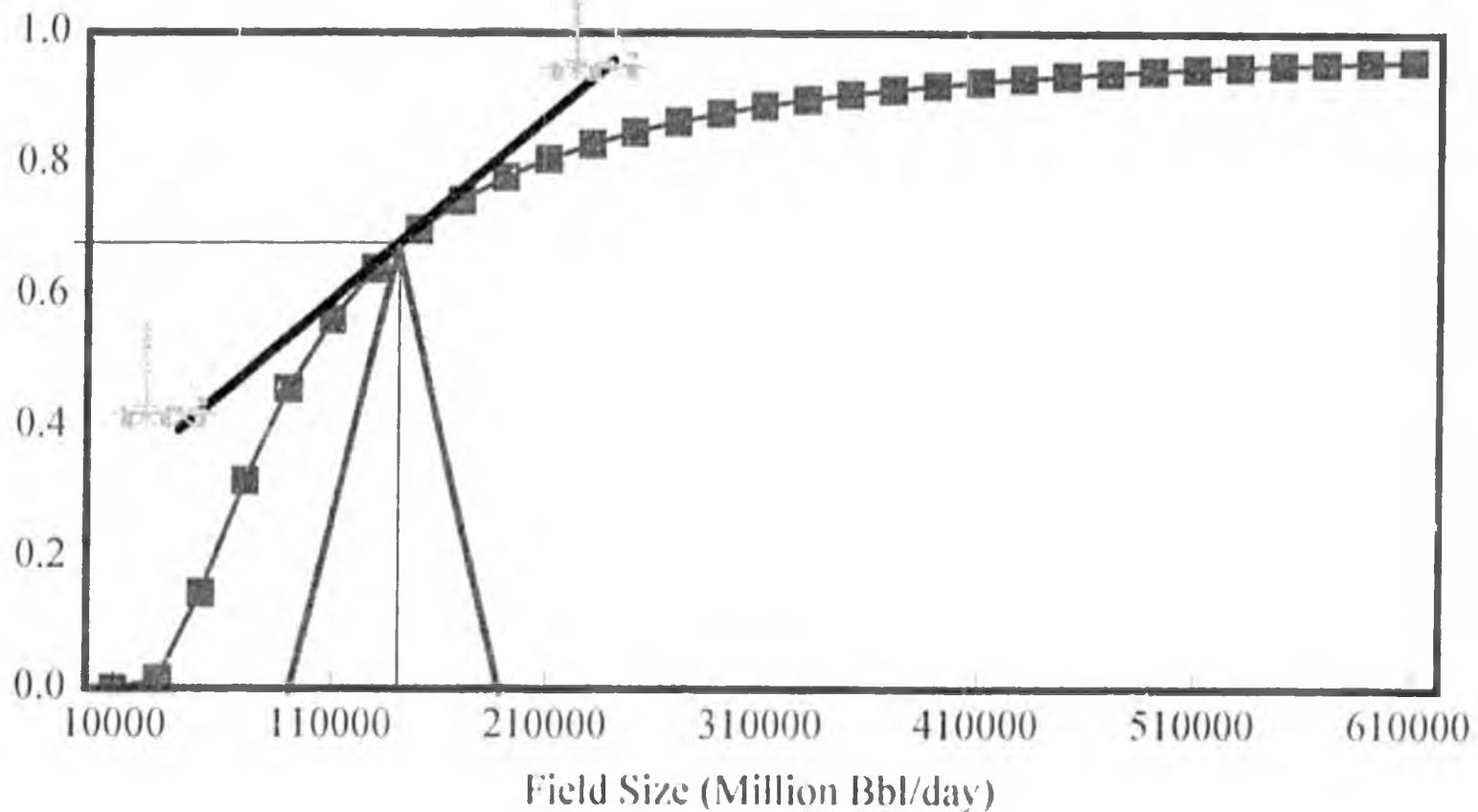
WP is the average production per well in an oil field

TP is the total daily production from the field

# FIELD SIZE AND ELF

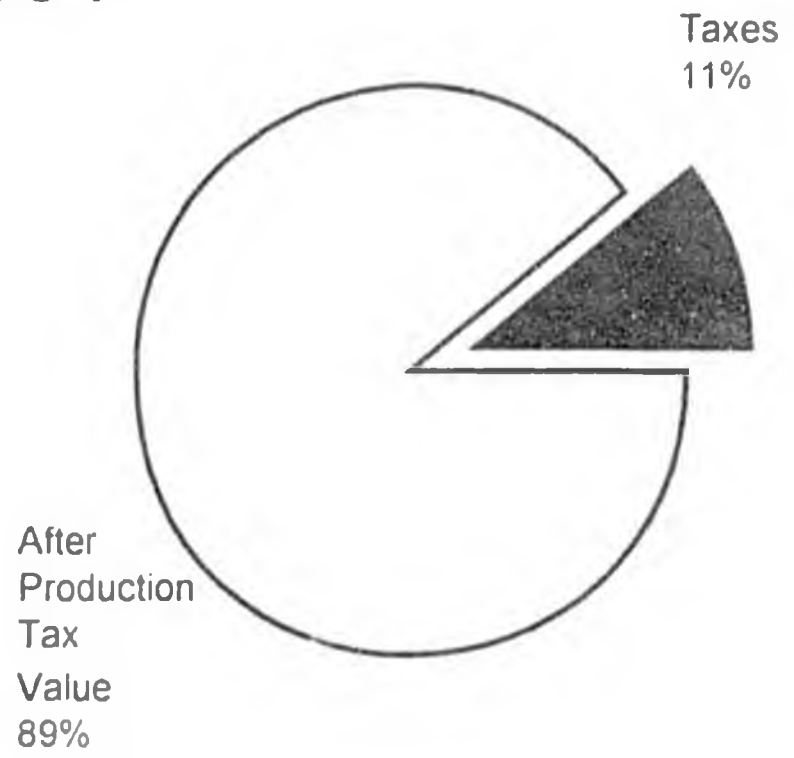
1000 bbl/ day/ well field

Economic Limit Factor

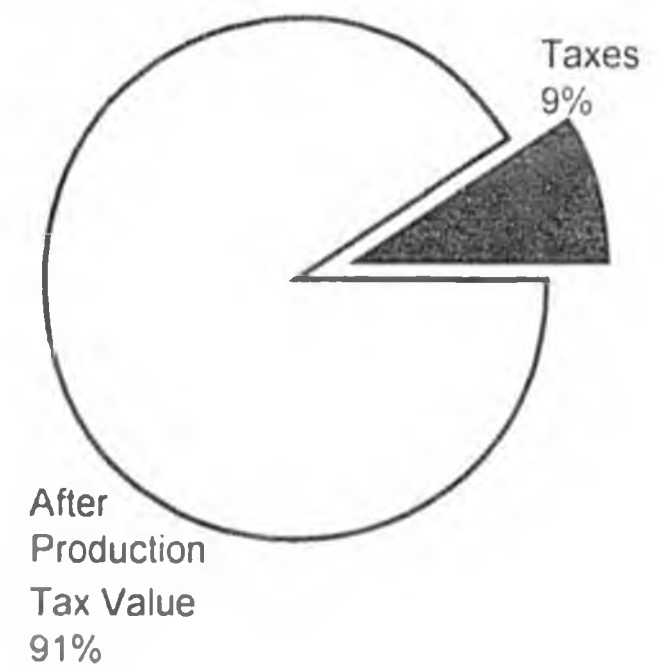


# SHRINKING PIECE OF SHRINKING PIE

1994



2005



# FISCAL NOTE

STATE OF ALASKA  
1995 LEGISLATIVE SESSION

BILL NO. SB 114

Revision Date: \_\_\_\_\_ Dept. Affected: Revenue  
 Title: High Cost Marginal Oil Wells BRU: Revenue Operations  
 Component: O&G Audit/ I&E Audit  
 Sponsor: (S) RES  
 Requester: (S) RES COMPONENT SERIAL NO. 115 / 113

**Expenditures/Revenues** (Thousands of Dollars)

OPERATING EXPENDITURES	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

<b>CAPITAL EXPENDITURES</b>						
-----------------------------	--	--	--	--	--	--

<b>CHANGE IN REVENUES ( GF )</b>	<b>(94.6)</b>	<b>(98.6)</b>	<b>(104.7)</b>	<b>(107.2)</b>	<b>(108.5)</b>	<b>(108.6)</b>
----------------------------------	---------------	---------------	----------------	----------------	----------------	----------------

**FUND SOURCE** (Thousands of Dollars)

FUND SOURCE	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
<b>TOTAL</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

Estimate of any current year (FY95) cost: \$ 0.0

**POSITIONS**

FULL-TIME						
PART-TIME						
TEMPORARY						

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

This bill would allow qualified low productivity oil wells a tax credit of up to \$2.00/bbl but limited to 50% of the taxes payable under AS 43.55 (petroleum production tax) on production from the well, \$1 million per well and \$5 million per producer. Tax credits could be applied against corporation income taxes (AS 43.20); production taxes (AS 43.55); and oil and gas rental, bonus and royalty payments.

The revenue impact is based on currently producing well data. It is assumed that the hazardous release surcharge contained under 43.55 is creditable. No allowance is made for old wells being turned on that weren't producing in 1993 hence no royalty offset is included.

Other than the hazardous release, 5 wells in 1993 paid severance tax, their average rate of production was 50 bbl/day.

Given the high cost of drilling wells, it is unlikely that new wells would be drilled to take advantage of the credit. Since the Economic Limit Factor already has served to reduce the severance tax to zero on our oldest fields in Cook Inlet and on the small fields on the North Slope, the net impact of the credit on oil field investment activity will be imperceptible.

Prepared by: Robert Baratk Phone: 465-2312  
 Division: Administrative Services Division Date: 3/16/95  
 Approved by Commissioner: Deborah Vogt Date: 3/16/95  
 Agency: Department of Revenue

**PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE**  
 For further distribution information, call the Governor's Legislative Office

SB 114 Fiscal Note

North Slope

- Assume:
1. 10 wells producing 190,000bbls/yr
  2. 5 wells pay zero severance tax
  3. 2 wells in Kuparuk and 3 wells in Prudhoe Bay
  4. All 10 wells pay hazardous release

Cook Inlet

- Assume:
1. 41 wells producing 697644 bbl/yr
  2. All wells pay zero severance tax
  3. All wells pay hazardous release

	Prudhoe Sev Tax per Bbl	Prudhoe Well Prod bbl/d	Prudhoe Wells	Prudhoe Credit	Kuparuk Sev Tax per Bbl	Kuparuk Well Prod bbl/d	Kuparuk Wells	Kuparuk Credit	Other Wells Cook North Slope	Other Wells Prod bbl/d	Other Credits	Total Credits
1996	1.61	50	3	44621.25	1.33	50	2	24820	46	50	25185	94826.25
1997	1.71	50	3	47358.75	1.4	50	2	26097.5	46	50	25185	98641.25
1998	1.89	50	3	52286.25	1.46	50	2	27192.5	46	50	25185	104663.8
1999	1.99	50	3	55023.75	1.45	50	2	27010	46	50	25185	107218.8
2000	2.07	50	3	57213.75	1.4	50	2	26097.5	46	50	25185	108496.3
2001	2.14	50	3	59130	1.3	50	2	24272.5	46	50	25185	108587.5

# FISCAL NOTE

STATE OF ALASKA  
1995 LEGISLATIVE SESSION

BILL NO. SB114

Revision Date: Original Dept Affected: Natural Resources  
 Title: An Act relating to high cost marginal oil wells BRU: Resource Development  
 Component: Oil & Gas Development  
 Sponsor: Senate Resources  
 Requestor: \_\_\_\_\_ Component Serial No. 439

Expenditures/Revenues (Thousands of Dollars)

	FY96	FY97	FY98	FY99	FY00	FY01
<b>OPERATING EXPENDITURES</b>						
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	0.0	0.0	0.0	0.0	0.0	0.0
<b>CAPITAL EXPENDITURES</b>	0.0	0.0	0.0	0.0	0.0	0.0
<b>CHANGE IN REVENUES ( )</b>		(1,000.0)	(1,000.0)	(1,000.0)	(1,000.0)	(1,000.0)

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
<b>TOTAL</b>	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY95) cost: \$ \_\_\_\_\_

**POSITIONS**

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

**ANALYSIS:**

(Attach a separate page if necessary)

The majority of the impact of this bill would fall on the Alaska Oil and Gas Conservation Commission and the Dept. of Revenue. The impact on DNR would be a small amount of relatively routine accounting work in the Royalty accounting section i.e. entering any royalty deductions from Royalties, Bonuses and/or Rents.

Section 31 050210 allows for a credit against either taxes or royalties, which would impact revenues to the state and reduce contributions to the permanent fund.

Prepared by: Ken Boyd, Acting Director Phone: 762-2547  
 Division: Oil & Gas Date: 14-Mar-95  
 Approved by Commissioner: *Michael S. ...* Date: 3-14-95  
 Agency: Natural Resources

**PREPARER TO PROVIDE ALL DISTRIBUTION COPIES TO GOVERNOR'S LEGISLATIVE OFFICE**  
 For further distribution information call the Governor's Legislative Office

# FISCAL NOTE

STATE OF ALASKA  
1995 LEGISLATIVE SESSION

BILL NO. SB 114

Revision Date: \_\_\_\_\_ Dept. Affected: Administration  
 Title: "An Act relating to high cost marginal oil wells." BRU: AK Oil and Gas Conservation Commission  
 Component: AK Oil and Gas Conservation Commission  
 Sponsor: The Senate Resources Committee  
 Requestor: \_\_\_\_\_ COMPONENT SERIAL NO. 2010

**Expenditures/Revenues**

(Thousands of Dollars)

OPERATING EXPENDITURES	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01
PERSONAL SERVICES	9.3	9.3	9.3	9.3	9.3	9.3
TRAVEL	0.0	0.0	0.0	0.0	0.0	0.0
CONTRACTUAL	0.5	0.0	0.0	0.0	0.0	0.0
SUPPLIES	1.9	0.0	0.0	0.0	0.0	0.0
EQUIPMENT	9.3	0.0	0.0	0.0	0.0	0.0
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
<b>TOTAL OPERATING</b>	<b>21.0</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>

CAPITAL EXPENDITURES						
----------------------	--	--	--	--	--	--

CHANGE IN REVENUES ( )						
------------------------	--	--	--	--	--	--

**FUND SOURCE**

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	21.0	9.3	9.3	9.3	9.3	9.3
1005 GF/Program Receipts						
1006 GF/MHTIA						
Other						
<b>Total</b>	<b>21.0</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>	<b>9.3</b>

Estimate of current year (FY 95) cost: \$ 0.0

**POSITIONS:**

FULL-TIME						
PART-TIME						
TEMPORARY						

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

**Assumptions:** Determination of high cost marginal well (HCMW) is fairly straightforward using previously submitted and easily interpreted production data. No economic analysis of cost data is required. Report to Department of Revenue requires only notice of qualifying wells and itemization of production data for previous six months. Wells are recertified every six months.

(Continued)

Prepared by David W. Johnston, Chairman  
 Division: Alaska Oil and Gas Conservation Commission

Phone: \_\_\_\_\_  
 Date: \_\_\_\_\_

Approved by Commissioner: Mark Bover  
 Agency: Department of Administration

Date: 3/16/95

**ANALYSIS: (continued)**

**Summary:**

- a) Personal Services--The program will require reclassification of one Natural Resource Technician to a Natural Resource Officer. Position will review applications for HCMW, analyze production and certify wells.
- b) Contractual--The program will require minimal funding for advertising and public hearings.
- c) Supplies--The program will require funding for software and forms.
- d) Equipment--The program will require funding for computer equipment.

**Economic Impact:** Bill should prolong producing life of qualifying wells for several years. Also, some currently shut-in wells may be returned to production. Based on 1994 production data, cost to state is estimated to be less than \$5 million per year. Cost could rise if significant numbers of shut-in wells are returned to production. Future costs will increase as more wells qualify for HCMW standing as production declines in existing fields.

Cost of program is offset by royalty oil gained by the state, which would be lost if marginal production is shut-in.

**Cautionary note:** If tax credits are extended but withdrawn in later years, the HCMW then existing will be immediately plugged and abandoned. The resulting economic downturn would be more dramatic than if the wells are gradually plugged and abandoned in the absence of incentives.

**Impact on Local Government:** Principle beneficiary of the bill is the Kenai Peninsula and surrounding Cook Inlet area where most HCMWs are located. Bill will contribute to local employment and tax base. Significant additional benefits could be realized if new production is developed from currently shut-in wells.