SCOMM

62:28

THE COMMITTEE HAS ANALYZED THE IMPACTS OF SB 97 AND HB 118 REGARDING EFFECTS ON FIELD SIZE AND PRODUCTION INCENTIVES AND LOOKED AT HOW THE FORMULA IS STRUCTURED.

AN INVESTIGATION OF THE FORMULA IN BOTH BILLS HAS LED TO THE CONCLUSION THAT THERE IS NO REASONABLE WAY TO MODIFY THE FORMULA TO MEET THE NEEDS OF VARYING SIZE FIELDS.

AFTER OVER 12 HOURS OF HEARINGS I HAVE CONCLUDED THAT THE ADMINISTRATION HAS SOLELY DESIGNED THIS LEGISLATION TO RAISE REVENUES AND THAT ANY MODIFICATION MAY CREATE UNFORESEEN CONSEQUENCES IN THE FUTURE--JUST LIKE THE SITUATION WE ARE FACED WITH TODAY.

THE COMMITTEE HAS DRAFTED A SUBSTITUTE WHICH INCORPORATES THE FORMULA OF HB 118 WITH AN EFFECTIVE DATE OF JULY 1, 1989. THE FIRST PAYMENT OF INCREASED TAXES WOULD THEN OCCUR ON AUGUST 20, SINCE THE TAX IS DUE ON THE 20TH DAY OF EACH CALENDAR MONTH ON OIL AND GAS PRODUCED FROM EACH LEASE OR PROPERTY DURING THE PROCEEDING MONTH.

WE HAVE LEFT THE CURRENT LAW STAND REGARDING WHETHER THE PRESUMPTION OF 300 BARRELS AS THE ECONOMIC LIMIT CAN BE REBUTTED DURING AN ADMINISTRATIVE HEARING. I THINK IT IS AN ISSUE OF FAIRNESS. IF A COMPANY CAN PROVE BY CLEAR AND CONVINCING EVIDENCE THAT ITS ECONOMIC LIMIT IS GREATER THAN 300 BARRELS, IT SHOULD HAVE THE OPPORTUNITY TO PROVE IT.

Alaska State Legislature

APR 5

SENATOR JIM DUNCAN

P. O. BOX V JUNEAU, ALASKA 99811-3100

(907) 465-4766

COMMITTEES:
FINANCE
VICE CHAIR – HEALTH EDUCATION & SOCIAL SERVICES
BUDGET & AUDIT
BANKING & ECONOMIC DEVELOPMENT

MEMORANDUM

April 5, 1989

TO: Senator Drue Pearce, Chairman
Senate Special Committee on Oil and Gas

FROM: Jim Duncan
Senator

SUBJECT: Proposed Amendment to Elf Legislation to help finance oil spill prevention and clean-up

The Prince William Sound oil spill dramatically illustrates the need for clearly identified and readily available funds for the prevention and clean-up of future spills.

The state's Oil and Hazardous Wastes Release Response Fund only had a balance of approximately $1.5 million before the spill occurred. The costs of cleaning up the spill will be far higher than that, as the Governor and the Senate recognized in our approval of the $20 million special appropriation. I believe it is safe to assume that the full costs to the state of the clean-up and restoration will far exceed that $20 million figure.

The spill also points out the need for the state to increase its efforts at prevention of such disasters. We have seen that clean-up work after a spill is a particularly poor substitute to keeping the spill from happening in the first place.

I propose that the legislature address these needs by passing legislation to revise the Economic Limit Factor (ELF). This legislation made sense before. It makes more sense now.

We now know that there is clearly a connection between the industry; their activity, and the financial and environmental risk to Alaskans. The margin of profits to the Oil Industry can be a direct liability to us as we have seen this past week as the costs of doing business (risks) has been wrongfully placed on our shoulders.

The attached amendment would make the bill apply to all the oil produced this calendar year from Prudhoe Bay and Kuparuk. The amendment provides the following:

1.) An additional $104 million more than the version reported out of the Senate Judiciary committee.

2.) Provide an immediate $32 million dollars for the Oil and Hazardous Substance Release Response fund to deal with our immediate disaster. This also allows some immediate funding for prevention as well as clean-up and restoration as authorized in SB 261 which I introduced this morning.

3.) Provides that the Legislature will appropriate annually to the state's spill prevention and clean-up fund $30 million or four percent of the severance tax revenues, whichever is greater.

As you are aware, Exxon has committed to paying for the costs of the clean-up, but the state needs to insure that the money is both adequate and timely. The state should spend the money as needed, and obtain reimbursement later through the courts if necessary. In the meantime we need to insure that adequate funding is available.

In addition to addressing the immediate need created by the Exxon Valdez spill, I believe if we are to see major production in the future, such as ANWR, it is necessary to demonstrate to the citizens of Alaska, and Congress that we will be prepared to prevent and respond quickly to future problems. I believe the building of a "super fund", such as this amendment provides for, would go a long way in providing those assurances.

I urge an early hearing of House Bill 118 and favorable consideration of both the legislation and my amendment.

6-0652Tb ✓
Chenoweth

AMENDMENT

OFFERED IN THE SENATE BY DUNCAN

TO: SCS CSHB 118 (Judiciary)

Page 1, following line 24:

Insert a new bill section to read:

"* Sec. 3. AS 43.55.080 is amended by adding new subsections to read:

(b) The commissioner of administration shall separately accoun for all proceeds of the tax deposited into the general fund under (a of this section.

(c) The legislature shall annually appropriate to the oil an hazardous substance release response fund established in AS 46.08.01 the greater of:

(1) $30,000,000; or

(2) four percent of the amount estimated to be receive from the tax levied and collected under this chapter during the fisca year."

Renumber the following bill section accordingly.

Page 1, following line 25:

Insert new bill sections to read:

"* Sec. 5. Sections 1, 2, and 4 of this Act are retroactive t January 1, 1989, and apply to oil produced after December 31, 1988.

* Sec. 6. AUTHORIZATION FOR APPROPRIATION OF TAX REVENUE RECEIVE DURING FY 1989. The legislature shall appropriate to the oil and hazardou

substance release response fund 50 percent of the difference between t taxpayer's tax liability on oil production under AS 43.55 for the peri between the retroactive application date of this Act and May 31, 1989, determined under AS 43.55.013

(1) as that statute existed before the amendments to it made secs. 1, 2, and 4 of this Act; and

(2) as amended by secs. 1, 2, and 4 of this Act.

* Sec. 7. PAYMENT OF TAX DUE. The oil production tax payable as result of the retroactive application of this Act is due on the 20th day o the calendar month following the effective date of this Act. If the ta due and payable is not paid by the date specified in this section, the ta becomes delinquent and subject to payment of interest and the provisions o AS 43.10 relating to enforcement and collection of delinquent taxes.

* Sec. 8. OVERPAYMENT OF TAX UNDER REVISED FORMULA. The tax liabilit of a party that is reduced by the retroactive application of this Act shal be credited against the taxpayer's future tax liability. The provisions o AS 43.05.280(a) and 43.05.280(b)(1) do not apply to, and interest is no allowed on, the overpayment."

Figure 1. Production from a Field

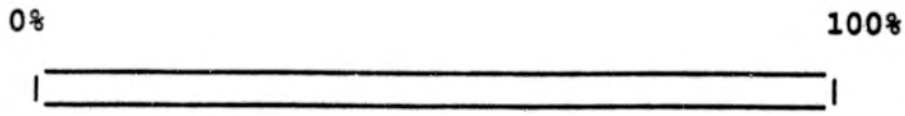


Figure 2. A Profitable Field

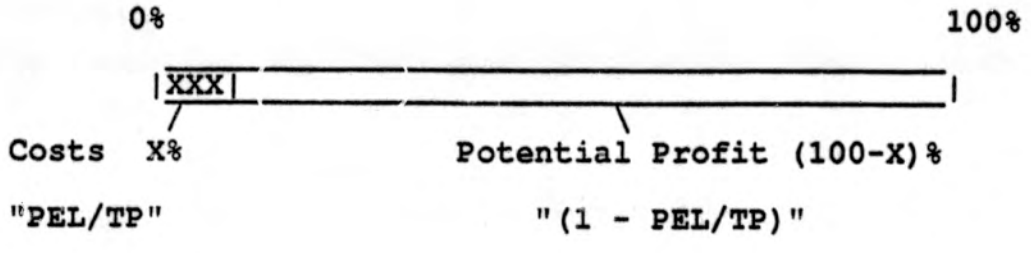
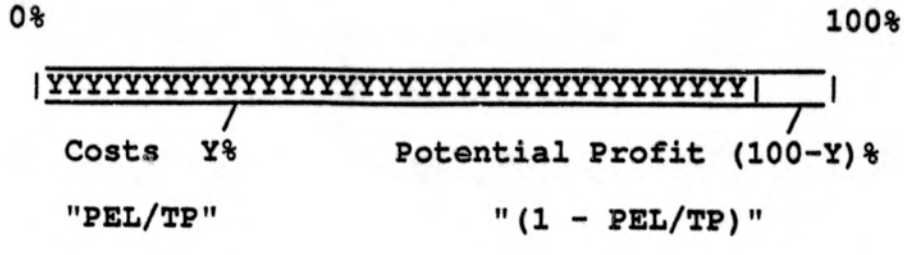
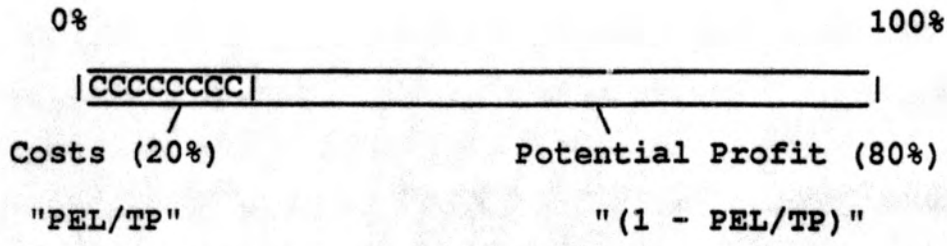


Figure 3. A Marginal Field



EXAMPLE 1. PRESENT ELF AND A SMALL FIELD

Production: 75,000 B/D
Wells: 50
Presumed Costs: 50 x 300 = 15,000 B/D equivalent



$$ELF = (1 - PEL/TP)^{(460 \times WD)/PEL}$$

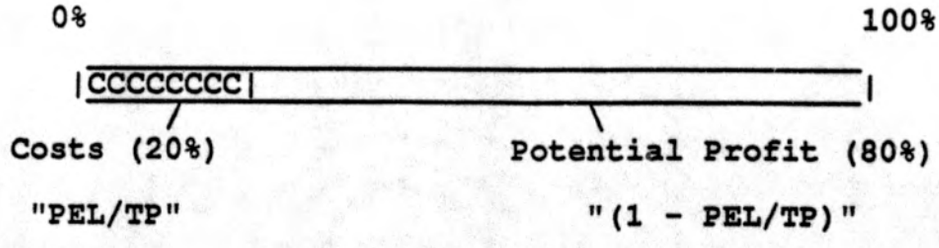
$$= (1 - 15{,}000/75{,}000)^{(460 \times WD)/(300 \times WD)}$$

$$= (1 - 0.2)^{460/300}$$

$$= 0.710239$$

EXAMPLE 2. PRESENT ELF AND A LARGE FIELD

Production: 750,000 B/D
Wells: 500
Presumed Costs: 500 x 300 = 150,000 B/D equivalent



$$ELF = (1 - PEL/TP)^{(460 \times WD)/PEL}$$

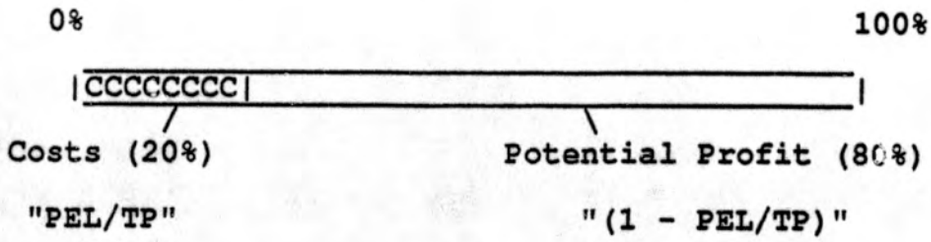
$$= (1 - 150,000/750,000)^{(460 \times WD)/(300 \times WD)}$$

$$= (1 - 0.2)^{460/300}$$

$$= 0.710239$$

EXAMPLE 3. SCS CSHB 118'S ELF AND A SMALL FIELD

Production: 75,000 B/D
Wells: 50
Presumed Costs: 50 x 300 = 15,000 B/D equivalent



$$\text{New Exponent} = (150{,}000/TP)^{(460 \times WD)/PEL}$$

$$= (150{,}000/75{,}000)^{460/300}$$

$$= 2^{460/300}$$

$$= 2.894538$$

$$\text{New ELF} = (1 - PEL/TP)^{\text{New Exponent}}$$

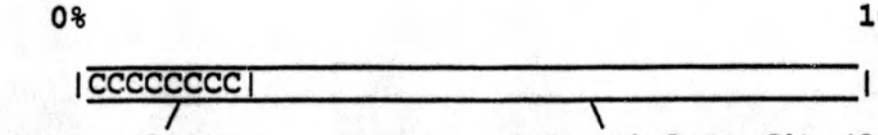
$$= (1 - 15{,}000/75{,}000)^{2.894538}$$

$$= (1 - 0.2)^{2.894538}$$

$$= 0.524192$$

EXAMPLE 4. SCS CSHB 118'S ELF AND A LARGE FIELD

Production: 750,000 B/D
Wells: 500
Presumed Costs: 500 x 300 = 150,000 B/D equivalent



Costs (20%) **Potential Profit (80%)**

"PEL/TP" **"(1 - PEL/TP)"**

$$\text{New Exponent} = (150{,}000/TP)^{(460 \times WD)/PEL}$$

$$= (150{,}000/750{,}000)^{460/300}$$

$$= 0.2^{460/300}$$

$$= 0.084771$$

$$\text{New ELF} = (1 - PEL/TP)^{\text{New Exponent}}$$

$$= (1 - 150{,}000/750{,}000)^{0.084771}$$

$$= (1 - 0.2)^{0.084771}$$

$$= 0.981262$$

EFFECTS OF CHANGING THE ELF ON DIFFERENT
SIZED FIELDS WITH THE SAME AMOUNT OF PROFIT

ASSUMPTIONS

Price per Barrel	$7.36
Production Needed to Cover Operating Cost	300 B/D per well
Profit ($ per day)	$7,360
Profit (B/D)	1,000
State Royalty Share	12.50%

Total Production	Wells	Profit ($/D)	SB 97 Tax ($/D)	HB 118 Tax ($/D)
31,000	100	$7,360	$0.0000453	$0.0000000000006
61,000	200	7,360	0.25	0.0047
91,000	300	7,360	9.94	5.35
121,000	400	7,360	81.66	148.71
151,000	500	7,360	329.91	1,016.40
181,000	600	7,360	903.38	3,548.36
211,000	700	7,360	1,948.68	8,547.76
241,000	800	7,360	3,588.79	16,431.79
271,000	900	7,360	5,915.97	27,265.75
301,000	1000	7,360	8,992.83	40,889.43
331,000	1100	7,360	12,856.71	57,030.21
361,000	1200	7,360	17,525.00	75,377.76
391,000	1300	7,360	22,999.89	95,626.09
421,000	1400	7,360	29,272.53	117,494.13
451,000	1500	7,360	36,326.21	140,733.53
481,000	1600	7,360	44,138.91	165,129.88
511,000	1700	7,360	52,685.12	190,500.56
541,000	1800	7,360	61,937.30	216,691.27
571,000	1900	7,360	71,866.86	243,572.18
601,000	2000	7,360	82,444.92	271,034.33
751,000	2500	7,360	144,085.03	414,328.17
901,000	3000	7,360	218,012.58	563,165.99
1,051,000	3500	7,360	301,647.96	714,329.07
1,201,000	4000	7,360	393,030.40	866,360.07
1,351,000	4500	7,360	490,677.84	1,018,575.70
1,501,000	5000	7,360	593,460.96	1,170,652.32

FINDING THE "CROSS OVER" POINT - HB 118

The "cross over" point is the field size for which the ELF under HB 118 would be the same as the present ELF. Both formulas have (1 - PEL/TP) as their base, so the cross over point can be found by solving for the field size at which the two exponents have the same value. Let "X" be that field size.

$$\text{Present Exponent} = (460*WD)/PEL$$

$$= (460*WD)/(300*WD)$$

$$= 460/300$$

$$\text{HB 118 Exponent} = (150,000/X)^{(460*WD)/PEL}$$

$$= (150,000/X)^{460/300}$$

Solution: HB 118 Exponent = Present Exponent

$$(150,000/X)^{460/300} = 460/300$$

$$\{(150,000/X)^{460/300}\}^{300/460} = (460/300)^{300/460}$$

$$(150,000/X)^{(460/300)*(300/460)} = (460/300)^{300/460}$$

$$150,000/X = (460/300)^{300/460}$$

$$X = \frac{150,000}{(460/300)^{300/460}}$$

$$= 113,507.3348 \text{ B/D}$$

FINDING THE "CROSS OVER" POINT - SB 97

The exponent in SB 97 can be simplified:

$$(55,000,000*WD)/(PEL*TP/Days) = (55,000,000*WD)/((300*WD)*TP/Days)$$

$$= 55,000,000/(300*TP/Days)$$

When we are solving for the cross over point, "X" (the field size in barrels per day) equals TP/Days (i.e., total production in the month, divided by the number of days in the month), so the exponent in SB 97 can be further simplified to

$$55,000,000/(300*X)$$

The cross over point is the field size at which the new exponent equals the present one:

$$\text{SB 97 Exponent} = \text{Present Exponent}$$

$$55,000,000/(300*X) = 460/300$$

$$55,000,000 = (460/300)*(300*X)$$

$$= 460*X$$

$$X = 55,000,000/460$$

$$= 119,565.2174 \text{ B/D}$$

TESTIMONY

OF

BP EXPLORATION (ALASKA) INC.

TO THE

SENATE SPECIAL OIL AND GAS COMMITTEE

REGARDING

SCS CSHB 118 (THE "ELF")

April 24, 1989

My name is Thomas K. Williams. I am Manager of Tax Planning at BP Exploration (Alaska). At the outset, I want to say that BP Exploration is saddened by the Exxon Valdez Incident. So is everyone I know at BP Exploration. We share in your desire to take steps to avoid further spills and to improve the ability to respond to any future spills, as already evidenced by actions announced to date.

However, my purpose in appearing before you today is to testify about the Economic Limit Factor, or ELF, and the legislation that proposes to change it, House Bill No. 118. My testimony today is in two parts. First, I have this prepared statement responding to certain testimony to the Committee last Thursday. Second, I have some comments about how the present ELF works and how it would be changed under HB 118.

Last Thursday there was a question about the nature and size of the return on investment which the owners of TAPS receive. Attached to my written statement are relevant pages from the Settlement Agreement between the State of Alaska and the pipeline owners. As Mr. Motley correctly stated on Thursday, the agreement provides for a 6.4% real rate of return from 1984 through 1989, and a return of 35 cents per barrel (adjusted for inflation) after that for the original investment. In signing the agreement, the State of Alaska endorsed this level of profitability for TAPS. Putting it another way, to increase the tax on production because of pipeline profits is counter to the intent and stated conclusion of the Agreement, which states on page 2 that "TAPS tariffs ... are both just and reasonable and nondiscriminatory...." The tariff was structured in a way to increase capital recovery in earlier years so that there would be a lower tariff in later years. This in turn would mean that State revenues would be higher and new fields would have a lower transportation cost in those later years.

Also at Thursday's hearing, the Administration again showed a chart displaying the rate change in Prudhoe Bay in 1987. In explaining the chart, the Administration described how a change of this nature was not fully understood in 1981. The goal in 1981 was to ensure that the State continued to receive its fair share of not less than 30 percent. In fact, compared to 1981, the State's share has soared. BP's figures show that the State's share of production revenue went from 30% in 1981 to 49% in 1988.

State Share of Production Revenue

	1981	1986	1987	1988
BP	30%	72%	39%	49%

The same would be true for the other petroleum companies having production in Alaska given the substantial decline in crude oil prices that have occurred over this period. In short, over the last three years, the State of Alaska has received a share of the revenue "pie" far beyond what was contemplated in 1981. In our earlier testimony before this Committee regarding Senate Bill No. 97, BP emphasized that 1986 marked the beginning of an era of dramatically reduced profitability from oil production. As just shown, 1986 also marked the beginning of a period of a dramatically increased State's share of the net revenue from oil production.

We heard on Thursday that HB 118's ELF formula makes field size its dominant parameter because field size reflects how profitable a field is. Let us pass over the counter-example of the West Sak field -- a very large field that even the Administration concedes will be marginal at best. Instead, let me direct your attention to the case of Prudhoe Bay.

BP's figures show that the profitability of Prudhoe Bay has dropped by more than 65% from 1981 to 1988. House Bill No. 118 would match this 65% drop in profitability with a reduction in the tax rate from 15% to 14.9%. If all goes as the State predicts, the rate for Prudhoe will drop again in 1994 -- from 14.9% to 14.8 percent. So much for HB 118's sensitivity to profitability. The justification for setting the tax rate as high as Alaska does was and remains the fact that the ELF will scale the rate down as profitability drops. Under the formula in HB 118, this will no longer happen.

One last comment I have about last Thursday's hearing is not about something that was said, but about something that was not

said. At the beginning of this Session, the Administration's primary argument for amending the ELF was that the State needs the money to meet its budget needs. Since then, the change in the outlook for oil prices this year and next based on the State's Spring Forecast has increased State revenues by more than five times the amount that the ELF was supposed to bring in.

This concludes my prepared remarks. At this time, with your permission, I would like to distribute to the Committee a handout regarding the operation of the present ELF and the proposed one under HB 118.

FIGURE 1

ADMINISTRATION'S CRITIQUE

ARCO'S CALCULATION OF AVERAGE KUPARUK PROFITS

	Kuparuk $/bbl
Assumed Crude Price	13.42
Tanker Freight	2.79
Quality Differential	0.40
TAPS Tariff	3.11
Kuparuk Pipeline	0.70
Pipeline Loss	0.10
Wellhead Price	6.41
Production Cost and Capital Recovery	5.43
Total Net Revenue	0.99
State Royalty	0.75
Severance Tax	0.50
Property Tax	0.44
State Income Tax	-0.02
Total State	1.66
Federal Income Tax	-0.23
Producer Profit	-0.45

(1) ARCO sends all its crude to the West Coast. Tanker freight costs $0.98/barrel. The $2.70 shown is the cost of shipping to the U.S. Gulf.

(2) ARCO is an owner of these pipelines. They should show their $1.34 per barrel average pipeline profit.

(3) ARCO uses a cost estimate by a British bank. Other estimates have put the figure as low as $4.13 per barrel. Why doesn't ARCO use its audited cost figures, as BP did?

4/24/89

Figure 2

ADMINISTRATION'S RECALCULATION OF ARCO'S AVERAGE PER-BARREL PROFIT AT KUPARUK

$ PER BARREL

	Under Existing Law			Under HB 118		
Asssumed U.S. Gulf Crude Price	**13.42**	**16.41**	**18.96**	**13.42**	**16.41**	**18.96**
West Coast market differential	1.09	1.09	1.09	1.09	1.09	1.09
West Coast tanker freight	0.98	0.98	0.98	0.98	0.98	0.98
Quality differential	0.40	0.40	0.40	0.40	0.40	0.40
Kuparuk Pipeline & TAPS tariffs	3.81	3.81	3.81	3.81	3.81	3.81
Operating & capital costs (pipelines)	1.34	1.34	1.34	1.34	1.34	1.34
State & local property tax (pipelines)	0.22	0.22	0.22	0.22	0.22	0.22
State income tax (pipelines)	0.07	0.07	0.07	0.07	0.07	0.07
Federal income tax (pipelines)	0.84	0.84	0.84	0.84	0.84	0.84
Pipeline profits	1.34	1.34	1.34	1.34	1.34	1.34
Pipeline loss	0.10	0.10	0.10	0.10	0.10	0.10
Wellhead value	7.04	10.03	12.58	7.04	10.03	12.58
Production cost	5.43	5.43	5.43	5.43	5.43	5.43
Total net revenue	1.61	4.60	7.15	1.61	4.60	7.15
State royalty	0.83	1.20	1.52	0.83	1.20	1.52
Severance tax	0.55	0.78	0.98	0.83	1.18	1.47
State & local property tax (production)	0.18	0.18	0.18	0.18	0.18	0.18
State income tax (production)	0.00	0.11	0.21	-0.01	0.09	0.18
Federal income tax (production)	0.02	0.79	1.45	-0.07	0.66	1.29
Total state (production & pipelines)	1.85	2.57	3.18	2.12	2.94	3.65
Total federal (production & pipelines)	0.85	1.63	2.29	0.76	1.50	2.13
Total profit (production & pipelines)	1.37	2.87	4.15	1.20	2.62	3.84

Sources:
ARCO spreadsheet handout, 4/20/89.
DOR Spring 1989 Revenue Forecast
TAPS settlement methodology

Division of Policy, 23 April 1989

FIGURE 3

ADMINISTRATION's CRITIQUE:
ARCO KUPARUK "INCREMENTAL" CALCULATION

INCREMENTAL SEVERANCE TAX EXAMPLE
KUPARUK EXAMPLE
THE ADDITION OF 1 WELL PRODUCING AT THE AVERAGE RATE
ACTUAL DEC'88 FIGURES

20-Apr-89

	CURRENT LAW		HB-118	
	BASE	+1 WELL	BASE	+1 WELL
PRODUCTION MBPD	307.2	308.1	307.2	308.1
TOTAL PRODUCTION MBL/MO	9,522.37	9,552.27	9,522.37	9,552.27
WELLS	318	319	318	319
BBL /DAY/WL	965	965	965	965
ELF	0.564894	0.564894	0.883291	0.883817
EFFECTIVE TAX RATE	8.4734%	8.4734%	13.2494%	13.2573%
TOTAL FIELD TAX M$	4,165.46	4,178.55	6,513.28	6,537.63
TOTAL FIELD TAX $/BBL	0.500	0.500	0.782	0.782
INCREASE IN TAX $M		13.08		24.35
INCREASE IN MBBLS		26.17		26.17
INCREMENTAL SEVERANCE TAX $/BBL		0.500		0.930

(1) NEW WELLS AT KUPARUK DON'T INCREASE PRODUCTION, THEY MODERATE THE DECLINE.

(2) INCREMENTAL WELLS AT KUPARUK PRODUCE ABOUT 300 BARRELS PER DAY, NOT 965.

4/24/89

FIGURE 4

ANS Net Revenue

	Kuparuk $/bbl	Kuparuk $/bbl	Kuparuk $/bbl
Assumed Crude Price	**13.42**	**16.41**	**18.96**
Tanker Freight	2.70	2.70	2.70
Quality Differential	0.40	0.40	0.40
TAPS Tariff	3.11	3.11	3.11
Kuparuk Pipeline	0.70	0.70	0.70
Pipeline Loss	0.10	0.10	0.10
Wellhead Price	6.41	9.40	11.95
Production Cost and Capital Recovery	5.43	5.43	5.43
Total Net Revenue	0.99	3.98	6.53
State Royalty	0.75	1.12	1.44
Severance Tax	0.50	0.73	0.92
Property Tax	0.44	0.44	0.44
State Income Tax	-0.02	0.05	0.11
Total State	1.66	2.34	2.91
Federal Income Tax	-0.23	0.56	1.23
Producer Profit	-0.45	1.08	2.38

ANS Net Revenue Under HB-118

	Kuparuk $/bbl	Kuparuk $/bbl	Kuparuk $/bbl
Assumed Crude Price	**13.42**	**16.41**	**18.96**
Tanker Freight	2.70	2.70	2.70
Quality Differential	0.40	0.40	0.40
TAPS Tariff	3.11	3.11	3.11
Kuparuk Pipeline	0.70	0.70	0.70
Pipeline Loss	0.10	0.10	0.10
Wellhead Price	6.41	9.40	11.95
Production Cost and Capital Recovery	5.43	5.43	5.43
Total Net Revenue	0.99	3.98	6.53
State Royalty	0.75	1.12	1.44
Severance Tax	0.75	1.10	1.40
Property Tax	0.44	0.44	0.44
State Income Tax	-0.03	0.04	0.10
Total State	1.91	2.70	3.37
Federal Income Tax	-0.31	0.43	1.07
Producer Profit	-0.61	0.84	2.08

Source:
Barclays de Zoete Wedd, September 1988
Alaska Department of Revenue October 1988
State of Alaska Royalty and Severance Methodology

MEASURES OF ALASKA RESOURCE VALUES AND ESTIMATED STATE TAXES

1987 Values
Millions of Dollars

Resource	Value At Point Of Production	Value At Point Of Export(a)	Value of Wages	Corporate Taxable Income	Book Income	State Taxes(b)
Non-Petroleum Resources						
Fisheries	937(c)		130(d)	24		60
Agriculture	29					56
Timber		382(e)	103			<1
Minerals	202		26			<1
Coal	42					2
Gold	105					1
Petroleum	12,007	14,224	519	1,681	3,182	<1
						2,373

(a) Includes foreign and doestic destinations except as noted.
(b) FY 1988.
(c) Ex-vessel.
(d) Processing only.
(e) Foreign exports only.

Sources: The Alaska Economy Performance Report (DCED); House Research Report Report 89.303; Division of Policy memorandum to Rep. A. Hanley, 20 April 1989.

Division of Policy, 23 April 1989

INCREMENTAL SEVERANCE TAX EXAMPLE 20-Apr-89

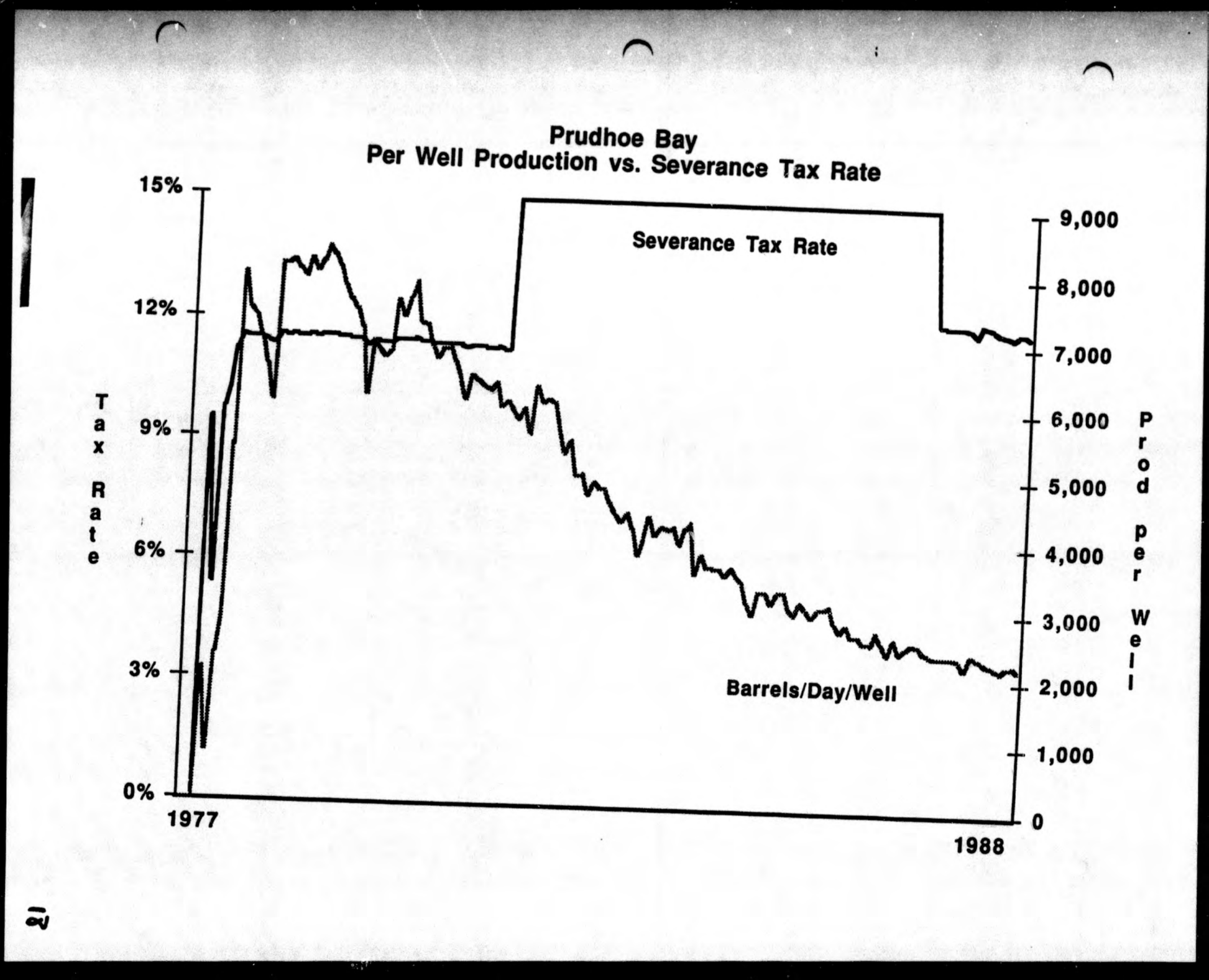
KUPARUK EXAMPLE

THE ADDITION OF 1 WELL PRODUCING AT THE AVERAGE RATE

ACTUAL DEC'88 FIGURES

	CURRENT LAW		HB-118	
	BASE	+1 WELL	BASE	+1 WELL
PRODUCTION MBPD	307.2	308.1	307.2	308.1
TOTAL PRODUCTION MBL/MO	9,522.37	9,552.27	9,522.37	9,552.27
WELLS	318	319	318	319
BBL/DAY/WL	965	965	965	965
ELF	0.564894	0.564894	0.883291	0.883817
EFFECTIVE TAX RATE	8.4734%	8.4734%	13.2494%	13.2573%
TOTAL FIELD TAX M$	4,165.46	4,178.55	6,513.28	6,537.63
TOTAL FIELD TAX $/BBL	0.500	0.500	0.782	0.782

INCREASE IN TAX $M	13.08	24.35
INCREASE IN MBBLS	26.17	26.17
INCREMENTAL SEVERANCE TAX $/BBL	0.500	0.930


Prudhoe Bay
Per Well Production vs. Severance Tax Rate
15%
12%
9%
6%
3%
0%
Tax Rate
Severance Tax Rate
9,000
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
Prod per Well
Barrels/Day/Well
1977
1988

ARCO Kuparuk Example

	Current Law	Proposed Law
Change in Annual Gross Revenue	$981,000	$981,000
Change in Annual Severance Tax	($37,846)	$58,611
Tax Rate on Incremental Production	-3.9%	6.0%
Average Tax Rate Before Drilling	7.820%	10.944%
Average Tax Rate After Drilling	7.806%	10.938%
Percent Change in Average Tax Rate Due to Drilling	-0.180%	-0.055%

[Department of Revenue, 1987]

CURRENT LAW

Field Rate x Wellhead Price x Severance Tax x ELF

90,168,000 BOPY x $9/BO x 0.10 x 0.82134

= $63,461,000/year

Addition of 1 well:

90,277,000 BOPY x $9/BO x 0.10 x 0.8204

=$63,423,388/year

A decrease of $37,846 year

PROPOSED LAW

Field Rate x Wellhead Price x Severance Tax x ELF

90,168,000 BOPY x $9/BO x 0.10 x 0.7909

=$63,519,573/year

Addition of 1 well:

90,277,000 BOPY x $9/BO x 0.10 x 0.7902

=$63,578,484/year

An increase of $58,611 year

[Copy of ARCO Handout, March 27, 1987]

"a $38,000 tax break for the oil industry, is that a good thing for Alaska ?"

The Administration says, No.

For the citizens of Alaska, as Royalty Owners, the answer is definitely , Yes !

The Rest of the Story on the ARCO Drilling Example

	Without Royalty	Including Royalty	Royalty
Original Kuparuk bbl / Yr.	90,168,000	103,049,143	12,881,143
With New Well	90,277,000	103,173,714	12,896,714
		Additional Royalty	15,571
		x $9.00 / bbl	$140,143
		+ Ad Valorem Tax	$20,000
		- ELF Impact	($37,846)
		Total State Revenue Impact	$122,297

ANS Net Revenue

	Kuparuk $/bbl	Kuparuk $/bbl	Kuparuk $/bbl
Assumed Crude Price	**13.42**	**16.41**	**18.96**
Tanker Freight	2.70	2.70	2.70
Quality Differential	0.40	0.40	0.40
TAPS Tariff	3.11	3.11	3.11
Kuparuk Pipeline	0.70	0.70	0.70
Pipeline Loss	0.10	0.10	0.10
Wellhead Price	6.41	9.40	11.95
Production Cost and Capital Recovery	5.43	5.43	5.43
Total Net Revenue	0.99	3.98	6.53
State Royalty	0.75	1.12	1.44
Severance Tax	0.50	0.73	0.92
Property Tax	0.44	0.44	0.44
State Income Tax	-0.02	0.05	0.11
Total State	1.66	2.34	2.91
Federal Income Tax	-0.23	0.56	1.23
Producer Profit	-0.45	1.08	2.38

Source:
Barclays de Zoete Wedd, September 1988
Alaska Department of Revenue October 1988
State of Alaska Royalty and Severance Methodology

ANS Net Revenue Under HB-118

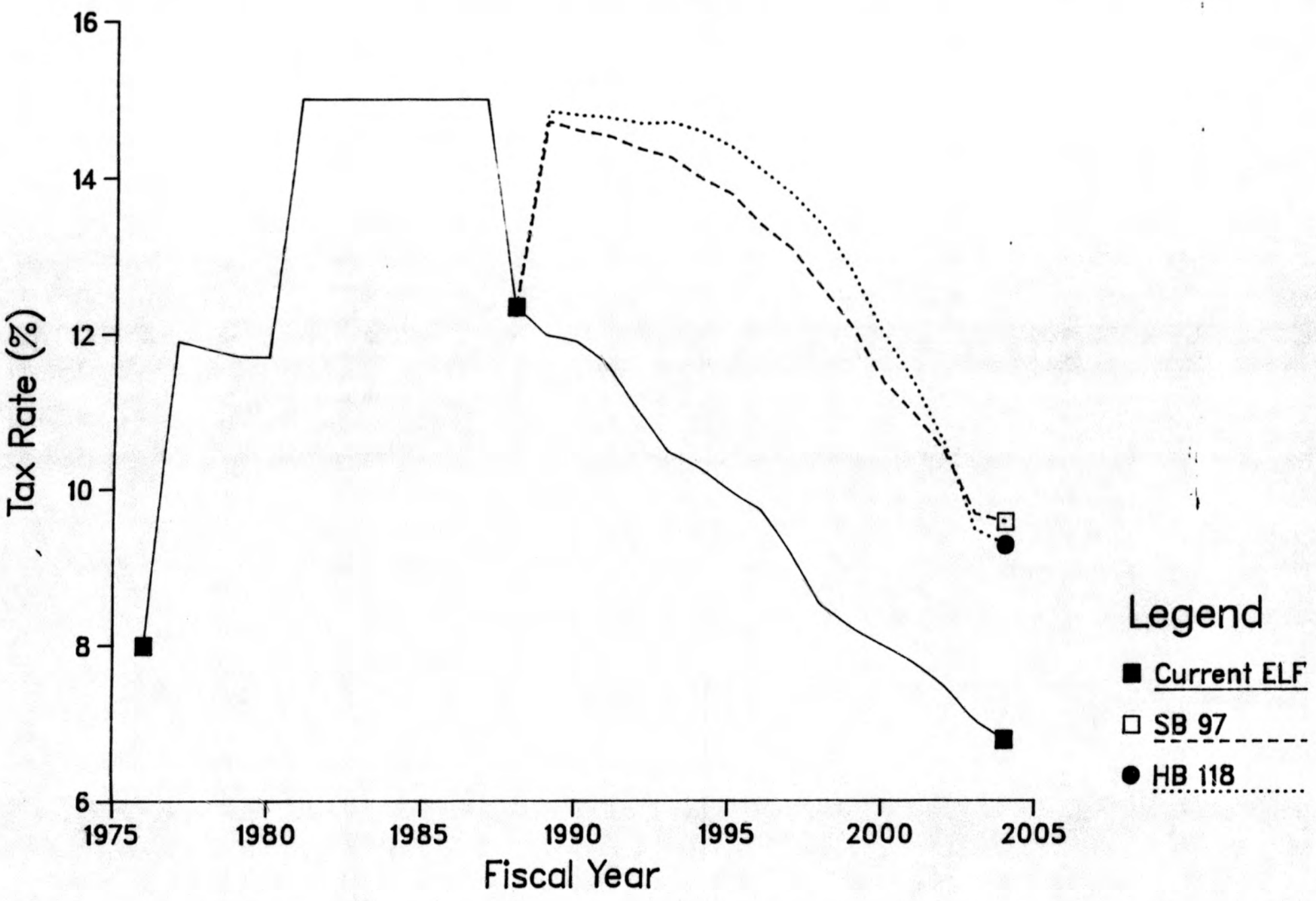
	Kuparuk $/bbl	Kuparuk $/bbl	Kuparuk $/bbl
Assumed Crude Price	**13.42**	**16.41**	**18.96**
Tanker Freight	2.70	2.70	2.70
Quality Differential	0.40	0.40	0.40
TAPS Tariff	3.11	3.11	3.11
Kuparuk Pipeline	0.70	0.70	0.70
Pipeline Loss	0.10	0.10	0.10
Wellhead Price	6.41	9.40	11.95
Production Cost and Capital Recovery	5.43	5.43	5.43
Total Net Revenue	0.99	3.98	6.53
State Royalty	0.75	1.12	1.44
Severance Tax	0.75	1.10	1.40
Property Tax	0.44	0.44	0.44
State Income Tax	-0.03	0.04	0.10
Total State	1.91	2.70	3.37
Federal Income Tax	-0.31	0.43	1.07
Producer Profit	-0.61	0.84	2.08

Source:
Barclays de Zoete Wedd, Septer
Alaska Department of Revenue
State of Alaska Royalty and Seve

Exxon

PBU Historical and Projected Tax Rate

Includes SB 97 and HB 118 Impacts



B. V. Liddell

Introduced by: Mullen, Skogstad
Date: April 4, 1989
Vote: 12 Yes, 2 No
Action: Adopted

KENAI PENINSULA BOROUGH

RESOLUTION 89-33

(Local Affairs Comm. Amended)

IN SUPPORT OF MODIFICATION OF THE ECONOMIC LIMIT FACTOR BY THE STATE OF ALASKA

WHEREAS, the Alaska legislature is considering modifications to the Economic Limit Factor (ELF), and

WHEREAS, revenues available to local municipalities including the Kenai Peninsula Borough in the form of funding for education and municipal assistance and revenue sharing will be directly impacted by action the legislature takes regarding the ELF, and

WHEREAS, if the ELF were modified as proposed in HB 118, additional revenues would be available to offset the budget deficit, thereby decreasing the likelihood of dramatic cuts to muncipalities;

NOW THEREFORE, BE IT RESOLVED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH:

Section 1. That the Kenai Peninsula Borough Assembly supports HB 118.

Section 2. That the Kenai Peninsula Borough Assembly urges a Senate floor vote on the ELF prior to May 9, 1989.

Section 3. That copies of this resolution shall be sent to all members of the legislature.

ADOPTED BY THE ASSEMBLY OF THE KENAI PENINSULA BOROUGH ON THIS 18th DAY OF April, 1989.

Jonathan W. Sewall

Jonathan W. Sewall, Assembly President

ATTEST:

Joanne Bindley

Borough Clerk

PROJECT PORTFOLIO

KUPARUK

Project	Description	Timing
Drilling		
• Peripheral Drillsite 2K	Selective peripheral DS development	1989 SU
• Peripheral Drillsite 3R	on 160 acre spacing. Total of 98	1989 SU
• Peripheral Drillsite 2M	additional wells	1990 SU
• Peripheral Drillsite 2L		1990 SU
• Peripheral Drillsite 3G		1990 SU
• Rem. Peripheral Dev.	14 drillsite expansions, 6 new drillsites, 180 additional wells 1 rig 1989, 2 rigs thereafter	1990===>
Waterflood/EOR		
• LIP-3 Expansion	Additional water handling capacity @ CPF-3	1990 SL
• Infill Drill @ DS 1Y/2Z	22 new wells. Improve EOR efficiency	1989===>
• Infill Drill @ DS 1A	16 wells. Seed for Phase I infill	1989 SU
• Phase I Infill Drilling	160 + 80 acre accelerate reserves	1991 SU
• Fullfield EOR	19 drillsites staged over 4 years	1991 SU

figures last 3 years

26% ARCO

51% state

15% federal

Kuparuk River Field

	Net Pay Feet	Gross Reserves MMBL
Kuparuk Maximums	70-80	60.9
Current Kuparuk Developed Area Average	55	42.7
Remaining Drill Site Development Areas		
Drill Site 1 K	25	8.9
Drill Site 1 M	10	12.8
Drill Site 1 J	25	6.2
Drill Site 2 K	20	22.6
Drill Site 2 M	25	32.3
Drill Site 2 L	15	21.5
Drill Site 2 P	15	11.8
Drill Site 3 G	15	22.7
Drill Site 3 R	25	13.2
Drill Site 3 L	25	15.7
Total		167.6
Average		16.8

MEMORANDUM

State of Alaska
Office of the Governor
Division of Policy

TO: The Hon. Alyce Hanley DATE: April 20, 1989

FROM: Gregg Erickson

SUBJECT: Corporate Profits Earned Alaska

During the March hearings on the ELF legislation in the House you requested information on the net income earned by the fishing industry.

Based on tax data from the Department of Revenue, we estimate that 1987 taxable corporate net income in Alaska totaled $2.010 billion. Of this, $24 million (1.2 percent) was earned by corporations in fishing or fishing related fields.

Based on Dept. of Revenue data, we estimate taxable oil company income at $1.681 billion, or 84 percent of the total.

Taxable income may differ substantially from the income shown on a company's books of account. This is especially true under the special taxation arrangements adopted for the oil industry by Alaska in 1981. The recent study by Professor Deakin found that 1987 oil industry net income totaled $3.182 billion. Based on the Deakin analysis, it is likely that the oil industry accounts for more than 90 percent of total book income attributable to Alaska. The figure cannot be determined precisely, however, because comparable figures for non-petroleum book income are not available for the state.

cc: Senate Special Oil and Gas Committee

CASE 1

HOW THE ELF IS CALCULATED

ELF = (1 - [PEL/TP])exp(460*WD/PEL)

PEL = (Production at the Economic Limit) =
(300 barrels per day)*
(average number of operating wells during the month)*
(number of days of production for the month).

EXAMPLE

PEL = 300 barrels * 541 wells * 30 days = 4,869,000 barrels per month

TP = (Total Production for the field for the month) =
(average number of operating wells during the month)*
(number of days of production for the month)*
(average daily production per well).

EXAMPLE

TP = 541 wells * 30 days * 2477 barrels per well = 40,201,710 barrels per month

WD = (Well Days) =
(number of operating wells during the month)*
(number of days each well operates)

EXAMPLE

WD = 541 wells * 30 days = 16,230 well days

CALCULATION EXAMPLE

ELF = (1 - [PEL / TP])exp(460* WD / PEL)

ELF = (1 - [4,869,000/40,201,710])exp(460*16,230/4,869,000)

ELF = (1 - .1211) exp (1.533)

ELF = (.8789) exp (1.533)

ELF = .82

MEMORANDUM

State of Alaska
Office of the Governor
Division of Policy

TO: Sen. Drue Pearce **DATE:** April 20, 1989

FROM: Gregg Erickson

SUBJECT: How Alaska Oil Income Is Shared

The attached table shows how the income from Alaska oil production and TAPs operations is divided between the state, the oil industry, and the federal government. This analysis shows that except at the very lowest oil prices the industry obtains a larger share of the income from Alaska operations than does the state. It also illustrates the great sensitivity of the shares to oil price levels. With average prices in the $14 per barrel range in 1988, the state received approximately 32 percent. At the price prevailing today, however, the state's share drops to below 29 percent.

These figures use the audited production cost figures provided by BP America to the House Resources committee. Apart from the industry's desire to disregard pipeline income, we are not aware of any substantial disagreement with the substance of these figures.

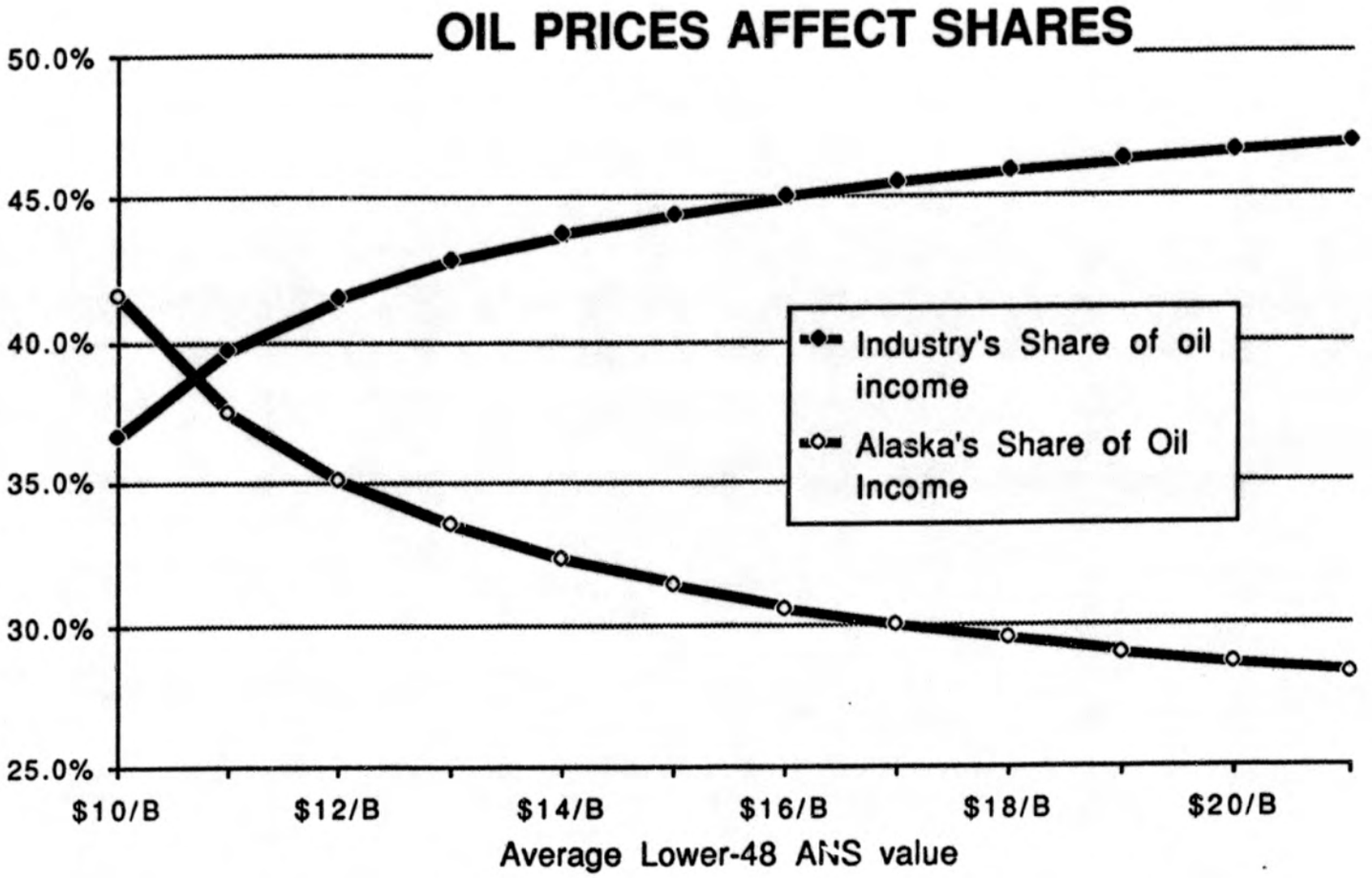
The figures are calculated using costs and other parameter values for calendar 1988. The underlying spreadsheet is available from this office on request.

Attachments

ALASKA OIL INCOME:
SHARES RESULTING UNDER VARIOUS OIL PRICES

AVERAGE LOWER 48 ANS VALUE	$10	$12	$14	$16	$18	$20
ANNUAL NET INCOME (BILLIONS)						
Industry	$1.143	$1.909	$2.654	$3.399	$4.144	$4.889
State & local	$1.298	$1.615	$1.964	$2.312	$2.661	$3.010
Federal	$0.678	$1.073	$1.457	$1.841	$2.224	$2.608
Memo: Industry cash flow	$3.276	$4.042	$4.787	$5.532	$6.277	$7.022
PERCENTAGE SHARES OF NET INCOME						
Industry	36.6%	41.5%	43.7%	45.0%	45.9%	46.5%
State & local	41.6%	35.1%	32.3%	30.6%	29.5%	28.6%
Federal	21.7%	23.3%	24.0%	24.4%	24.6%	24.8%

Division of Policy, 4/19/89


OIL PRICES AFFECT SHARES
50.0%
45.0%
40.0%
35.0%
30.0%
25.0%
$10/B
$12/B
$14/B
$16/B
$18/B
$20/B
Average Lower-48 ANS value
Industry's Share of oil income
Alaska's Share of Oil Income

TESTIMONY OF
GERALD SERENA

FOR

EXXON COMPANY, U.S.A.

BEFORE THE

SENATE SPECIAL OIL AND GAS COMMITTEE

SCS CSHB No. 118

APRIL 20, 1989

My name is Gerald Serena and I am a tax lawyer for Exxon Company, U.S.A. We appreciate the opportunity to comment once again on legislation proposed to modify the Economic Limit Factor. In previous hearings before committees of the House and Senate, Exxon has made clear its opposition to any proposals that would effectively eliminate the benefit of ELF for the Prudhoe Bay and Kuparuk fields. Our message has not changed.

This bill would significantly increase production tax on 90% of Alaska's oil production. This increased cost of production would adversely affect investment in future Prudhoe Bay development projects. These projects are economically marginal in the same sense that the start-up of some smaller fields on the North Slope might be marginal. Such projects are necessary to optimize production from Prudhoe Bay, which is crucial to Alaska's economic future.

Alaska's production tax law is comprehensive, well-reasoned, and effective. It combines two essential elements -- the highest nominal tax rate in the United States, and an Economic Limit Factor which reduces this rate on a field-by-field basis as measured by production rate per well in the field.

IT HAS WORKED UP TO NOW AND IT WILL CONTINUE TO WORK AS DESIGNED AS PRUDHOE BAY PRODUCTION DECLINES.

THE PRODUCTION TAX ON OIL FROM PRUDHOE BAY IS HIGH ENOUGH BY ANY STANDARDS. WHEN COMBINED WITH THE OTHER STATE TAXES ON NORTH SLOPE PRODUCTION OPERATIONS, IT IS CLEAR THAT OUR INDUSTRY IS CONTRIBUTING ITS FAIR SHARE OF STATE TAX COLLECTIONS. WHEN YOU COMBINE TAXES AND ROYALTIES, OUR INDUSTRY ACCOUNTS FOR ABOUT 85% OF STATE REVENUES. FURTHERMORE, ROYALTIES AND OTHER LEASE PAYMENTS HAVE ESTABLISHED THE $10 BILLION ALASKA PERMANENT FUND.

IN 1988, AVERAGE DAILY OIL PRODUCTION AT PRUDHOE BAY DECLINED TO 1,450,000 BARRELS FROM THE 1,500,000 AVERAGE ACHIEVED IN PRIOR YEARS, AND WE ANTICIPATE THAT THIS DECLINE WILL CONTINUE. THIS WAS INEVITABLE. IT WAS DELAYED UNTIL NOW BY AN EFFICIENT AND OPTIMAL DEVELOPMENT PLAN THAT CONTINUES TO BE IMPLEMENTED. SINCE INITIAL DEVELOPMENT, EXXON HAS EVALUATED AND SUPPORTED SEVERAL PROJECTS TO INCREASE RECOVERY AT PRUDHOE BAY. THE COST PER BARREL FOR THESE PROJECTS TO INCREASE RECOVERY WAS TWICE THE COST OF THE INITIAL DEVELOPMENT.

AFTER CURRENT DEVELOPMENT IS COMPLETED, IT IS ESTIMATED THAT 10 BILLION BARRELS OF OIL WILL BE LEFT IN FORMATION AT PRUDHOE BAY. H.B. 118 WOULD INCREASE THE COST OF PRODUCING THOSE BARRELS AND THEREBY REDUCE THE INCENTIVE TO UNDERTAKE SUCH PROJECTS. FUTURE PROJECTS TO MAINTAIN PRODUCTION AND INCREASE RECOVERABLE RESERVES AT PRUDHOE BAY WILL COST MORE THAN FIVE TIMES AS MUCH AS THE INITIAL DEVELOPMENT. IT IS CONCEIVABLE THAT UNDEVELOPED MARGINAL RESERVES AT PRUDHOE BAY MIGHT EXCEED THE POTENTIAL RESERVES OF ALL THE SMALLER FIELD PROSPECTS ON THE NORTH SLOPE IDENTIFIED TO DATE.

H.B. 118 IS BASED ON THE ASSUMPTION THAT LARGER OIL FIELDS SHOULD CONTRIBUTE PRODUCTION TAXES AT A HIGHER RATE THAN SMALLER FIELDS. TAX POLICY MAKERS SHOULD NOT CONFUSE THE PRODUCTION RATE OF A FIELD WITH ITS PROFITABILITY. THE PRUDHOE BAY FIELD IN DECLINE IS A PERFECT EXAMPLE.

OUR RECOMMENDATION TODAY IS THE SAME AS IT HAS BEEN AT ALL THE PRIOR HEARINGS ON THIS LEGISLATION. WE URGE YOU NOT TO SUPPORT H.B. 118. IT WILL ADVERSELY AFFECT FUTURE DEVELOPMENT INVESTMENT AT PRUDHOE BAY. SUCH INVESTMENT IS NEEDED TO MAXIMIZE OIL PRODUCTION, THEREBY INCREASING THE STATE'S ROYALTY AND PRODUCTION TAX BASE.

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y STATE CAPITOL
JUNEAU ALASKA 99811
907 465 3800

1

M E M O R A N D U M February 6, 1989

SUBJECT: Retrospective application of the economic limit factor tax amendments, CSHB 118 ( )

TO: Representative Cliff Davidson, Co-Chair
House Resources Committee

FROM: Jack Chenoweth
Legislative Counsel

The amendments requested are enclosed. The drafts differ only as to the date of retrospective application of each. The draft identified as 6-0652E applies the economic limit factor (ELF) retrospectively to oil produced after June 30, 1987; the draft identified as 6-0652H applies the economic limit factor retrospectively to oil produced after December 31, 1988. (A subsequent memo from your office specified different alternative dates. Mechanically changing a date in any of these drafts is not a significant drafting problem.)

It is my understanding that these provisions limit the applicability of the ELF to the state's major producing fields and that, as a consequence, the tax liability of some taxpayers subject to the severance tax, AS 43.55, would be increased, while the liability of others may decrease. 1/

1/ Under AS 43.55.020(a):

> The gross production tax on oil or gas shall be paid monthly. The tax is due on the 20th day of each calendar month on oil or gas produced from each lease or property during the preceding month. If the tax is not paid before the end of the month in which it becomes due, the tax becomes delinquent.

Thus, tax liability is incurred and remitted on a monthly, not an annual basis. For oil production during December, 1988, the tax became due and payable January 20, 1989, and tax liability for oil production during January, 1989, becomes due and payable February 20, 1989.

A retroactive tax adjustment will apply if there is a valid public purpose served by giving retrospective effect to that adjustment. Here, the committee's deliberations may be critical. As a committee substitute for HB 118 is considered, it would, in my judgment, be important to develop a record on which a court, if called upon to consider an argument, would conclude that there was a public purpose served by giving the adjustment a retrospective effect.

A reasonable retrospective application will be sustained. The farther back the retroactive provision is given effect, the less likely a court would be to sustain the provision without a clear showing of public purpose. (To foreclose a claim altogether, this office has discouraged retrospective application of severance tax adjustments beyond the narrow period recognized under AS 43.55.020(a), that is, a change amending the economic limit factor to be made retroactive only to the beginning of the month in which the bill is to take effect. That approach should not create any problems of retrospective applications since the tax liability would not have become due on that date.)

I

RETROSPECTIVE APPLICATION OF THE AMENDMENTS:

Tax statutes may be made retroactive. 2/ The threshold

2/ This office has also recently considered proposed retrospective application of severance tax adjustments, specifically relying on the federal and state constitutional prohibitions against passage of ex post facto laws. There are two ex post facto law prohibitions of the federal constitution. Article I, section 9, clause 3 is a limitation on the federal government, while article I, section 10, clause 1 imposes a similar limitation on the states. Alaska's constitution also contains a limitation in section 15 of article I.

Our previous conclusion that federal and state constitutional prohibitions against enactment of ex post facto laws would support a challenge to the amendment's retrospective application was surely in error. Federal court decisions have limited the application of the limitations to criminal or penal consideration is that the retrospective application of the measure must not impair an obligation of contract.

The impairment of contract consideration appears to be inapplicable in this instance. Retrospective application of a newly-enacted statute may, in some instances, impair obligations of contract, in violation of article I, section 10 of the United States Constitution and article I, section 15 of the State Constitution. However, the Alaska Supreme Court appears to have cut off an impairment of contract argument applicable to retrospective application of a tax amendment in Atlantic Richfield Co. v. State, 705 P.2d 418 (Alaska, 1985). To the argument that the oil and gas corporate income tax then in litigation impaired the obligation of the state's underlying lease contracts, the court concluded that "[the] argument [was] without merit":

> . . . No lease provision has been impaired. In entering into the leases the state could not, and did not, contract away its power as a sovereign to tax income earned in the state. Merrion v. Jicarilla Apache Tribe, 455 U.S. 130, 102 S.Ct. 894, 71 L.Ed.2d 21 (1982) disposes of this issue:
>
> > Contractual arrangements remain subject to subsequent legislation by the presiding sovereign. Even where the contract at issue requires payment of a royalty for a license or franchise issued by the government entity, the government's power to tax remains unless it "has been specifically surrendered in terms which admit of no other reasonable interpretation." St. Louis v. United R. Co., 210 U.S. 266, 280, 28 S.Ct. 630, 634, 52 L.Ed. 1054 (1908).

455 U.S. at 148, 102 S.Ct. at 907, 71 L.Ed.2d at 36 (citations omitted); see also Exxon v. Eagerton, 462

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statutes, concluding that retrospective tax legislation is not prohibited by the ex post facto clause. Personal Finance Co. v. United States, 86 F. Supp. 779 (D.Del., 1949). See 16A Am. Jur. 2d secs. 636, 677. Decisions in other state courts have similarly concluded. Parlato v. McCarthy, 69 A.2d 648 (Ct., 1949), Walker v. Commonwealth, 130 S.W.2d 27 (Ky., 1939). The Alaska Supreme Court has not extended application of the state constitutional ex post facto prohibition beyond penal or criminal matters. Danks v. State, 619 P.2d 720 (Alaska, 1980); Creekpaum v. State, 753 P.2d 1139 (Alaska, 1988).

U.S. at 187-94, 103 S.Ct. at 2304 - 2307, 76 L.Ed.2d at 508-12.

705 P.2d 418, at 438.

*

If legislation acts retrospectively, the nature and duration of its retrospective application should be reasonable. The arguments favoring a reasonable retrospective operation arise out of the equal protection and due process clauses of the state and federal constitutions.

Federal equal protection considerations:

State legislation retroactively imposing a tax is not necessarily and certainly invalid under the equal protection clause of the Fourteenth Amendment to the federal constitution. The inquiry to be made is one of whether the retroactivity impairs substantial, vested rights, and is reasonable in the circumstances. As to retroactively imposed new taxes, the courts have been reluctant to find a violation because of the impairment of a vested right. Welch v. Henry, 305 U.S. 134, 83 L.Ed. 87, 59 S.Ct. 121 (1938), rehearing denied 305 U.S. 675, 83 L.Ed. 437, 59 S.Ct. 250 (1938). 3/ Several state courts have agreed. See Garrett

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3/ In Welch, the United States Supreme Court concluded that a Wisconsin state statute, enacted in 1935 and operating retrospectively to tax corporate dividends earned in 1933 which, when received, were deductible from gross income, did not violate the equal protection clause. The tax rates applied to the dividends differed from the rates applicable to other types of taxable income. As to the retrospective application of the new tax to dividends that were, when earned, exempt from tax, the court noted that:

> The equal protection clause does not preclude the legislature from changing its mind in making an otherwise permissible choice of subjects of taxation. The very fact that the dividends were relieved of tax [in 1933], when the need was less, is basis for the legislative judgment that they should bear some of the added burden when the need is greater.

Freight Lines v. State Tax Commission, 135 P.2d 523, at 526, 527 (Utah, 1943); Colonial Pipeline Co. v. Commonwealth, 145 S.E.2d 227 (Va., 1965), reh. den. (1966), app. dismissed, 384 U.S. 268, 16 L.Ed.2d 523, 86 S.Ct. 1476 (1966). 4/

> Numerous retroactive revisions of the federal and Wisconsin revenue laws . . . have imposed taxes on subjects previously untaxed and shifted the burden of old taxes by changes in rates, exemptions, and deductions. It has never been thought that such changes involve a denial of equal protection if the new taxes could have been included in the earlier act when adopted. If some retroactive alteration in the scheme of a tax act is permissible, as is conceded, it seems plain that validity, so far as equal protection is concerned, must be determined, as in the case of any other tax, by ascertaining whether the thing taxed falls within a distinct class which may rationally be treated differently from other classes. If such changes are forbidden in the name of equal protection, legislatures in laying new taxes would be left powerless to rectify to any extent a previous distribution of tax burdens which experience had shown to be inequitable, even though constitutional.

83 L.Ed. 87, at 92.

4/ In Garrett Freight Lines v. State Tax Commission, 135 P.2d 523 (Utah, 1943), the Utah Supreme Court, called upon to determine whether an excise tax levied on the use of diesel motor fuel that was used prior to the date the legislative act became law, found no equal protection violation:

> It is well settled that a tax does not necessarily violate the Federal Constitution merely because it contains retroactive features. Milliken v. United States, 283 U.S. 15, 21, 51 S.Ct. 324, 75 L.Ed. 809 [(U.S., 1931)]; Billings v. United States, 232 U.S. 261, 34 S.Ct. 421, 58 L.Ed. 596 [(U.S., 1914)]; Welch v. Henry, 305 U.S. 134, 59 S.Ct. 121, 125, 83 L.Ed. 87 [(U.S., 1938)] . . . .
>
> . . .
>
> Neither the Federal Constitution nor the Utah

Federal due process considerations:

Retroactive imposition of a tax is not necessarily a violation of the due process clause of the Fourteenth Amendment to the federal constitution. The leading case is Welch, cited earlier, in which the United States Supreme Court determined:

> The objection chiefly urged to the taxing statute is that it is a denial of due process of law because in 1935 it imposed a tax on income received in 1933. But a tax is not necessarily unconstitutional because retroactive. Milliken v. United States, 283 U.S. 15, 21, 75 L.Ed. 809, 814, 51 S.Ct. 324 [(1931)], and cases cited. Taxation is neither a penalty imposed on the taxpayer nor a liability which he assumes by contract. It is but a way of apportioning the cost of government among those who in some measure are privileged to enjoy its benefits and must bear its burdens. Since no citizen enjoys immunity from that burden, its retroactive imposition does not necessarily infringe due process, and to challenge the present tax it is not enough to point out that the taxable event, the receipt of income, antedated the statute.

83 L.Ed. 87, at 93. But the assertion that due process is not violated is not absolute and, the court has said that

> In each case it is necessary to consider the nature of the tax and the circumstances in which it is laid before it can be said that its retroactive application is so harsh and oppressive as to transgress the constitutional limitation.

Id.

Similarly, in Garrett Freight Lines, earlier cited, the Utah Supreme Court determined that the due process clause is not

---

Constitution has any provision in terms prohibiting retroactive legislation -- excepting that which forbids the enactment of ex post facto laws. [Citations omitted.] That clause relates to criminal and penal matters and does not affect legislation such as the statute here involved. Calder v. Bull, 3 Dall. 386, 390, 1 L.Ed. 648, 1 Kent Commentaries 409; 3 Story on Constitution 212; 18 C.J.S. Constitutional Law, sec. 435, p. 886.

a limitation on the state's ability to retrospectively impose a tax:

> Although basing its case upon the due process clause, appellant does not show wherein the tax constitutes any arbitrary and oppressive discrimination except to assert that a tax based upon a transaction consummated prior to passage of the act amounts to a taking of property without due process. It has many times been questioned whether the due process clause constitutes any limitation upon the taxing power. In this connection we quote from Mr. Justice Sutherland of the United States Supreme Court in an opinion upholding the validity of a statute of the State of Washington levying a tax upon the sale of oleomargarine:
>
> > Except in rare and special instances, the due process of law clause contained in the Fifth Amendment is not a limitation upon the taxing power conferred upon Congress by the Constitution. * * * And no reason exists for applying a different rule against a state in the case of the Fourteenth Amendment. * * * That clause is applicable to a taxing statute such as the one here assailed only if the act be so arbitrary as to compel the conclusion that it does not involve an exertion of the taxing power, but constitutes, in substance and effect, the direct exertion of a different and forbidden power, as, for example, the confiscation of property. * * * Collateral purposes or motives of a Legislature in levying a tax of a kind within the reach of its lawful powers are matters beyond the scope of judicial inquiry. * * * Nor may a tax within the lawful power of a state be judicially stricken down under the due process clause simply because its enforcement may or will result in restricting or even destroying particular occupations or businesses, * * * unless, indeed, as already indicated, its necessary interpretation and effect be such as plainly to demonstrate that the form of taxation was adopted as a mere disguise, under which there was exercised, in reality, another and different power denied by the Federal Constitution to the state.

A. Magnano Co. v. Hamilton, 292 U.S. 40, 54 S.Ct. 599, 601, 78 L.Ed. 1109.

Garrett Freight Lines, 135 P.2d 523, at 527.

Courts have, however, considered retrospective tax legislation unconstitutional as a violation of the due process clause when, as Welch concludes, in light of "the nature of the tax and the circumstances in which it is laid," the legislation is "so harsh and oppressive as to transgress [that] constitutional limitation." Welch v. Henry, 305 U.S. 134, 59 S.Ct. 121, 83 L.Ed. 87, at 93. The question is typically one of the degree of harshness, based upon consideration of factors such as (1) the effect of the retroactive application of legislation amending a tax on a taxpayer's voluntary act that was influenced by the taxpayer's understanding of tax incidence or consequence at the time of that act, especially if the tax to be imposed or amended is "novel," (2) the sufficient certainty of the taxpayer's expectation of money that is jeopardized by the retroactive legislation, (3) the length of the period of the legislation's retrospective application, and (4) the importance of the public purpose to be served by the action. The first three elements are, to some degree, based on the taxpayer's expectations, while the fourth involves a determination of a public interest that necessitated the actual enactment.

Computation and payment of the severance tax is not greatly determinative of taxpayers' taxable activities that generate the tax liability, nor does this proposed legislation seem to strike at activities of a taxpayer that reasonably relied on the current severance tax rates before this bill proposed amendment of that tax. It is the length of the period of the legislation's retrospective application and the importance of the public purpose to be served that need be most carefully considered.

The state's strongest case would be one that suggests that the purpose of the retroactive provision was remedial and that its impact was limited to the shortest period practicable. One benchmark date that might serve that purpose is July 1, 1988 (start of the current fiscal year, if, indeed, the principal purpose of the retroactive application is to meet revenue shortfalls in this fiscal year); a number of cases would sustain the argument that the legislation may be retrospective over the calendar or fiscal period of its enactment. An alternative--riskier because of the length of the period over which that retroactivity would reach back, but perhaps stronger from the point of view of public policy considerations--would be that date in 1987 when the ten-year exemption from the ELF's operation expired

and the economic limit factor became applicable to the state's major producing fields. But this would probably be justified only if the state could demonstrate that the conditions that suggested in 1981 that adoption of the ELF would benefit production are now shown to have been inaccurate or incorrect.

State due process and equal protection considerations:

Nothing in my quick research suggested that an analysis under the state's "due process" clause, article I, section 7, would reach a conclusion at variance with the decisions based on the comparable federal provision discussed above.

State "equal protection" analysis differs, though the conclusion reached under that analysis is consistent with the conclusions reached under the analysis applicable to the federal provisions. In State v. Erickson, 574 P.2d 1 (Alaska, 1976), the court established a "single test" approach for state-constitution based equal protection analysis, essentially requiring that the court (1) ascertain the purposes of the legislation to determine whether they are legitimate; (2) determine whether the means chosen to accomplish the objectives actually do so; and (3) balance the importance of the state's interest against the constitutional right involved. The state has plenary authority to tax. Assuming an adequate record--and the April, 1988, "ELF Policy Perspective" document may be sufficient--the ELF adjustments now proposed, adding to tax liability on the major producing fields that are most profitable but continuing or reducing rates on marginally producing fields, seems to bear a strong correlation to the state's efforts to impose a tax burden on an oil field's production that is consistent with the field's economics. By that analysis, if the retrospective application of the change is reasonable, the court should reject any state constitutional equal protection-based claim.

II

IS THERE A NEED FOR A SEVERABILITY CLAUSE?

A severability clause is not needed, and one has not been included in either draft. In the absence of a severability clause, you may rely on AS 01.10.030.

III

TO THE EXTENT THAT THE BILL MAKES A RETROACTIVE TAX REDUCTION, MAY THE LEGISLATURE PROVIDE FOR THAT TAX

REDUCTION BY A CREDIT AGAINST THE TAXPAYER'S FUTURE TAX LIABILITY, OR IS THE PAYMENT OF AN IMMEDIATE [CASH] REFUND REQUIRED?

If retrospective application of the ELF adjustment reduces the tax liability of any taxpayer, the revenue having been received and deposited into the general fund, the state would not be able to refund amounts that have been previously paid by the taxpayer to that taxpayer without an appropriation. However, article IX, section 6 of the state constitution provides that appropriations of public money may be made only for a public purpose. In states operating with a constitutional provision comparable to Alaska's in which there has been a proposed payment of a retroactive refund of a validly enacted tax, the appropriation has been held to violate those constitutional provisions. Japan Line, Ltd. v. MacCaffree, 558 P.2d 211 (Wash., 1977); City of Yakima v. Huza, 407 P.2d 815 (Wash., 1965); In re Estate of Skinner, 303 P.2d 745 (Cal., 1956); San Bernardino County v. Way, 117 P.2d 354 (Cal., 1941). These considerations then would favor the use of a credit due the taxpayer against the taxpayer's future tax liability, for the use of this approach would necessarily avoid a "public purpose" challenge under article IX, section 6.

IV

TO THE EXTENT THAT THE BILL MAKES A RETROACTIVE TAX REDUCTION, IS INTEREST PAYABLE ON THAT REDUCTION? IF SO, FROM WHAT DATE WOULD INTEREST ACCRUE?

Assuming the draft makes a retroactive tax reduction, I would treat the reduction as the equivalent of a refund of taxes legally collected. In a refund situation, the legislature may shape the conditions and limitations of that refund. While interest is generally recoverable on the amount of the refund, the few Alaska precedents suggest that payment of interest is discretionary and depends principally on whether or not the legislature, by statute, has authorized its payment.

By statute, interest is allowed on an overpayment of a tax levied and collected under AS 43. See AS 43.05.280. That statute is, of course, more generally applicable to instances involving tax payments made in regular fashion, and not to adjustments made by retrospective application of a change of the tax law. But it would seem to have applicability to the changes suggested under AS 43.55. Apart from the statute, I know of nothing that mandates

payment of interest on a tax refund due for a tax that, at the time of levy, was legally collectable, and suggest that the state may act with respect to interest on the tax refunds as it sees fit.

The committee should determine what it wants to do and give instructions, and the draft will be prepared accordingly.

V

TO THE EXTENT THAT THE BILL INCREASES A TAXPAYER'S LIABILITY, IS THE TAXPAYER OBLIGATED TO PAY INTEREST ON THE INCREASED LIABILITY? IF SO, FROM WHAT DATE WOULD INTEREST ACCRUE?

Assuming the committee substitute serves to establish a greater liability on the part of certain taxpayers for one or more "past due" months, that liability arises not under AS 43.55.020(a), but by operation of this law. The legislature has authority to determine whether interest should be paid, and from what date it should be paid.

The bill should not leave taxpayers subject to the assertion that they failed to remit taxes by the deadlines established in AS 43.55.020(a). In each measure, I have incorporated an additional provision that sets a date certain for reporting and paying the retroactive tax liability. Thereafter, if the amount due has not been timely remitted, provisions governing delinquency should apply.

*

Your January 30 memo asks other questions concerning retroactive application of the proposed ELF changes. Let me briefly respond.

As should be clear from the decision in Atlantic Richfield v. State, there is sound benefit in adhering to the requirements outlined in the Agency's drafting manual. The current manual, at pp. 27, 28, instructs that

> The language providing for retroactive application of a bill or part of a bill should be set out in a separate section immediately preceding the effective date section. The retroactive section and the sections in the bill that are to be retroactive should have immediate effective date clauses.

I am bound to follow the drafting manual, and any draft version of legislation prepared for the committee's

consideration that contained a retroactive provision would necessarily include an immediate effective date. All the drafts I would provide for the committee's consideration would contain the effective date clause. However, if, in a mark-up, the committee directs (on the record) deletion of the clause with the immediate effective date, I would provide the bill with that section omitted. But, before departing from the directive of the manual, I would want to have committee instruction, for I think it is important that the record show why there has been a departure from standard drafting procedure.

If one house or both houses fail to adopt an immediate effective date for legislation having a retroactive provision, the bill would still take effect. The effective date would be delayed 90 days, however, but the retroactive elements of the legislation would not be impaired by that delay.

JBC:kb
wkk1/109

Enclosure

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y STATE CAPITOL
JUNEAU ALASKA 99811
907 465 3800

MEMORANDUM March 27, 1989

SUBJECT: Failure of effective date in CSHB 118 (Resources) and retroactivity

TO: Senator Jan Faiks, Chair
Senate Judiciary Committee
ATTN: Chris Christensen

FROM: Jack Chenoweth
Legislative Counsel

Late last week the House of Representatives narrowly passed CSHB 118 (Resources), amending the economic limit factor applicable to the state severance tax. At the same time, it failed to adopt the clause giving the act immediate effect by the requisite two-thirds vote.

The bill is before your committee as CSHB 118 (Resources) (eff. date failed).

Section 4 of CSHB 118 (Resources)(eff. date failed) makes the economic limit factor amendments retrospectively operative to January 1, 1989. If that date is tested and found constitutionally lacking, section 5 of the Act identifies an alternative retroactive application date, the first day of the month in which the Act takes effect.

In light of an Opinion of the Attorney General of March 31, 1988, you have asked whether the bill's passage, if coupled with the failure of the immediate effective date clause, would invalidate retrospective application of the legislation. The opinion in question examined House Bill 164 of the Fifteenth Legislature. The particular provision in the opinion that generates the question appears to be the concluding paragraph of the first section of the analysis, a paragraph that reads:

> The language of sections 3 and 4 of [CSHB 164 (Finance)] is similar to the language approved by the [Alaska] Supreme Court in Atlantic Richfield [v. State, 705 P.2d 418 (Alaska 1985)]. Ch. 110, SLA 1978. If

> passed by the legislature with the requisite two-thirds vote on the effective date clause, the bill is certain to pass [the] first constitutional hurdle. Without passage of the effective date clause by a two-thirds vote, the retroactive application section will be void, and the bill will operate prospectively only.

Emphasis added.

In the Atlantic Richfield decision cited, the opinion notes:

> Retroactive application [of separate accounting] was challenged by the oil companies. The Supreme Court held that the statute was "properly retroactive to January 1, 1978," because (1) the statute expressly stated it was to be retroactive, in accord with AS 01.10.090 and (2) the two-thirds vote requirement on the immediate effective date was met. The Court rejected oil company arguments that a separate two-thirds vote was required for retroactivity:
>
> > AS 01.10.090 states that "[n]o statute is retrospective unless expressly declared therein." A two-thirds vote requirement does not appear in that section, or elsewhere in Alaska law. The legislature, however, has recognized that where retroactive application of a portion or all of a bill is desired, an immediate effective date, which does require a two-thirds vote under article II, sec. 18 and AS 01.10.070(a), should be used in conjunction with the retroactivity section.
>
> 705 P.2d [418], at 438, citing Legislative Affairs Agency, Manual of Legislative Drafting 11 (1977 ed.) and Uniform Rules of the Alaska State Legislature, Rule 10 (May 3, 1977); accord, Legislative Affairs Agency, Manual of Legislative Drafting 28-29 (1987 ed.).

The interrelationship of the effective date clause and the retrospective application of the substantive statutory provisions in legislation is not governed by either the state constitution or statute. Each stands on its own and each can therefore have independent operational effect.

An effective date provision addresses when a particular bill, enacted into law, is to become effective. "Become[s] effective" is defined to mean "becomes applicable," AS 01.-

10.070(f)(3), and identifies the time from which the legislature intends that the substantive changes made in the particular bill are to be given legal application--the time when the bill's application as law is to begin. An effective date clause is essentially procedural.

A retroactive or retrospective applicability clause, on the other hand, is a provision that acts to "[give] to pre-enactment conduct a different legal effect from that which it would have had without the passage of the statute." Hochman, The Supreme Court and the Constitutionality of Retroactive Legislation, 73 Harv. L. Rev. 692 (1960). Retrospective application goes to the legal effect of conduct that had occurred prior to the enactment of the legislation in question, changing the legal consequences of an act after the act had occurred. Most commentators summarily characterize legislation applied retrospectively as affecting existing rights. It is because of this characteristic that courts will carefully scrutinize retrospective civil statutes under either the impairment of contract or due process clauses, but otherwise a statute given retroactive effect will operate by its terms.

Thus, retrospective applicability of legislation and effective date provisions giving validity to enacted legislation serve different ends. In the absence of a constitutional or statutory provision or case decision holding that the two are to be treated together, there is nothing to require linkage between them. The state constitution and state statute do not do so explicitly. Neither "due process" nor "impairment of contract" provisions so implicitly require. Nor, I suggest, does the court's decision in Atlantic Richfield that is relied on in the Attorney General's Opinion. Far from being conclusive on the point, the court's reference in that decision merely repeats the suggestion or directive of the Legislative Drafting Manual that when it is desired that portions of a bill are to have retroactive effect, an immediate effective date clause "should" be used in conjunction with it.

The Legislative Drafting Manual's recommended use of an immediate effective date provision in conjunction with a retrospective application section may be regarded as a matter of drafting policy and convenience rather than one of legal necessity. From the policy perspective, there is little sense, at least in theory, to delay the taking effect of those portions of a bill that are to have retroactive effect

by 90 days when, to better accord with effectuating the legislature's intent that substantive relationships be changed retrospectively, the desired retroactive effect may be promptly obtained by giving the bill's provisions immediate effect.

Substantive constitutional questions concerning retrospective application of any legislation aside, the sole procedural requirement applicable to retrospective application of legislation is AS 01.10.090, with its directive that a statute is not retrospective unless it so expressly declares. CSHB 118 (Resources)(eff. date failed) meets that requirement.

There is nothing to indicate that article II, section 18, the state constitutional provision otherwise applicable to giving effect to legislation, should not operate in this instance. That section, as you well know, directs that laws passed by the legislature become effective ninety days after enactment unless, by a two-thirds vote of each house, a different effective date is provided. As to the bill's effective date, the suggestion or directive of the Drafting Manual (". . . an immediate effective date . . . should be used in conjunction with the retroactivity section") was met in the drafting of the initial versions of legislation. That clause was necessarily deleted by its failure to obtain 27 affirmative votes in the House.

The two provisions are not mutually dependent. They are independent provisions that operate, as I think they must do with respect to CSHB 118 (Resources) (eff. date failed), to delay the taking effect of the bill and making its changes retrospectively applicable to one of the dates identified in sections 4 and 5 of the bill.

In summary, I disagree with the language of the Attorney General's Opinion cited. The court's reference in Atlantic Richfield to a recommendation of the Legislative Drafting Manual is not, in my judgment, to compel the conclusion that "without passage of the effective date clause by a two-thirds vote, the retroactive application section will be void, and the bill will operate prospectively only." Article II, section 18 and AS 01.10.090 may operate independently and, when the requirements of AS 01.10.090 are met (as they are in the House-passed bill), the failure of the legislature to adopt an effective date clause is not fatal to a retroactive application of the legislation.

JBC:kb
wkk3/036

ARCO Alaska, Inc.
Tax Department
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Anchorage, Alaska 99510-0360
Telephone 907 265 1397

F. Steven Mahoney
Senior Tax Attorney

March 29, 1989

Senator Jan Faiks
Chairman Judiciary Committee
P.O. Box V
Capitol Room #101
Juneau, Alaska 99811

Dear Senator Faiks:

This letter addresses the constitutionality of the retrospective application of CSHB 118. The question is posed because, as the bill is now drafted, Section 4 would make the Act retroactive to January 1, 1989. The retrospective application of this Act to Alaska's monthly Oil and Gas Properties Production Tax is fundamentally unfair and constitutes an arbitrary and unconscionable taking in violation of the 5th Amendment Due Process Clause of the Constitution of the United States, (as applied through the 14th Amendment Equal Protection Clause), and of Article I, Section 7 of the Constitution of the State of Alaska.

A provision that creates additional tax liabilities on tax periods that have already ended, places an unreasonable and unconstitutional additional tax burden on taxpayers. Those taxpayers are forced to pay added taxes on production long after it was produced, taxed, transported, marketed and sold. The original production taxes, properly paid in the affected earlier tax periods, are part of production costs. The sales price of the oil was in part determined in relation to the costs then attributable to production. The producers can not go back and adjust the prices they previously charged to customers for that oil. It is fundamentally untair to come back after the sale, after the tax had been properly calculated, the return properly filed and the liability properly paid, and increase the tax cost of

producing the oil (as this bill does to oil produced by ARCO Alaska, Inc. at the Kuparuk River Unit).

The Supreme Court of Alaska summed up the general state policy in regard to retrospective application of statutes by stating "that people, in conducting their business, should be able to rely on existing laws with reasonable certainty." Norton v State, ABC Board, 695 P.2d. 1090, at 1093 (Alaska 1985). This is the general policy of most states and the federal government because it is widely acknowledged that legislation applied retrospectively affects existing legal rights. When pre-existing legal rights are deemed at risk, courts have closely scrutinized retroactive provisions in determining whether due process has been violated.

"In each case it is necessary to consider the nature of the tax and the circumstances in which it is laid before it can be said that its retroactive application is so harsh and oppressive as to transgress the constitutional limitation." Welch v Henry, 305 U.S. 134, 83 L Ed. 87, 59 S. Ct. 121 (1938) at 93. Because of the onerous additional tax liabilities created and that six separate tax return periods would be affected, retroactive application of this Act is so harsh and oppressive as to transgress constitutional due process limitations.

The Alaska Production Tax is a transactional tax on the production of each barrel of oil. It is not an income tax and therefore does not apply to any specific time period but instead relates directly to each barrel of oil produced. Each barrel severed subjects the producer to a tax on that barrel. The producer calculates, files and remits its taxes incurred in each month on the 20th day of the following month. Cases cited in recent state memorandum, asserting that due process is generally not violated by limited retrospective application of tax statutes, limit their findings specifically to income tax cases. United States v Darusmont, 449 U.S. 292, 66 L. Ed. 2d. 513, 101 S. Ct. 549 (1981), United States v Hudson, 299 U.S. 498, 81 L. Ed. 370, 57 S. Ct. 309 (1937), Welch v Henry, 305 U.S. 134, 83, L. Ed. 87, 59 S. Ct. 121 (1938), Brushaber v Union Pacific R.R., 240 U.S. 1, 60 L. Ed. 493, 36 S. Ct. 236 (1917). In each of these

cases provisions had been enacted during the taxable year which contained retroactive provisions to an earlier date in the same taxable year. In each case the tax acts were imposed before liabilities were fixed or the taxable period had ended. These cases are certainly distinguishable from the transactional Production Tax that will be affected by retroactive application of CSHB 118.

The retrospective application of tax statutes has in fact been found unconstitutional as violative of due process in transactional type taxes. Nichols v Collidge, 274 U.S. 531, 71 L. Ed. 1184 (1927), 47 S. Ct. 710, Blodgett v Holden, 275 U.S. 142, 72 L. Ed. 645, 48 S. Ct. 105 (1928), Untermeyer v Anderson, 276 U.S. 440, 72 L. Ed. 645, 48 S. Ct. 353 (1928). Justice Learned Hand, in addressing a retroactive provision of an income tax, recognized that "there is a valid distinction between the taxation of incomes and gifts or testamentary transfers." Cohan v Commissioner of Internal Revenue, 39 F. 2d. 540, at 545 (2nd CIR 1930). These cases dealing with gift and estate taxes are far more relevant to the present bill than income tax cases dealing with full year income tax periods.

Under either set of precedents the United State Supreme Court has determined that when reviewing retroactive tax questions a "totality of the circumstances" test must be applied. Various courts have used many different factors when making this inquiry but these factors can be summarized in four questions:

Keeping in mind the type of tax at issue, what is the extent of the retroactive effect of the tax?

In the current bill, the retroactive provision would apply to a transactional severance tax. The severance occurred months earlier than the Bill was proffered. Six separate and complete tax reporting periods will have ended between the earliest possible effective date and the retroactive application date. Funds generated through sales of the oil produced during that time frame have already been allocated, invested, or expended by the taxpayers. The affect is immediate, large and extraordinarily unfair to taxpayers.

What notice did the taxpayer enjoy and how should it have affected the certainty of his expectations?

That the ELF exists does not put a taxpayer on notice that a double exponent CSHB 118 would be drafted and include a retroactive provision. The taxpayer rightfully allocated, invested, and expended funds from production during this period believing that his production tax liabilities were fully satisfied. Notice was not necessarily adequate even on the date the bill was introduced (without a retroactive provision) because as the court has stated "[a taxpayer] cannot foresee and ought not be required to guess the outcome of pending measures." Untermeyer infra at 647. Therefore, the taxpayers have no clear notice of the Act until it is passed into law.

What is the public policy behind making the bill apply retroactively?

The legislature, in 1981, was aware that all oil produced in Alaska would eventually be subject to the unrestricted ELF formula. Therefore, the current ELF cannot be said to be adverse to public policy and the period over which it has been in effect should not be changed. If the legislature deems it necessary to change the ELF to cure its estimated budget shortfall it should do so prospectively only. No public policy is served by retroactively applying the bill.

Does the state's interest outweigh the harm done to the taxpayer because of the retroactive application of the bill?

The taxpayers are burdened by an onerous and unfair additional tax if the retroactive provision remains in the bill. The actions taken by the taxpayers during the period affected by the retroactivity can not be undone or changed in reaction to the additional tax burden. The state's interests in utilization, development, and conservation of its resources is neither enhanced nor harmed if the bill is not made retroactive. Therefore, the retroactivity provision serves no purpose except to add to the state's general fund.

The conclusion is not that retroactive tax legislation is per se a violation of a taxpayer's due process rights; however when reviewing the "totality of the circumstances" and weighing the precedent of prior non-income tax cases, it appears certain that Section 4, Retroactive Application, of CSHB 118 would be found an unconscionable and unconstitutional violation of the due process rights of Alaska's oil producers.

Sincerely,

F. Steven Mahoney
Senior Tax Attorney

MAY 1 1989

4/27/89
Pamela L. Rogers
10501 Stroganof Dr.
Anchorage, AK 99516

TAL

Senator Drue Pearce
P. O. Box V
Juneau, AK 99811

Dear Senator Pearce:

Thank you for passing the ELF bill out of your special Oil & Gas Committee. I believe this issue deserves a full Senate vote, although I doubt if it can make it through the remaining committees by adjournment on May 9.

Please don't take this personally. As a Republican, and unfortunately, a state employee, I hope the public doesn't fall for the committee's apparent strategy of hoping the ELF revision will die because the money will be available for more state spending...a public no-no. The state <u>needs</u> to spend some of that money.

As manager of the state's oil and gas leasing program, I have appeared before an often hostile public numerous times assuring that the oil and gas industry in Alaska has its environmental "act" together. Well, the Exxon Valdez proves that it didn't and it doesn't. I feel personally and professionally compromised. People who live in oil producing areas were well aware of monitoring and enforcement problems long before the Prince William Sound disaster. Unless the state spends money to monitor and enforce environmental terms related to oil and gas development, there is no guarantee that further disasters won't occur. And until we can assure the public of that, oil and gas development in Alaska could be in jeopardy. I don't say this idly. I've come to this conclusion from the letters I've received, from talks with local officials, and perhaps surprisingly, from editorials in the nationally-published Oil and Gas Journal.

Thus, I urge that you support modification of the ELF when it comes before the full Senate. And again, thank you for allowing the bill out of committee.

Sincerely,

Pamela L. Rogers

cc: Senator Arliss Sturgelewski

Pamela L. Rogers
10501 Stroganof Dr.
Anchorage, AK 99516
4/27/89

Senator Arliss Sturgelewski
P. O. Box V
Juneau, AK 99811

Dear Arliss:

I am enclosing a letter I wrote tonight to Senator Drue Pearce.

I won't repeat my feelings as expressed in the letter to Drue - you can read those for yourself.

I did not support a revision in the ELF before the Exxon Valdez spill. Now I do. I realize the two are not related, but I am convinced the state must find extra money <u>now</u> to monitor and enforce the environmental terms we have developed for oil and gas exploration and development.

If the bill makes it to your committee before May 9 I hope that you, too, will pass it out. And I hope that you will support the bill when it reaches the Senate floor. This goes against my grain, too, as I also believe (despite my dislike of the phrase and its originator) that "a deal is a deal." But the oil industry has reneged on its deal with the citizens of Alaska to operate in an environmentally safe manner.

Sincerely,

Pam Rogers

cc: Senator Drue Pearce

SENATE COMMITTEE REPORT

FURTHER RES
FIN

3/31/89 DATE TURNED INTO OFFICE _____

Mr. President:

OIL & GAS Committee considered CSHB 118 (RES)(efd fld)

oil and gas properties production tax

and recommended

[✓] replace with S cs HB 118 (OIL & GAS)) [ ] same title
[ ] or adopt _____ cs _____) [✓] new title
[ ] technical title change (HB only)

[ ] attached amendment(s) and

[ ] _____ letter of intent adopted

[ ] do pass

[✓] do not pass

[ ] no recommendation

[ ] individual recommendations

[ ] further referral to _____

FISCAL NOTE(S) [✓] zero [ ] fiscal impact [ ] appropriation no FN
[ ] new [ ] updated [ ] previous
[ ] same as previous fiscal note(s) published _____

MEMBERS SIGNING DO PASS

Cal Adams - NEEDS Amendment

OTHER RECOMMENDATIONS

Paul Fink (Do Not Pass)
Rick Halford (Do Not Pass)
Tim Kelly (Do Not Pass)

True Blood - Do not pass
Chairman signature and recommendation

[ ] Committee Backup attached

SENATE COMMITTEE REPORT

FURTHER

RES
FIN

3/31/89 DATE TURNED INTO OFFICE _____

Mr. President:

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Chairman signature and recommendation

[ ] Committee Backup attached

STATE OF ALASKA
1989 LEGISLATIVE SESSION

Bill Version: CSHB 118 (RES)
Publish Date: HOUSE 3/20/89

FISCAL NOTE

REQUEST:
Revision Date: March 7, 1989
Title: Oil & gas properties production tax - ELF; providing an effective date
Sponsor: House Finance Committee
Requestor: House Resources

Agency Affected: Department of Revenue
BRU: Oil & Gas Audit Division

Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LANDS & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	49,000	126,000	144,000	163,000	187,000	180,000

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

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: See attached page for analysis.

Prepared By: Roger Marks
Division: Dept. of Revenue, Oil & Gas Audit Division
Phone: 277-5627
Date: March 7, 1989

Approved by Commissioner: Hugh Malone for
Agency: Department of Revenue
Date: 3/8/89

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

Fiscal Analysis

This bill modifies the economic limit factor (ELF) formula used in computing the production (severance) tax on oil.

The bill (1) introduces the rate of field production into the exponent of the current ELF formula; (2) repeals the so-called "rounding rule," the provision of current law which states that for any month during the first 10 years of commercial oil production for which the computed ELF of a lease or property exceeds 0.7 the ELF shall be considered to be one; and (3) fixes the production at the economic limit (PEL) at 300 barrels times the number of well days in the month.

This bill is retroactive to January 1, 1989, and applies to oil produced after December 31, 1988. Because the severance tax on oil for a given month is due during the following month, a tax change which takes effect on January 1 would not affect revenues until February. Depending on the actual passage date of the bill, the FY 89 amounts may not be actually collected until FY 90.

This fiscal note was calculated using the oil price and production assumptions of the Department of Revenue's Fall 1988 Petroleum Production Revenue Forecast mid-case scenario updated for actual data through November of 1988. That forecast was predicated on Alaska North Slope crude prices at the U.S. Gulf of $13.25 a barrel in FY 89 and $12.89 a barrel in FY 90. 1/

Additional revenues for future years in millions of dollars are as follows:

1995	174
1996	169
1997	163
1998	153
1999	152
2000	144
2001	136
2002	129
2003	117
2004	110
2005	104
2006	91
2007	80
2008	60
2009	45
2010	19

1/ Had the fiscal note used the oil price and volume assumptions of the "Consensus Revenue Analysis" of January 24, 1989, the FY 89 fiscal impact would be $56 million, and the FY 90 fiscal impact would be $132 million. That analysis was predicated on Gulf ANS prices of $14.07/bbl in FY 89 and $14.30/bbl in FY 90.

Date: March 1, 1989

Price/Revenue Sensitivity Matrix for HB 118

(Millions of $)

ANS @ US Gulf ($/bbl)	Fiscal Year 1989	1990	1991	1992	1993	1994
10.35	28	89	89	97	100	96
12.70	42	113	114	123	135	129
15.00	56	149	149	159	170	160
17.35	70	185	186	196	208	196
19.70	84	216	218	230	243	216
22.00	98	251	254	278	273	239

Assumptions:

1. Production and well assumptions from Department of Revenue mid scenario Fall 1988 forecast.
2. HB 118 effective date January 1, 1989.
3. The variation in revenue between years is a function of a number of factors, including:
   - A. The changing relative tax rates under the current ELF and HB 118.
   - B. The effect of price on production levels. (e.g. West Sak economic at $18/bbl.)
   - C. The effect of changing production and wells on ELF under either formula.

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL AND GAS
ROYALTY ACCOUNTING SECTION

PARTICIPATING PERCENTAGES -
KUPARUK RIVER UNIT

WORKING INTEREST OWNER	OWNER'S AREA PARTICIPATION PERCENTAGE
ARCO	56.30096
BP	38.75643
UNOCAL	4.24961
MOBIL	.36600
EXXON	.21800
CHEVRON	.10900
	100.00000

d:kprkpcts
sms 4/11/89

KUPARUK

ADJUSTED FOR RSA AND
SECTION 37.110 - PBUOA

EXHIBIT 26A
AREA VALUES
OIL RIM AND GAS CAP PARTICIPATING AREAS

WORKING INTEREST OWNER *	OWNER'S AREA PARTICIPATION PERCENTAGE		AREA INVESTMENT COST ALLOCATION %
	OIL RIM	GAS CAP	
SAPC	50.6830966	13.8397816	49.8501784
ARCO	21.7799635	42.5649413	21.9509351
EXXON	21.7776490	42.5647901	21.9485918
MOBIL	1.8915771	0.2843666	2.1176717
PHILLIPS	1.8805235	0.2629370	2.1065745
CHEVRON	0.6717745	0.4830700	0.7106113
AMERADA HESS	0.5379191	-	0.5379191
TEXACO	0.5484215	-	0.5484215
LL&E	0.0397591	-	0.0397591
MARATHON	0.0499044	-	0.0499044
SHELL	0.1376744	-	0.1376744
BPAE	0.0017373	0.0001134	0.0017587

*LEGEND:

Amerada Hess --Amerada Hess Corporation
Arco --Arco Alaska, Inc.
BPAE --BP Alaska Exploration Inc.
Chevron --Chevron U.S.A., Inc.
Exxon --Exxon Corporation
Texaco --Texaco Producing Inc.
LL&E --The Louisiana Land and Exploration Company
Marathon --Marathon Oil Company
Mobil --Mobil Oil Corporation
Shell --Shell Western E & P Inc.
Phillips --Phillips Petroleum Company
SAPC --Standard Alaska Production Company

PRUDHOE BAY

October 1987

Participating Percentages
Lisburne Participating Area
Prudhoe Bay Unit

Working Interest Owner	Owner's Area Participating Percentage
ARCO Alaska, Inc.	40.00
Exxon Corporation	40.00
BP Exploration	20.00

LISBURNE

Participating Percentages
Kuparuk Participating Area
Milne Point Unit

Working Interest Owner	Owner's Area Participating Percentage
Conoco	72.14933
Chevron	17.37352
OXY	10.47715

3648A

MILNE POINT

EXHIBIT L

Area Participations and Acreage Participations for the Endicott Participating Area (Revised April 1985)

Working Interest Owner	Area Participation (%)	Acreage Participation (%)
Amoco Production Company	10.4940	12.0142
ARCO Alaska, Inc.	0.0234	0.0586
Cook Inlet Region, Inc.	0.6456	0.4919
Doyon, Limited	0.1291	0.0984
Exxon Corporation	21.0206	24.7098
NANA Regional Corporation, Inc.	0.3874	0.2952
Sohio Alaska Petroleum Company	56.7825	50.8591
Union Oil Company of California	10.5174	12.0728
	100.0000	100.0000

ENDICOTT

CASE 1

HOW THE ELF IS CALCULATED

ELF = (1 - [PEL/TP])exp(460*WD/PEL)

PEL = (Production at the Economic Limit) =
(300 barrels per day)*
(average number of operating wells during the month)*
(number of days of production for the month).

EXAMPLE

PEL = 300 barrels * 541 wells * 30 days = 4,869,000 barrels per month

TP = (Total Production for the field for the month) =
(average number of operating wells during the month)*
(number of days of production for the month)*
(average daily production per well).

EXAMPLE

TP = 541 wells * 30 days * 2477 barrels per well = 40,201,710 barrels per month

WD = (Well Days) =
(number of operating wells during the month)*
(number of days each well operates)

EXAMPLE

WD = 541 wells * 30 days = 16,230 well days

CALCULATION EXAMPLE

ELF = (1 - [PEL / TP])exp(460* WD / PEL)

ELF = (1 - [4,869,000/40,201,710])exp(460*16,230/4,869,000)

ELF = (1 - .1211) exp (1.533)

ELF = (.8789) exp (1.533)

ELF = .82

PROFITABILITY OF OIL AND GAS PRODUCTION ALASKA VERSUS FOREIGN COUNTRIES 1983-87

Thomas Horst
Horst & Associates
March 13, 1989

Introduction

The ultimate objective of this Report is to compare the royalty and tax burden of oil and gas operations in Alaska with that in foreign countries. In our search for information on how the total income from oil and gas production was shared between producers and governments, we undertook a comprehensive investigation of data published by the World Bank and other international agencies, the U.S. government, domestic and foreign trade publications, academic studies, and the companies' annual reports. In the end, we could identify only one reliable comprehensive source of data describing companies' actual oil and gas production: the supplemental information U.S. oil and gas producers are required by Financial Accounting Standard No. 69 ("FAS 69") to disclose in their annual financial reports. Although FAS 69 does not require companies to disclose total royalties, taxes or other payments to various governments per se, it does require companies to report their revenues, expenses (including income taxes), and a bottom-line result of operations by major geographic area of operations. Accordingly, we tabulated the results of foreign oil and gas producing activities for 1983-87 for the ten largest U.S. producers and compared those results to the comparable results reported by BP America and Sohio, the only U.S. company that reports separately the results of its Alaska operations.

FAS 69 Disclosure Requirements

Before describing those results, we should summarize the disclosure required by FAS 69. Broadly speaking FAS 69 requires companies to disclose information pertaining to: (1) proved oil and gas reserves, (2) capitalized costs relating to oil and gas producing activities, (3) costs incurred for property acquisition, exploration and development activities, (4) results of operations, and (5) a standardized measure of discounted future net cash flows relating to proved oil and gas reserves. Domestic and foreign producing activities must be disclosed separately, and individual countries or groups of countries must be disclosed separately if appropriate for meaningful disclosure.

In disclosing their results of operations, oil and gas producers are required to report information on their (1) revenues, (2) production (lifting) costs, (3) exploration expenses, (4) depreciation, depletion, and amortization, and valuation provisions, (5) income tax expense, and (6) and the result of operations, which generally equals the excess of revenues over the

various expenses.[1] Royalty payments and net profit disbursements are excluded from gross revenues. Production or severance taxes are not excluded from gross revenues, but are instead included in production costs.

Neither corporate overhead nor interest expense is included in production costs or otherwise deducted in calculating the results of operations. Moreover, income taxes are calculated using the statutory income tax rate applied to revenues less production (lifting costs), exploration expenses, depreciation, depletion, and amortization, and valuation provisions, but not corporate overhead or interest expense. Calculation of income tax expenses reflects permanent differences between book and taxable income (e.g., the excess of percentage depletion over cost depletion) and tax credits and allowances (e.g., the investment credit), but not book-tax timing differences (e.g., book depreciation versus accelerated tax depreciation, or the expensing of intangible drilling and development costs for tax, but not for book, purposes). Because book-tax timing differences usually result in a portion of book income tax expense being deferred until a later period, and because

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[1] The reported results of operations would also be reduced by the after-tax income attributable to minority interests in consolidated subsidiaries. Because the revenue and expenses include amounts attributed to minority interests are not reported separately, the after-tax income amounts shown in the tables of this Report are before deduction of after-tax income attributable to minority interests in the consolidated subsidiaries. Moreover, we have not included amounts attributable to interests of the reporting company in non-consolidated entities (e.g., Aramco).

no account is taken of the deductions for corporate overheads and interest expense, the amount of income tax expense recorded under the FAS 69 disclosure will generally overstate the amount of income tax actually paid on account of oil and gas production. What effect this overstatement of income tax has had on the comparison of the results of foreign oil and gas operations to the results of Alaska oil and gas operations is uncertain because income tax expense has potentially been overstated in both instances.

Results of Foreign Oil and Gas Operations for 10 Largest U.S. Producers, 1983-87

The results of foreign oil and gas operations for the 10 largest U.S. producers are described in detail in Appendix I and are summarized in Table 1 on the following page. Because results for a particular producer vary widely from region to region and may vary from year to year for a particular region, we have shown on the following page the five-year (1982-87) cumulative results for all foreign operations of each of the 10 producers. Exxon is not only the largest U.S.-based foreign producers, but also the most profitable with after-tax income averaging 21.4 percent of total oil and gas revenues. At the other extreme was Shell, which consistently reported losses on its limited foreign operations. (Obviously, these results do not include the very substantial and presumably profitable non-U.S. operations of Shell's U.K. and Dutch parent corporation or its foreign sister subsidiaries.)

TABLE 1: RESULTS OF FOREIGN PRODUCTION
10 LARGEST U.S. COMPANIES, 1983–87

Company	Years	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Amoco	1983–87	18,866	7,088	3,879	3,209	17.0%
ARCO	1983–87	2,789	357	330	27	1.0%
Chevron	1983–87	14,391	8,748	6,548	2,200	15.3%
Exxon	1983–87	42,198	20,696	11,673	9,023	21.4%
Mobil	1983–87	25,153	14,301	9,836	4,465	17.8%
Occidental	1983–87	8,561	3,391	3,012	379	4.4%
Phillips	1983–87	8,140	4,450	3,848	602	7.4%
Shell	1983–87	711	(77)	54	(131)	-18.4%
Tenneco	1983–87	1,033	236	137	99	9.6%
Texaco	1983–87	16,469	9,269	7,110	2,159	13.1%
10 Companies	1987	24,472	10,653	5,998	4,655	19.0%
10 Companies	1986	20,053	7,549	4,711	2,838	14.2%
10 Companies	1985	33,867	18,041	12,986	5,055	14.9%
10 Companies	1984	32,808	18,165	12,705	5,460	16.6%
10 Companies	1983	27,111	14,051	10,027	4,024	14.8%
10 Companies	1983–87	138,311	68,459	46,427	22,032	15.9%

One of the more striking features of the results shown in Table 1 is the clear correlation between the size of a U.S. company's foreign operations and its profitability (Exxon has the largest and most profitable, Mobil the second largest and second most profitable, etc.). Whether this correlation reflects economies of scale, a tendency of older foreign operations (and longer established foreign operators) to be more profitable, or some other phenomenon has not been investigated.

Results of Alaska Oil and Gas Operations for BP America, 1986-87, and Sohio, 1983-85

The only major U.S. company that discloses separately the results of its Alaska oil and gas operations is BP America and its major predecessor corporation, Sohio.[2] The BP America/Sohio results for the 1983-87 period are summarized in Table 2. For the entire five-year period, BP America and Sohio reported after-tax income from Alaska oil and gas operations equal to 27.7 percent of Alaska revenues. This result is higher than the comparable 21.4 percent after-tax income margin reported by Exxon, the company with the most profitable foreign operations, and substantially above

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[2] BP America was formed in 1987 when BP successfully acquired the remaining 45 percent of the outstanding shares in Sohio. BP America was the result of the merger of Sohio with BP North America, which held BP's Trans Alaska Pipeline System subsidiary, BP's minority interest in the Kuparuk field and associated pipeline, and other BP-owned U.S. assets.

TABLE 2: RESULTS OF ALASKA PRODUCTION
BP AMERICA 1986-87, SOHIO 1983-85

Company	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	fter-Tax Income/ evenues
BP America	1987	3,340	1,358	611	747	22.4%
BP America	1986	1,973	248	108	140	7.1%
Sohio	1985	4,433	2,571	1,241	1,330	30.0%
Sohio	1984	4,146	2,675	1,240	1,435	34.6%
Sohio	1983	4,013	2,336	1,037	1,299	32.4%
BP/Sohio	1983-87	17,905	9,188	4,237	4,951	27.7%

the 16.0 percent average margin for the foreign operations of the 10 largest producers taken together.

The annual results for BP America and Sohio shown in Table 2 indicates that for years through 1985 Sohio was consistently reporting after-tax income of 30 percent or more of its Alaska oil and gas revenues. The sharply lower after-tax income, 7.1 percent of Alaska oil and gas revenues, reported in 1986 was attributable primarily to the collapse of oil prices, but also to a series of unusual expenses recognized in that year. Specifically, BP America stated in the notes to its 1987 financial statements:

> During 1986 the Company recorded special charges of $1.13 billion pretax which have been classified as unusual items in the Statement of Income. The charges principally represented provisions for the restructuring of certain operations, the loss on the disposal of certain operations and the impairment of properties where future cash flows were no longer expected to recover current book values. Also included was a provision representing the excess of the Company's settlement with the Internal Revenue Service of the windfall profit tax valuation of Alaskan crude oil for the period 1980-83 over amounts previously provided.
>
> In addition to these unusual items, the exploration and production businesses recorded pretax charges of $410 million in 1986 for the impairment of leases held in oil and gas prospect inventory, over and above normal lease amortization expense. These charges were included in exploration expenses in the Statement of Income and resulted from technical reassessment and expected lower future oil prices.

The pattern of the BP America/Sohio results provide an interest contrast to that for foreign operations for U.S. companies. While both total revenues and after-tax income from foreign operations were down sharply in 1986 on account of the

lower oil prices, the ratio of after-tax income to total revenues dropped only slightly. The sharp drop in the after-tax income margin for Alaska operations compared to foreign operations may reflect two factors. First, the higher cost of transporting Alaska North Slope ("ANS") crude oil to refineries through the TAPS and then ocean transportation magnifies the impact of oil prices on ANS wellhead values. Stated differently, if the FAS 69 information consolidated the results of TAPS with ANS production, the ratio of income after taxes to total revenues would not have fallen so sharply.

Second, many foreign countries have entered into various risk-sharing agreements with oil and gas producers under which a significant portion of government revenues are calculated as a percentage of net profits -- wellhead values minus lifting and other costs -- rather than gross revenues. Risk-sharing agreements allow foreign governments to collect more revenue when oil prices are high, but reduce their revenues when oil prices are low. Consequently, the companies' ratio of income after taxes to gross revenues do not vary so sharply as oil prices fluctuate.

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
AMOCO, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Canada	1987	549	237	120	117	21.3%
Europe	1987	447	49	40	9	2.0%
Other	1987	2,021	733	406	327	16.2%
Canada	1986	521	204	89	115	22.1%
Europe	1986	430	102	69	33	7.7%
Other	1986	1,795	419	316	103	5.7%
Canada	1985	737	382	245	137	18.6%
Europe	1985	575	180	93	87	15.1%
Other	1985	3,146	1,281	732	549	17.5%
Canada	1984	727	320	216	104	14.3%
Europe	1984	579	253	59	194	33.5%
Other	1984	3,349	1,294	665	629	18.8%
Canada	1983	719	374	229	145	20.2%
Europe	1983	421	133	59	74	17.6%
Other	1983	2,850	1,127	541	586	20.6%
Foreign	1987	3,017	1,019	566	453	15.0%
Foreign	1986	2,746	725	474	251	9.1%
Foreign	1985	4,458	1,843	1,070	773	17.3%
Foreign	1984	4,655	1,867	940	927	19.9%
Foreign	1983	3,990	1,634	829	805	20.2%
Foreign	1983-87	18,866	7,088	3,879	3,209	17.0%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
ARCO, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Foreign	1987	573	90	77	13	2.3%
Foreign	1986	456	43	29	14	3.1%
Foreign	1985	674	96	95	1	0.1%
Foreign	1984	618	117	108	9	1.5%
Foreign	1983	468	11	21	(10)	-2.1%
Foreign	1983-87	2,789	357	330	27	1.0%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
CHEVRON, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Canada	1987	476	259	130	129	27.1%
Canada	1986	353	117	66	51	14.4%
Canada	1985	1,148	542	347	195	17.0%
Canada	1984	1,309	669	440	229	17.5%
Canada	1983	696	352	248	104	14.9%
Africa	1987	1,160	958	587	371	32.0%
Africa	1986	913	517	403	114	12.5%
Africa	1985	1,649	1,446	1,307	139	8.4%
Africa	1984	1,037	923	786	137	13.2%
Africa	1983	82	(57)	63	(120)	-146.3%
Other	1987	978	530	224	306	31.3%
Other	1986	895	239	176	63	7.0%
Other	1985	1,494	789	719	70	4.7%
Other	1984	1,271	865	629	236	18.6%
Other	1983	930	599	423	176	18.9%
Foreign	1987	2,614	1,747	941	806	30.8%
Foreign	1986	2,161	873	645	228	10.6%
Foreign	1985	4,291	2,777	2,373	404	9.4%
Foreign	1984	3,617	2,457	1,855	602	16.6%
Foreign	1983	1,708	894	734	160	9.4%
Foreign	1983-87	14,391	8,748	6,548	2,200	15.3%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
EXXON, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Canada	1987	965	504	209	295	30.6%
Other Western Hemisphere	1987	80	16	11	5	6.3%
Europe	1987	3,762	1,806	691	1,115	29.6%
Middle East & Africa	1987	82	(51)	12	(63)	-76.8%
Australia & Far East	1987	2,431	878	478	400	16.5%
Canada	1986	755	264	109	155	20.5%
Other Western Hemisphere	1986	62	(18)	2	(20)	-32.3%
Europe	1986	3,499	1,611	553	1,058	30.2%
Middle East & Africa	1986	62	(72)	5	(77)	-124.2%
Australia & Far East	1986	1,991	543	240	303	15.2%
Canada	1985	1,041	508	228	280	26.9%
Other Western Hemisphere	1985	98	(4)	1	(5)	-5.1%
Europe	1985	5,108	3,431	2,088	1,343	26.3%
Middle East & Africa	1985	30	(62)	3	(65)	-216.7%
Australia & Far East	1985	3,583	1,154	590	564	15.7%
Canada	1984	930	507	300	207	22.3%
Other Western Hemisphere	1984	94	(3)	(5)	2	2.1%
Europe	1984	5,159	3,793	2,506	1,287	24.9%
Middle East & Africa	1984	39	(6)	5	(11)	-28.2%
Australia & Far East	1984	3,607	1,206	589	617	17.1%
Canada	1983	937	497	316	181	19.3%
Other Western Hemisphere	1983	72	(77)	0	(77)	-106.9%
Europe	1983	4,680	3,353	2,262	1,091	23.3%
Middle East & Africa	1983	45	(6)	3	(9)	-20.0%
Australia & Far East	1983	3,086	924	477	447	14.5%
Foreign	1987	7,320	3,153	1,401	1,752	23.9%
Foreign	1986	6,369	2,328	909	1,419	22.3%
Foreign	1985	9,860	5,027	2,910	2,117	21.5%
Foreign	1984	9,829	5,497	3,395	2,102	21.4%
Foreign	1983	8,820	4,691	3,058	1,633	18.5%
Foreign	1983-87	42,198	20,696	11,673	9,023	21.4%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
MOBIL, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Foreign	1987	5,618	2,302	1,262	1,040	18.5%
Canada	1986	541	138	95	43	7.9%
Europe	1986	1,534	573	305	268	17.5%
Other	1986	1,519	1,233	732	501	33.0%
Canada	1985	974	495	356	139	14.3%
Europe	1985	2,193	1,171	839	332	15.1%
Other	1985	3,096	2,306	1,734	572	18.5%
Canada	1984	820	444	308	136	16.6%
Europe	1984	1,978	1,092	802	290	14.7%
Other	1984	2,453	1,836	1,373	463	18.9%
Canada	1983	643	368	262	106	16.5%
Europe	1983	1,670	879	633	246	14.7%
Other	1983	2,114	1,464	1,135	329	15.6%
Foreign	1987	5,618	2,302	1,262	1,040	18.5%
Foreign	1986	3,594	1,944	1,132	812	22.6%
Foreign	1985	6,263	3,972	2,929	1,043	16.7%
Foreign	1984	5,251	3,372	2,483	889	16.9%
Foreign	1983	4,427	2,711	2,030	681	15.4%
Foreign	1983-87	25,153	14,301	9,836	4,465	17.8%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
OCCIDENTAL, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Other Western Hemisphere	1987	568	108	144	(36)	-6.3%
Eastern Hemisphere	1987	629	424	347	77	12.2%
Other Western Hemisphere	1986	486	73	74	(1)	-0.2%
Eastern Hemisphere	1986	550	265	254	11	2.0%
Other Western Hemisphere	1985	422	(26)	87	(113)	-26.8%
Eastern Hemisphere	1985	1,358	663	542	121	8.9%
Other Western Hemisphere	1984	574	145	65	80	13.9%
Eastern Hemisphere	1984	1,572	734	633	101	6.4%
Other Western Hemisphere	1983	640	185	126	59	9.2%
Eastern Hemisphere	1983	1,762	820	740	80	4.5%
Foreign	1987	1,197	532	491	41	3.4%
Foreign	1986	1,036	338	328	10	1.0%
Foreign	1985	1,780	637	629	8	0.4%
Foreign	1984	2,146	879	698	181	8.4%
Foreign	1983	2,402	1,005	866	139	5.8%
Foreign	1983-87	8,561	3,391	3,012	379	4.4%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
PHILLIPS, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Norway	1987	613	192	116	76	12.4%
United Kingdom	1987	174	76	27	49	28.2%
Africa	1987	171	109	82	27	15.8%
Other Foreign	1987	72	(8)	1	(9)	-12.5%
Norway	1986	731	364	279	85	11.6%
United Kingdom	1986	152	27	11	16	10.5%
Africa	1986	142	(55)	53	(108)	-76.1%
Other Foreign	1986	53	(1)	0	(1)	-1.9%
Norway	1985	1,227	847	672	175	14.3%
United Kingdom	1985	261	127	70	57	21.8%
Africa	1985	327	183	201	(18)	-5.5%
Other Foreign	1985	88	(7)	9	(16)	-18.2%
Norway	1984	1,383	983	806	177	12.8%
United Kingdom	1984	284	129	107	22	7.7%
Africa	1984	318	177	184	(7)	-2.2%
Other Foreign	1984	89	(45)	1	(46)	-51.7%
Norway	1983	1,598	1,308	1,058	250	15.6%
United Kingdom	1983	85	20	(4)	24	28.2%
Africa	1983	292	91	172	(81)	-27.7%
Other Foreign	1983	80	(67)	3	(70)	-87.5%
Foreign	1987	1,030	369	226	143	13.9%
Foreign	1986	1,078	335	343	(8)	-0.7%
Foreign	1985	1,903	1,150	952	198	10.4%
Foreign	1984	2,074	1,244	1,098	146	7.0%
Foreign	1983	2,055	1,352	1,229	123	6.0%
Foreign	1983-87	8,140	4,450	3,848	602	7.4%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
SHELL, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Foreign	1987	193	4	2	2	1.0%
Foreign	1986	122	(5)	31	(36)	-29.5%
Foreign	1985	130	(47)	12	(59)	-45.4%
Foreign	1984	116	(20)	6	(26)	-22.4%
Foreign	1983	150	(9)	3	(12)	-8.0%
Foreign	1983-87	711	(77)	54	(131)	-18.4%

RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
TEXACO, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Canada	1987	534	294	143	151	28.3%
Other Western Hemisphere	1987	331	194	161	33	10.0%
Europe	1987	1,150	511	286	225	19.6%
Other Eastern Hemisphere	1987	718	433	411	22	3.1%
Canada	1986	504	238	131	107	21.2%
Other Western Hemisphere	1986	426	248	212	36	8.5%
Europe	1986	818	259	231	28	3.4%
Other Eastern Hemisphere	1986	598	309	267	42	7.0%
Canada	1985	952	555	338	217	22.8%
Other Western Hemisphere	1985	733	526	415	111	15.1%
Europe	1985	1,493	669	523	146	9.8%
Other Eastern Hemisphere	1985	1,094	769	718	51	4.7%
Canada	1984	1,088	696	401	295	27.1%
Other Western Hemisphere	1984	734	498	399	99	13.5%
Europe	1984	1,221	557	475	82	6.7%
Other Eastern Hemisphere	1984	1,232	904	812	92	7.5%
Canada	1983	978	659	374	285	29.1%
Other Western Hemisphere	1983	705	472	380	92	13.0%
Europe	1983	493	(2)	37	(39)	-7.9%
Other Eastern Hemisphere	1983	667	480	396	84	12.6%
Foreign	1987	2,733	1,432	1,001	431	15.8%
Foreign	1986	2,346	1,054	841	213	9.1%
Foreign	1985	4,272	2,519	1,994	525	12.3%
Foreign	1984	4,275	2,655	2,087	568	13.3%
Foreign	1983	2,843	1,609	1,187	422	14.8%
Foreign	1983-87	16,469	9,269	7,110	2,159	13.1%

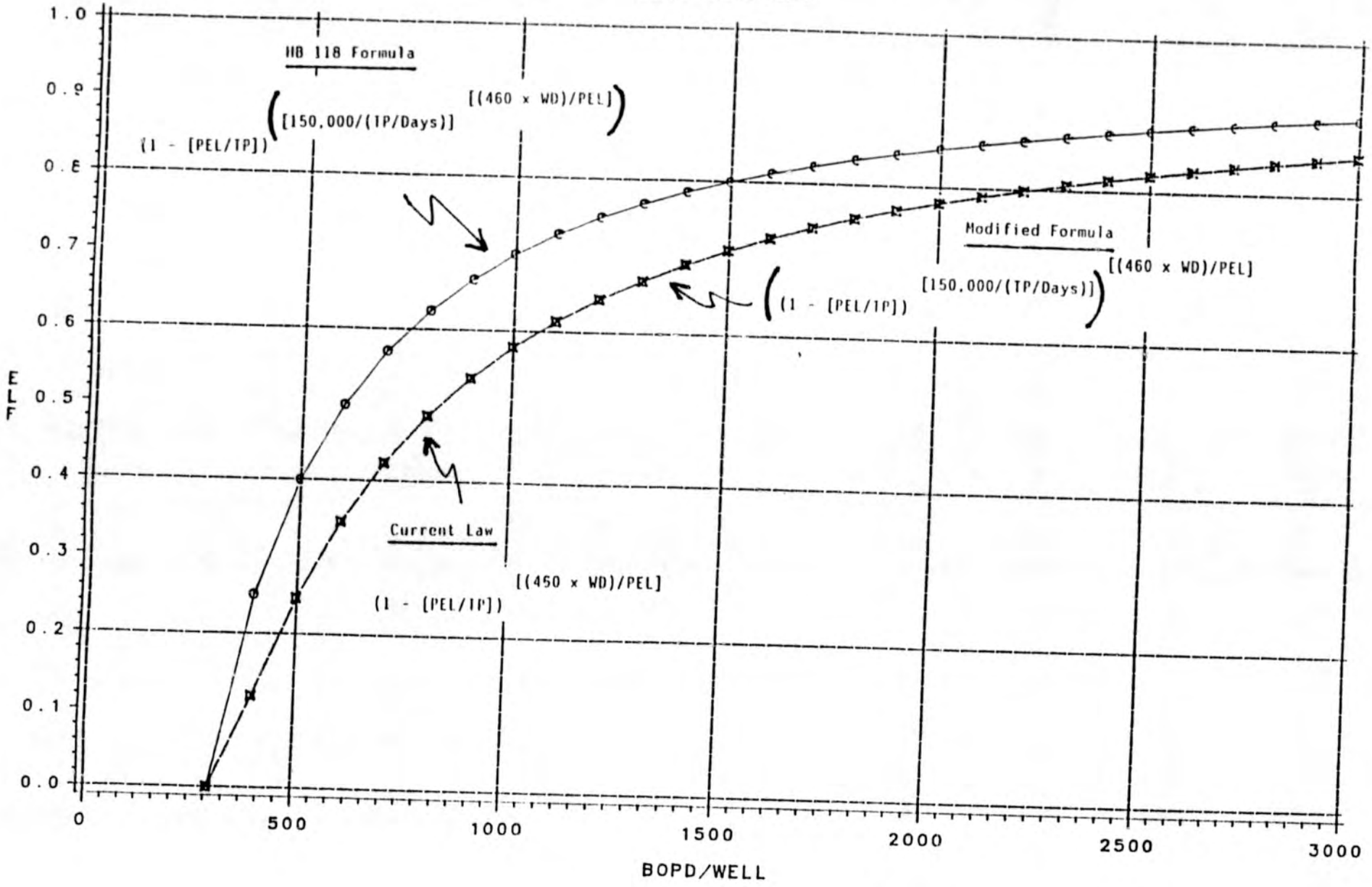
RESULTS OF FOREIGN OIL & GAS PRODUCING ACTIVITIES
TENNECO, 1983-87

Producing Area	Year	Total Revenue	Income Before Tax	Income Tax	Income After Tax	After-Tax Income/ Revenues
Colombia	1987	130	44	30	14	10.8%
Other Foreign	1987	47	(39)	1	(40)	-85.1%
Colombia	1986	109	36	27	9	8.3%
Other Foreign	1986	36	(122)	(48)	(74)	-205.6%
Colombia	1985	153	86	22	64	41.8%
Other Foreign	1985	83	(19)	0	(19)	-22.9%
Colombia	1984	139	91	33	58	41.7%
Other Foreign	1984	88	6	2	4	4.5%
Colombia	1983	147	113	46	67	45.6%
Other Foreign	1983	101	40	24	16	15.8%
Foreign	1987	177	5	31	(26)	-14.7%
Foreign	1986	145	(86)	(21)	(65)	-44.8%
Foreign	1985	236	67	22	45	19.1%
Foreign	1984	227	97	35	62	27.3%
Foreign	1983	248	153	70	83	33.5%
Foreign	1983-87	1,033	236	137	99	9.6%

EXXON

HB 118 – ELF FORMULA SENSITIVITIES

150,000 BOPD FIELD



XXXXX CURRENT TAX
ooooo HB118 FORMULA
□□□□□ MOD FORMULA

HOUSE FINANCE COMMITTEE
03-16-89
B.V. LIDDELL

SB 97 and HB 118 ELFs COMPARED

An analysis prepared for the
Senate Special Committee on Oil and Gas
20 April 1989

As the chair requested, this analysis focuses on three fields -- Prudhoe, Kuparuk and Lisburne -- and the differences between SB 97 and HB 118.

ELF formulas in both SB 97 and HB 118 have two variables: productivity per well, and total productivity (or, field productivity). In the real world these variables are closely interrelated; both are subject to continuous change over the life of an oil field. Figure 1 illustrates what realistically will happen when the two variables are considered together. Figure 2 illustrates what happens if total production is hypothetically held constant and per-well productivity is varied. Figure 3 hypothetically holds per-well productivity constant for the three fields, and illustrates the severance tax rates that would result when the total production is varied. The declining tax rates illustrated in Figure 1 are depicted graphically in Figures 4-6.

Figure 7 shows the declining total production and per-well productivity projected for the three fields, and which underly the rates in Table 1.

As requested, step-by-step instructions for calculating the ELFs under the two bills are included following Figure 7.

Division of Policy and Department of Revenue.

The Economic Limit Factor or ELF is a fraction which reduces severance taxes as well productivity declines.

EFFECTIVE SEVERANCE TAX RATE equals nominal severance tax rate times ELF.

For example, 15.00% times 0.824 equals an effective severance tax rate of 12.36%.

Department of Revenue (April 20, 1989)

Figure 1

PROJECTED SEVERANCE TAX RATES, FY 1990-2000
UNDER EXISTING LAW, SB 97, AND HB 118

Fiscal Year	PRUDHOE			KUPARUK			LISBURNE		
	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118
1990	12.1%	14.7%	14.9%	7.4%	11.1%	12.6%	5.4%	1.3%	0.4%
1991	12.0%	14.7%	14.9%	6.6%	10.4%	12.0%	4.7%	0.7%	0.1%
1992	11.8%	14.6%	14.9%	6.0%	9.6%	11.3%	5.7%	0.9%	0.2%
1993	11.4%	14.5%	14.9%	5.6%	8.9%	10.6%	5.7%	0.9%	0.2%
1994	11.1%	14.4%	14.8%	4.8%	7.3%	8.9%	5.4%	0.6%	0.1%
1995	10.5%	14.2%	14.8%	3.9%	5.5%	6.9%	4.4%	0.2%	0.0%
1996	9.7%	14.0%	14.6%	2.9%	3.6%	4.4%	4.0%	0.1%	0.0%
1997	8.9%	13.6%	14.5%	1.9%	1.7%	1.9%	3.5%	0.0%	0.0%
1998	7.9%	13.2%	14.2%	1.1%	0.6%	0.6%	2.9%	0.0%	0.0%
1999	6.8%	12.6%	13.9%	0.6%	0.2%	0.1%	1.3%	0.0%	0.0%
2000	5.6%	11.9%	13.4%	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%

Division of Policy, 4/19/89

Figure 2

HYPOTHETICAL SEVERANCE TAX RATES RESULTING WHEN FIELD PRODUCTION IS HELD CONSTANT AND AVERAGE DAILY PRODUCTION PER WELL IS VARIED--UNDER EXISTING LAW, SB 97, AND HB 118

(Approximate FY 90 averages shown in highlighting.)

Average Daily Production Per Well	PRUDHOE 1,452,100 barrels per day			KUPARUK 279,500 barrels per day			LISBURNE 43,800 barrels per day		
	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118
300	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
325	0.3%	10.9%	13.9%	0.3%	2.8%	5.6%	0.2%	0.0%	0.0%
350	0.8%	11.7%	14.1%	0.8%	4.2%	7.1%	0.6%	0.0%	0.0%
375	1.3%	12.2%	14.3%	1.3%	5.2%	8.1%	1.0%	0.0%	0.0%
400	1.8%	12.6%	14.4%	1.8%	6.0%	8.8%	1.5%	0.0%	0.0%
500	3.7%	13.4%	14.6%	3.7%	8.2%	10.5%	3.0%	0.3%	0.0%
600	5.2%	13.7%	14.7%	5.2%	9.5%	11.5%	4.2%	0.7%	0.1%
700	6.4%	14.0%	14.7%	6.4%	10.4%	12.1%	**5.2%**	**1.2%**	**0.3%**
800	7.3%	14.1%	14.8%	**7.3%**	**11.0%**	**12.5%**	6.0%	1.7%	0.6%
900	8.1%	14.3%	14.8%	8.1%	11.5%	12.8%	6.6%	2.2%	0.8%
1,000	8.7%	14.3%	14.8%	8.7%	11.9%	13.1%	7.1%	2.8%	1.2%
1,100	9.2%	14.4%	14.9%	9.2%	12.2%	13.3%	7.5%	3.2%	1.5%
1,200	9.6%	14.5%	14.9%	9.6%	12.4%	13.4%	7.9%	3.7%	1.8%
1,300	10.0%	14.5%	14.9%	10.0%	12.6%	13.6%	8.2%	4.1%	2.2%
1,400	10.4%	14.6%	14.9%	10.4%	12.8%	13.7%	8.5%	4.5%	2.5%
1,500	10.7%	14.6%	14.9%	10.7%	13.0%	13.8%	8.7%	4.8%	2.8%
1,600	10.9%	14.6%	14.9%	10.9%	13.1%	13.8%	8.9%	5.1%	3.1%
1,700	11.1%	14.6%	14.9%	11.1%	13.2%	13.9%	9.1%	5.4%	3.4%
1,800	11.3%	14.7%	14.9%	11.3%	13.3%	14.0%	9.3%	5.7%	3.7%
1,900	11.5%	14.7%	14.9%	11.5%	13.4%	14.0%	9.4%	6.0%	3.9%
2,000	11.7%	14.7%	14.9%	11.7%	13.5%	14.1%	9.5%	6.2%	4.2%
2,100	11.8%	14.7%	14.9%	11.8%	13.6%	14.1%	9.7%	6.4%	4.4%
2,200	12.0%	14.7%	14.9%	12.0%	13.6%	14.2%	9.8%	6.6%	4.7%
2,300	**12.1%**	**14.7%**	**14.9%**	12.1%	13.7%	14.2%	9.9%	6.8%	4.9%
2,400	12.2%	14.7%	14.9%	12.2%	13.7%	14.2%	10.0%	7.0%	5.1%

Division of Policy, 4/19/89

Figure 3

HYPOTHETICAL SEVERANCE TAX RATES RESULTING WHEN PER-WELL PRODUCTIVITY IS HELD CONSTANT AND AVERAGE DAILY PRODUCTION PER FIELD IS VARIED--UNDER EXISTING LAW, SB 97, AND HB 118

(Approximate FY 90 averages shown in highlighting.)

Average Daily Production for the Field	PRUDHOE 2,290 barrels per well per day			KUPARUK 817 barrels per well per day			LISBURNE 730 barrels per well per day		
	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118	Existing Law	SB-97	HB-118
10,000	12.1%	1.1%	0.0%	7.4%	0.0%	0.0%	5.4%	0.0%	0.0%
20,000	12.1%	4.1%	0.7%	7.4%	0.2%	0.0%	5.4%	0.1%	0.0%
30,000	12.1%	6.4%	2.9%	7.4%	0.9%	0.1%	5.4%	0.5%	0.0%
40,000	12.1%	7.9%	5.2%	7.4%	1.8%	0.5%	5.4%	1.1%	0.2%
50,000	12.1%	9.0%	7.0%	7.4%	2.8%	1.3%	5.4%	1.8%	0.7%
60,000	12.1%	9.8%	8.5%	7.4%	3.7%	2.3%	5.4%	2.4%	1.4%
70,000	12.1%	10.4%	9.5%	7.4%	4.5%	3.4%	5.4%	3.1%	2.2%
80,000	12.1%	10.9%	10.4%	7.4%	5.3%	4.5%	5.4%	3.6%	3.1%
90,000	12.1%	11.3%	11.0%	7.4%	5.9%	5.5%	5.4%	4.2%	3.8%
100,000	12.1%	11.6%	11.5%	7.4%	6.5%	6.4%	5.4%	4.6%	4.6%
200,000	12.1%	13.2%	13.7%	7.4%	9.9%	11.2%	5.4%	7.5%	8.7%
300,000	12.1%	13.8%	14.3%	7.4%	11.3%	12.8%	5.4%	8.9%	10.2%
400,000	12.1%	14.1%	14.5%	7.4%	12.2%	13.5%	5.4%	9.6%	10.9%
500,000	12.1%	14.2%	14.7%	7.4%	12.7%	14.0%	5.4%	10.1%	11.3%
600,000	12.1%	14.4%	14.8%	7.4%	13.0%	14.2%	5.4%	10.4%	11.5%
700,000	12.1%	14.5%	14.8%	7.4%	13.3%	14.4%	5.4%	10.7%	11.7%
800,000	12.1%	14.5%	14.8%	7.4%	13.5%	14.5%	5.4%	10.9%	11.8%
900,000	12.1%	14.6%	14.9%	7.4%	13.7%	14.6%	5.4%	11.0%	11.8%
1,000,000	12.1%	14.6%	14.9%	7.4%	13.8%	14.6%	5.4%	11.1%	11.9%
1,100,000	12.1%	14.7%	14.9%	7.4%	13.9%	14.7%	5.4%	11.2%	11.9%
1,200,000	12.1%	14.7%	14.9%	7.4%	14.0%	14.7%	5.4%	11.3%	12.0%
1,300,000	12.1%	14.7%	14.9%	7.4%	14.1%	14.8%	5.4%	11.4%	12.0%
1,400,000	12.1%	14.7%	14.9%	7.4%	14.1%	14.8%	5.4%	11.4%	12.0%
1,500,000	12.1%	14.7%	14.9%	7.4%	14.2%	14.8%	5.4%	11.5%	12.1%
1,600,000	12.1%	14.8%	14.9%	7.4%	14.2%	14.8%	5.4%	11.5%	12.1%

Division of Policy, 4/19/89.

Figure 4

PROJECTED TAX RATES AT PRUDHOE BAY

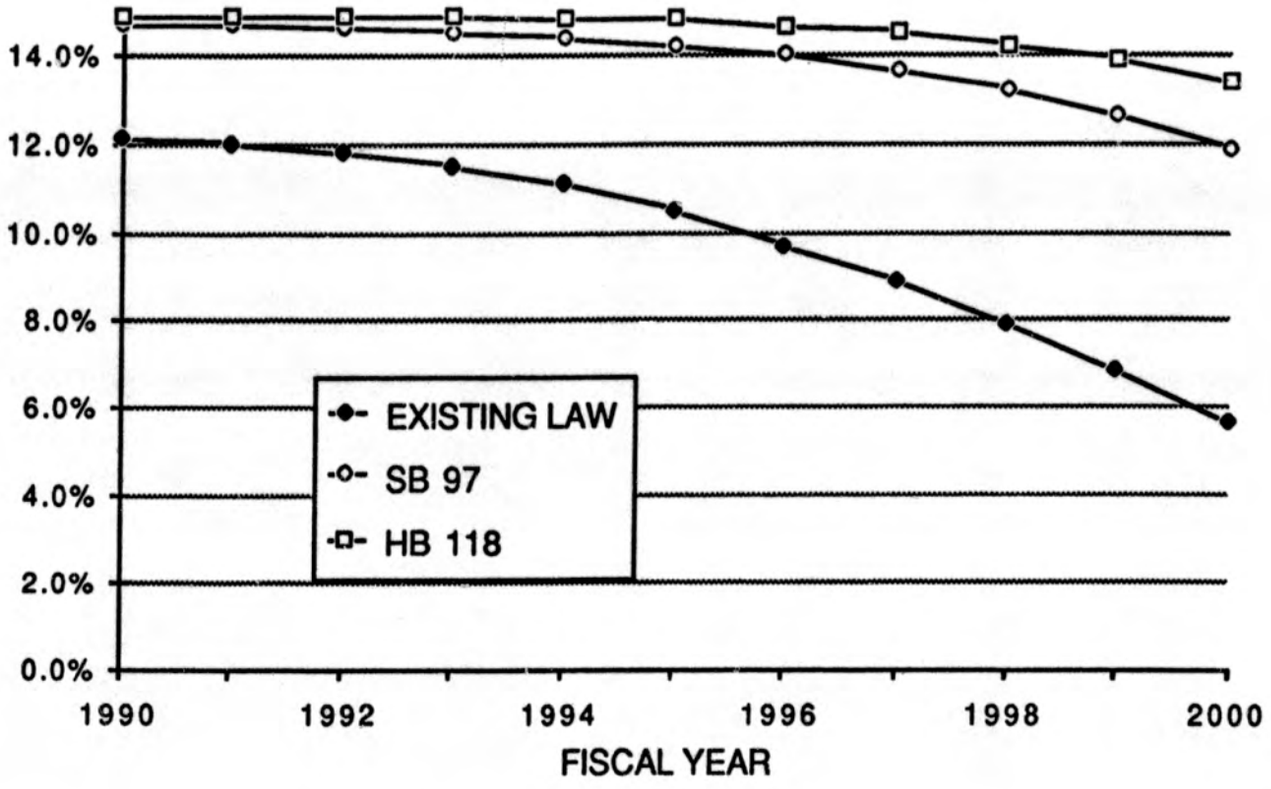


Figure 5

PROJECTED TAX RATES AT KUPARUK

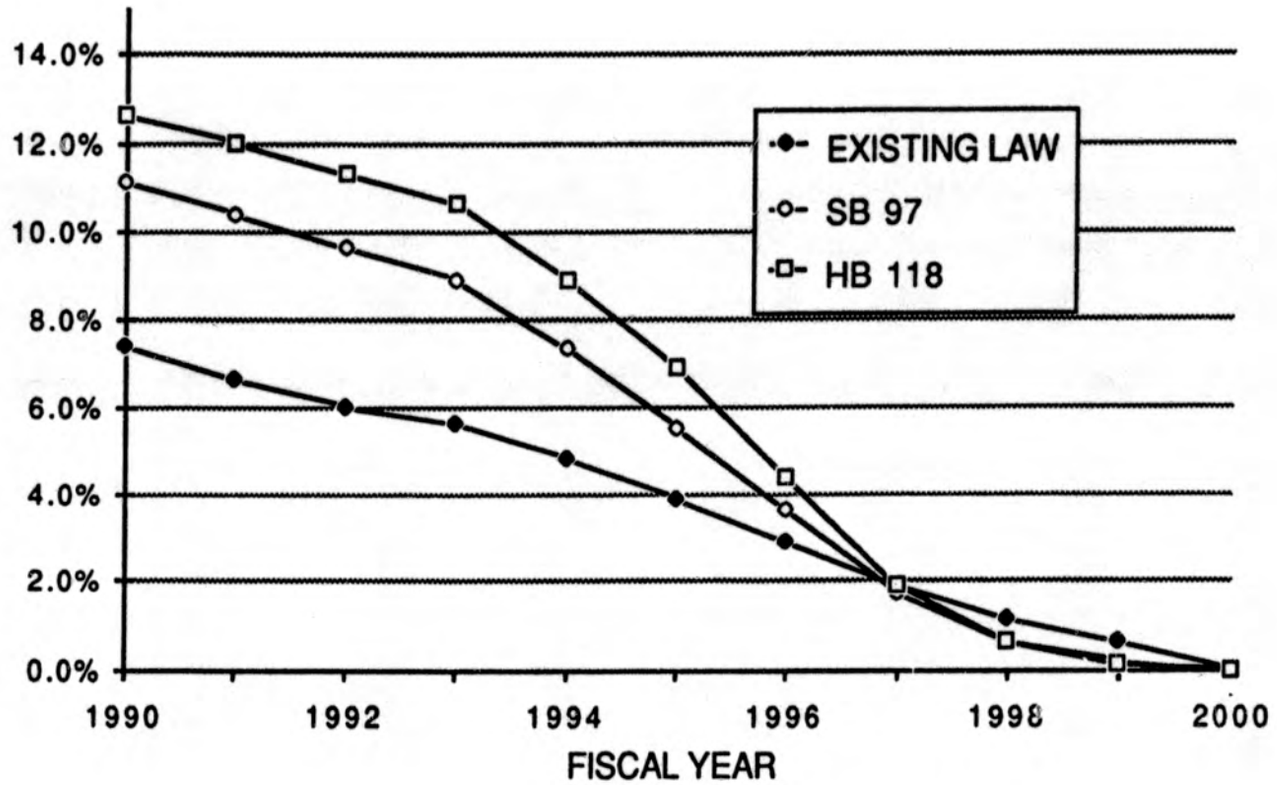


Figure 6

PROJECTED TAX RATES AT LISBURNE

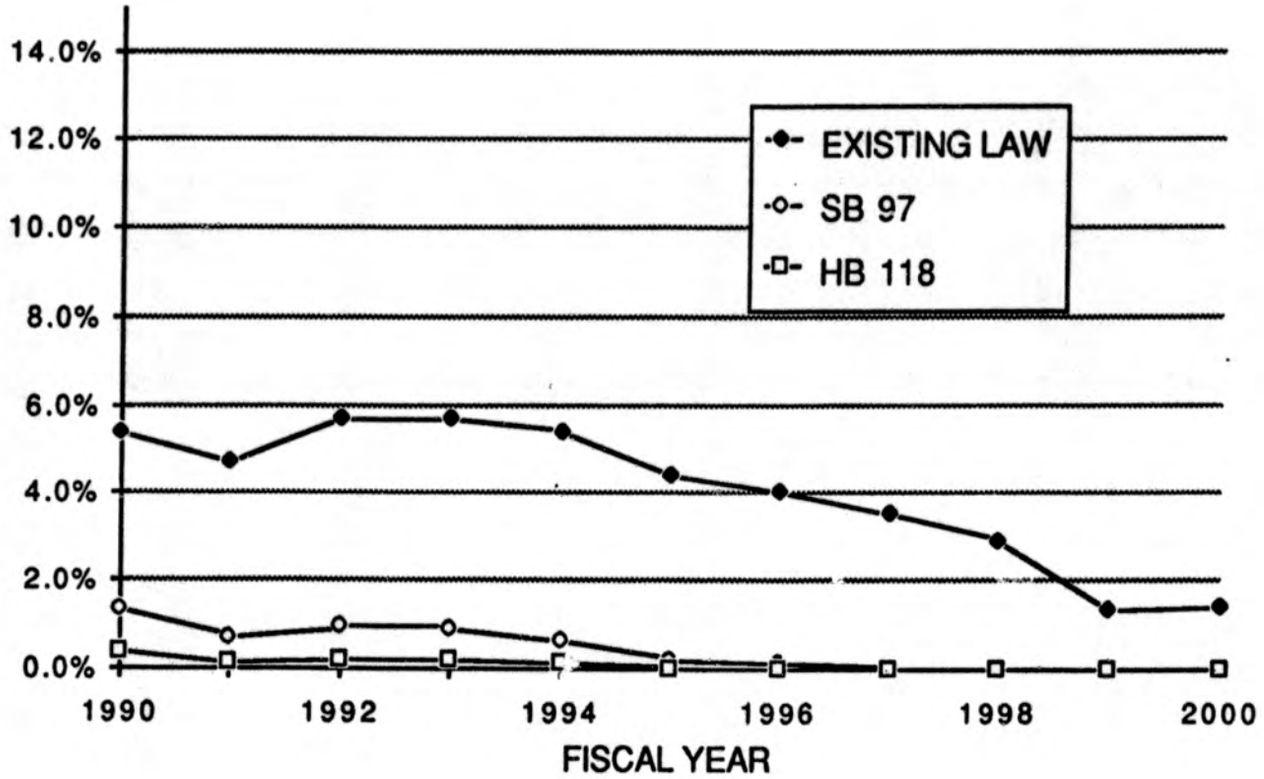


Figure 7
Estimated Production and Well Productivity
Prudhoe Bay, Kuparuk, Lisburne

	Prudhoe Bay		Kuparuk		Lisburne	
	Volume (mmbbl/yr)	Avg p/well Prod (bbl/day)	Volume (mmbbl/yr)	Avg p/well Prod (bbl/day)	Volume (mmbbl/yr)	Avg p/well Prod (bbl/day)
1990	530	2290	102	817	16	731
1991	504	2080	97	724	15	642
1992	472	1845	89	666	15	642
1993	427	1614	81	636	15	642
1994	387	1450	69	569	14	619
1995	332	1303	59	513	12	548
1996	282	1165	50	457	11	520
1997	239	1039	42	404	10	489
1998	203	930	36	365	9	457
1999	173	834	32	341	7	376
2000	147	753	26	294	7	376

Based on the Dept of Revenue's Spring 1989 forecast. Well productivity is adjusted for well days.

COMPUTING THE SB 97 ELF

(Using typical Prudhoe Bay field values in the examples.)

The SB 97 Economic Limit Factor formula is:

ELF = (1-PEL/TP)EXP[(55,000,000*WD)/(PEL*TP/Days)]

PEL (Production at the Economic Limit) =
(300 barrels per day)*
(average number of operating wells during the month)*
(number of days of production for the month).
For example:
*300 barrels * 634 wells * 30 days = 5,706,000 barrels per month at the Economic Limit.*

TP (Total Production for the field) =
(average number of operating wells during the month)*
(number of days of production for the month)*
(average daily production per well).
For example:
*634 wells * 30 days * 2290 barrels per well = 43,555,800 barrels of production per month.*

EXP (Exponent) -- Means that the expression following is an exponent.

WD (Well Days) =
(average number of operating wells during the month)*
(number of days of production for the month).
For example:
*634 wells * 30 days = 19020 well days.*

Days = the number of days in the month for which the tax is paid.
For example: In April, 30 days.

CALCULATION EXAMPLE

=(1- PEL / TP) EXP[(55,000,000* WD)/(PEL * TP / Days)]

=[1 -(5,706,000/43,555,800)]EXP[(55,000,000*19,020)/(5,706,000*43,555,800/30)]

= (1 - .1310) EXP (.1263)

= $(.8690)^{(.1263)}$

= .9824

TP = total production

COMPUTING THE HB 118 ELF

(Using typical Prudhoe Bay field values in the examples.)

The HB 118 Economic Limit Factor formula is:

ELF = (1-[PEL/TP])EXP([150,000/(TP/Days)] EXP [(460*WD)/PEL])

PEL (Production at the Economic Limit) =
(300 barrels per day)*
(average number of operating wells during the month)*
(number of days of production for the month).
For example:
*300 barrels * 634 wells * 30 days = 5,706,000 barrels per month at the Economic Limit.*

TP (Total Production for the field) =
(average number of operating wells during the month)*
(number of days of production for the month)*
(average daily production per well).
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(number of days of production for the month).
For example:
*634 wells * 30 days = 19,020 well days.*

Days = the number of days in the month for which the tax is paid.
For example: In April, 30 days.

CALCULATION EXAMPLE

= (1-[PEL/TP])EXP([150,000/(TP/Days)] EXP [(460*WD)/PEL])

=[1 -(5,706,000/43,555,800)]EXP[(150,000/(43,555,800 /30)] EXP [(460* 19,020)/ 5,706,000])

$= (1 - .1310) \text{ EXP } .1033^{1.5333}$

$= .8690^{.0308}$

= .9957

SCS CSHB118 (JUDICIARY)

LEGISLATION REVISING THE ECONOMIC LIMIT FACTOR (ELF)

Presented to the

Senate Special Committee on Oil and Gas

by the

Department of Revenue

April 20, 1989

INDEX

I. QUESTIONS AND ANSWERS ON SCS CSHB 118 (JUDICIARY)

II. THE SEVERANCE TAX AND THE ELF

- A. Definition of the Severance Tax
- B. Importance of the Severance Tax to Alaska's Revenues
- C. Definition of the ELF
- D. Application of ELF to Produce the Effective Severance Tax Rate

III. HISTORY OF ELF

- A. The Tax Rate on Prudhoe Bay Has Dropped Sharply
- B. How Revenue Neutral Were the 1981 Changes?
- C. Selected Petroleum Revenues, FY 79 - FY 88
- D. General Fund Unrestricted Revenues, FY 88
- E. Severance Tax Receipts as Percentage of Gross Wellhead Value -- Prudhoe Bay

IV. SCS CS HB 118 (JUDICIARY)

- A. Legislation
- B. Fiscal Note
- C. Price/Revenue Matrix Assuming 5-31-89 Application Date
- D. Size of Field Where Taxes Will Increase or Decrease Under SCS CS HB 118 (Judiciary)
- E. Sectional Analysis of SCS CS HB 118 (Judiciary): Legislation Revising the Economic Limit Factor

V. ELF'S EFFECTS ON ALASKA FIELDS

- A. Approximate Field Locations (Current and Prospective Fields)
- B. The Tax Rate on Prudhoe Bay Has Dropped Sharply
- C. Fields Where Taxes Would Increase Under HB 118
- D. Fields Where Taxes Would Decrease Under HB 118 (For Representative Years)
- E. Effective Severance Tax Rates Under Different ELF Formulas
- F. Synopsis of Alaska Fields and Top Ten Lower 48 Fields
- G. U.S. Fields With Reserves Exceeding 100 Million Barrels (Oil and Gas Journal, January 30, 1989)

VI. ELF AND ALASKA'S REVENUE

- A. HB 118 Raises More Severance Tax Revenue From Prudhoe Bay and Kuparuk
- B. HB 118 Gives a Tax Savings For Producers At Oil Fields Other than Prudhoe Bay and Kuparuk
- C. Comparative Severance Tax Payments in 1987 For 10 Top Oil Producing States

QUESTIONS AND ANSWERS ON

SCS CSHB 118 (JUDICIARY)

Why should the Legislature modify the ELF?

This legislation promotes economic development, creates jobs, raises revenue, and protects the interests of the people of Alaska in their resources.

What tax does the Economic Limit Factor formula affect?

The Economic Limit Factor (ELF) formula affects the severance tax on oil. The severance tax — also called the production tax — is a tax on oil removed from the ground. The tax compensates for the depletion of the state's non-renewable resources. The severance tax has provided more than a third of the state's unrestricted General Fund revenue in the past decade.

What is the Economic Limit Factor?

The ELF is a formula which reduces the severance tax actually paid on oil. The ELF formula produces a fraction which reduces severance taxes as the productivity of a well declines. This reduced severance tax rate is the "effective" severance tax rate — that is, it is the rate the producer actually pays. The effective severance tax rate is the "nominal" severance tax rate (the one set out, or "named" in statute, which is normally 15 percent for mature fields) multiplied by the ELF. Here's an example which shows the tax rate on Prudhoe Bay now:

15% nominal tax rate

multiplied times ELF of 0.824

equals an effective severance tax rate of 12.36%

The higher the ELF, the higher the actual tax paid. The lower the ELF, the lower the actual tax paid. A low ELF provides a large tax break.

Why do we have the ELF?

The ELF was originally created in 1977 to encourage oil companies to develop marginal oil fields, and to extend the life of producing fields when production at those fields became marginal.

How did we get to where we are today?

In 1981, the Legislature sharply reduced the state's corporate income tax on oil and gas producers by abandoning separate accounting. (The changes were made because the separate accounting law had been challenged in court, but the state later won the lawsuit.) In an attempt to compensate for the expected loss of revenues from the changes made in the corporate income tax, the Legislature raised the severance tax rate from 12.25% to 15%. Because the ELF formula would have cut into this needed revenue, the Legislature -- as a stopgap measure -- suspended the ELF at Prudhoe Bay until 1987.

Even at the outset, this attempt to compensate failed. The 1981 changes in the income tax and severance tax had the net effect of costing the state more than $1 billion in lost revenues between fiscal years 1982 and 1987.

In 1987, the impact of the 1981 tax changes became even more negative for the state. When the stopgap provision ended in 1987, this additional tax break caused the effective severance tax rate at Prudhoe Bay to drop sharply. (Graphic #1 shows this sharp drop for Prudhoe Bay.) This sharp drop immediately cut Alaska's total revenue by $135,000,000 in FY 88, and has cost the state more than $70 million more for FY 89 by the middle of March of 1989.

Why do people want to change the ELF now?

The current ELF is not giving Alaska an attractive enough tax climate to encourage development of marginal oil fields. Instead of helping marginal fields, the ELF formula now mostly provides a massive and unnecessary tax break to two fields which are not marginal at all -- Prudhoe Bay and Kuparuk. These are the largest oil fields in the United States, and two of the most profitable as well.

House Bill 118 would target tax breaks toward marginal fields and away from these two large, high-profit fields. The bill would give tax breaks to currently producing marginal fields such as Endicott and Lisburne and to prospective marginal fields at Niakuk, Point Thomson, Milne Point, and Seal Island. It would leave taxes at zero at West Sak and all the Cook Inlet fields. (See Graphic #2.)

In fact, HB 118 would cut -- or leave at zero -- the taxes on every oil field in Alaska except Prudhoe Bay and Kuparuk.

HB 118 would reduce the tax breaks given to Prudhoe Bay and Kuparuk. The current ELF gives a 20 percent tax break to Prudhoe Bay, and more than a 40 percent tax break to Kuparuk. HB 118 would reduce -- but not eliminate -- the tax breaks given to these two large fields.

Graphic #3 shows the tax savings provided by HB 118 for producers at all other fields except Prudhoe Bay and Kuparuk. Graphic #4 shows the increased revenues generated from Prudhoe Bay and Kuparuk by HB 118. The legislation on balance raises substantial revenues.

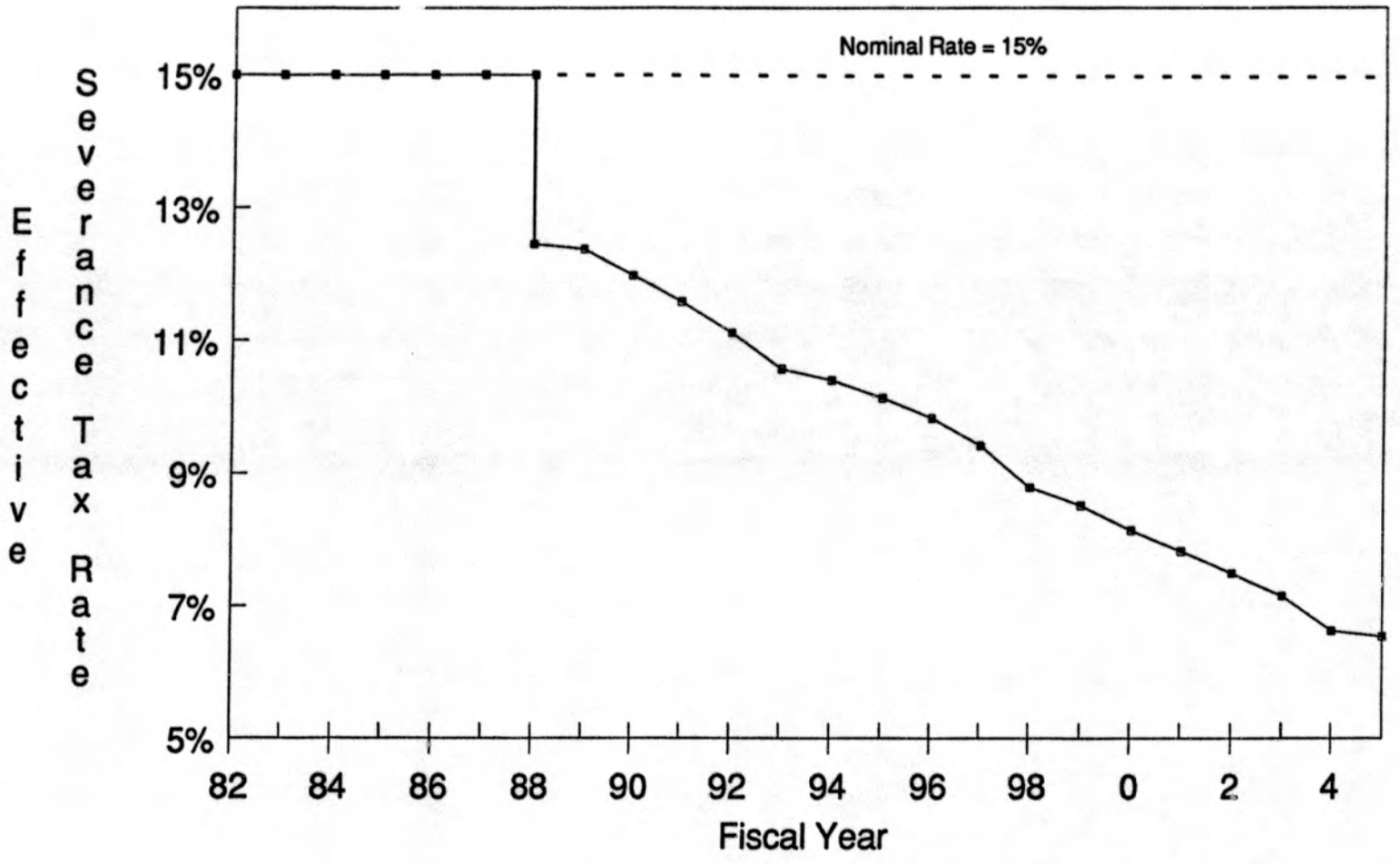
How much revenue would HB 118 raise?

HB 118 does not provide for an effective date, nor does it specify when it begins to apply. Assuming that the bill went into effect September 1, 1989 and applied to oil produced after August 31, 1989 -- and assuming the mid-case scenario projections of the Fall, 1988 Department of Revenue forecast -- the bill will raise $132 million in Fiscal Year 1990.

The legislation would raise much more money if it were retroactive. If the bill applied to oil produced after December 31, 1988, it would generate $235 million for FY 89 and FY 90.

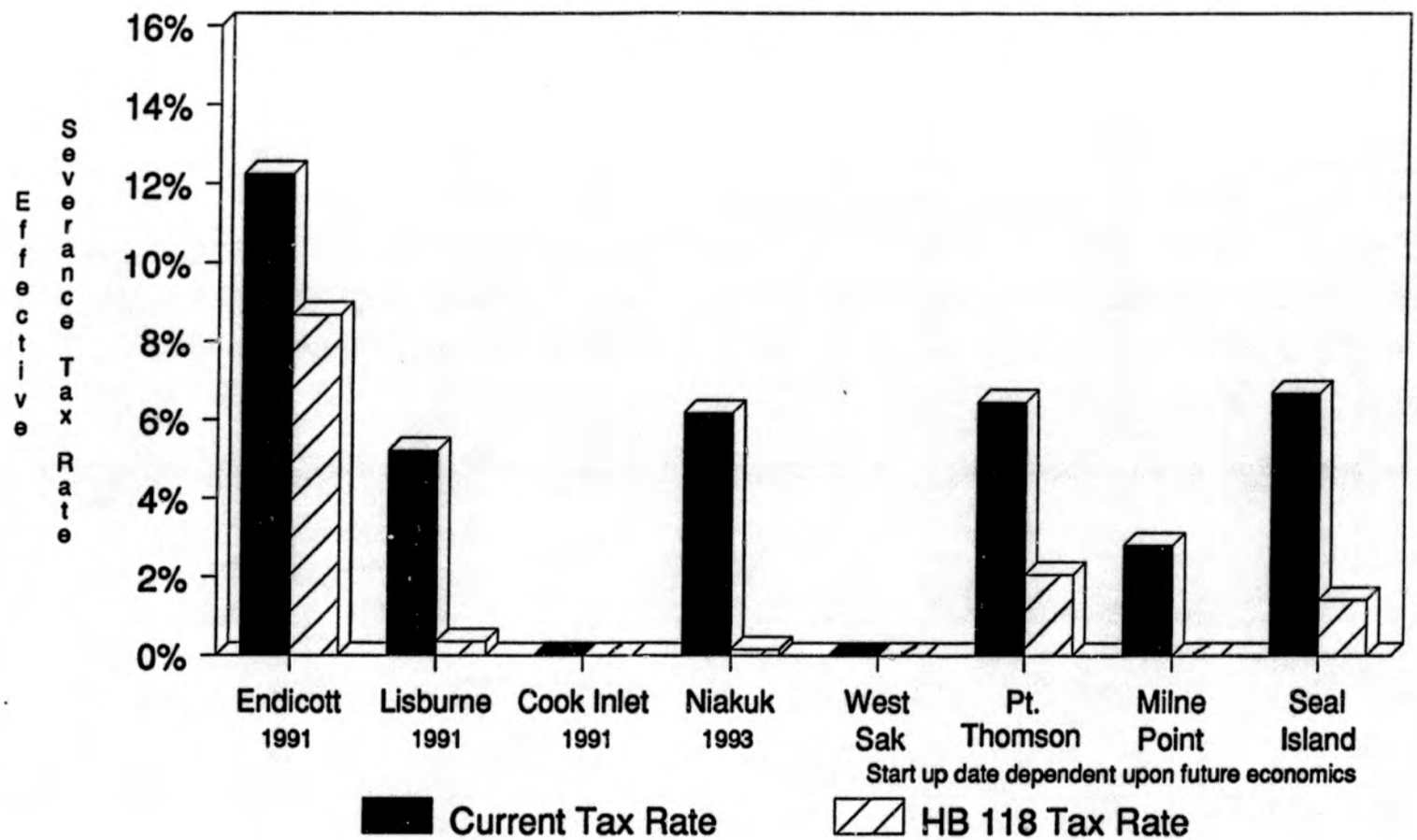
The long-term fiscal impact is substantial as well. For the FY 91 - FY 95 period, the legislation would raise $981 million.

The Tax Rate at Prudhoe Bay Collapsed on July 1, 1987



Fields Where Taxes Would Decrease Under HB 118

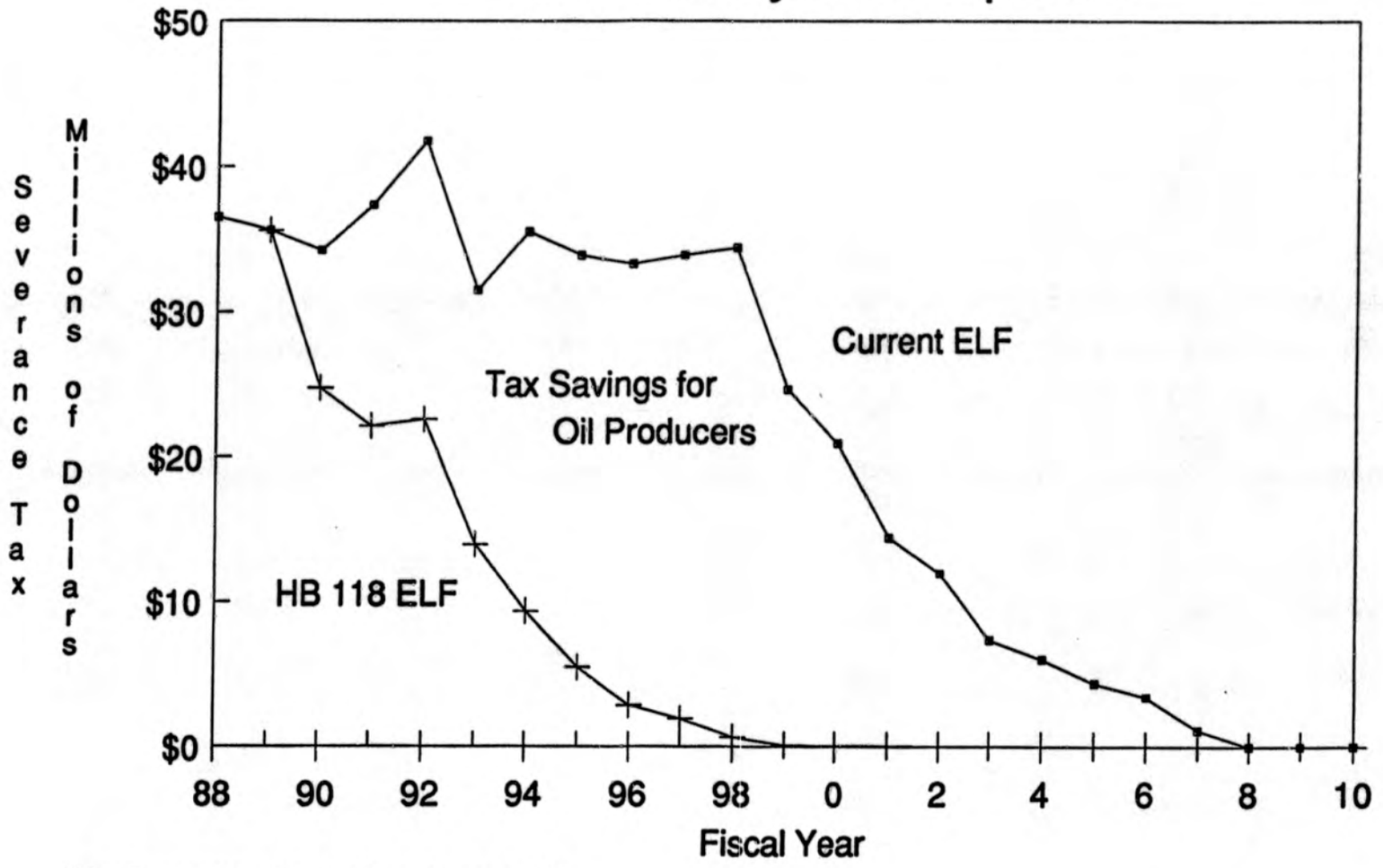
(For Representative Years)



Source: Department of Revenue

Date: February 7, 1989

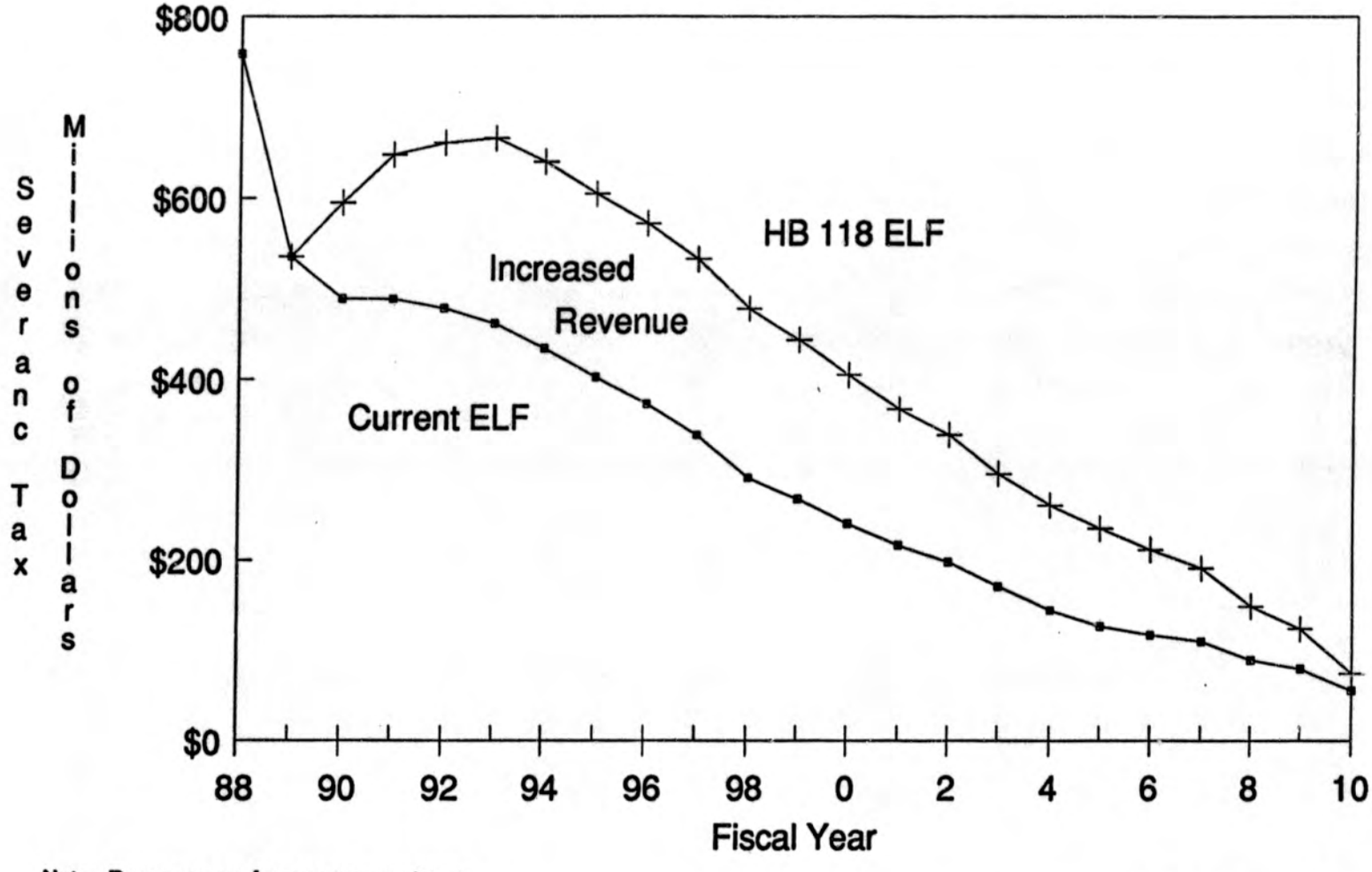
HB 118 Gives a Tax Savings for Producers at Oil Fields Other than Prudhoe Bay and Kuparuk



Note: Revenues are from severance taxes on fields other than Prudhoe Bay and Kuparuk

Date: February 15, 1989

HB 118 Raises More Severance Tax Revenue from Prudhoe Bay and Kuparuk



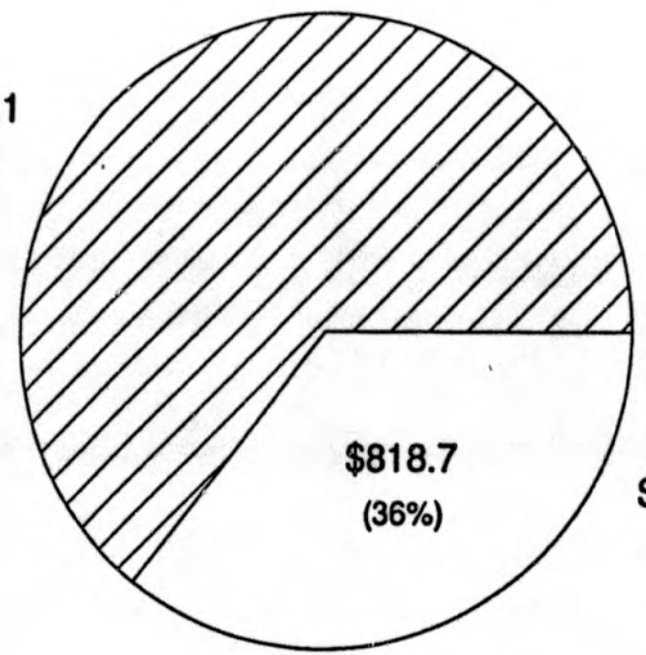
Note: Revenues are from severance taxes on Prudhoe Bay and Kuparuk

Date: February 15, 1989

SEVERANCE TAX, also called production tax, is a tax on oil removed from the ground. The tax compensates for the depletion of the state's non-renewable resources.

Date: February 7, 1989

Severance Taxes are an Important Part of Alaska's Revenues



$2305.8

Total Unrestricted General Fund Revenues For Fiscal Year 1988

Date: February 7, 1989

The Economic Limit Factor or ELF is a fraction which reduces severance taxes as well productivity declines.

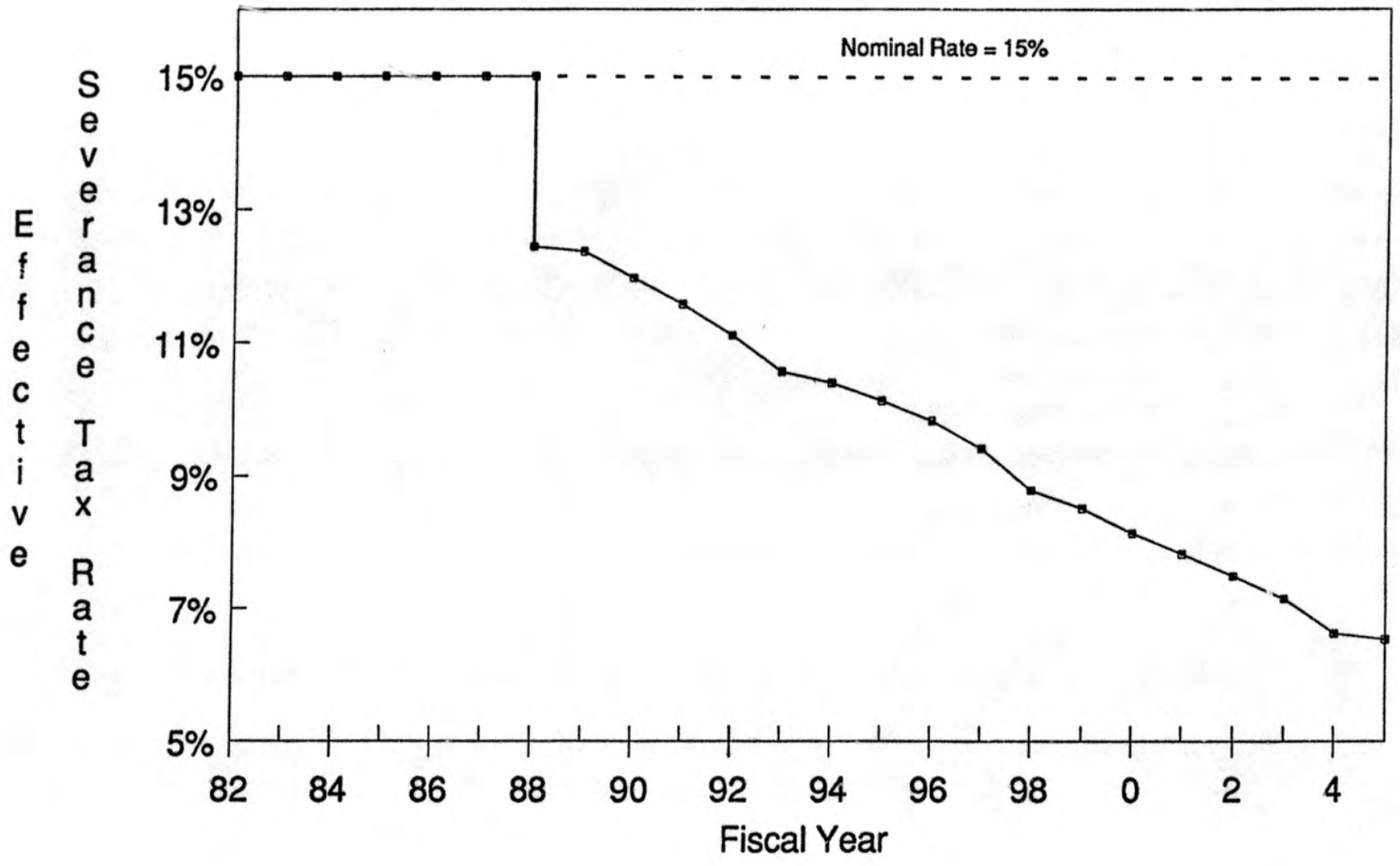
Date: February 7, 1989

EFFECTIVE SEVERANCE TAX RATE
equals nominal severance tax rate times ELF.

For example, 15.00% times 0.824 equals
an effective severance tax rate of 12.36 %

Date: March 3, 1989

The Tax Rate at Prudhoe Bay Collapsed on July 1, 1987

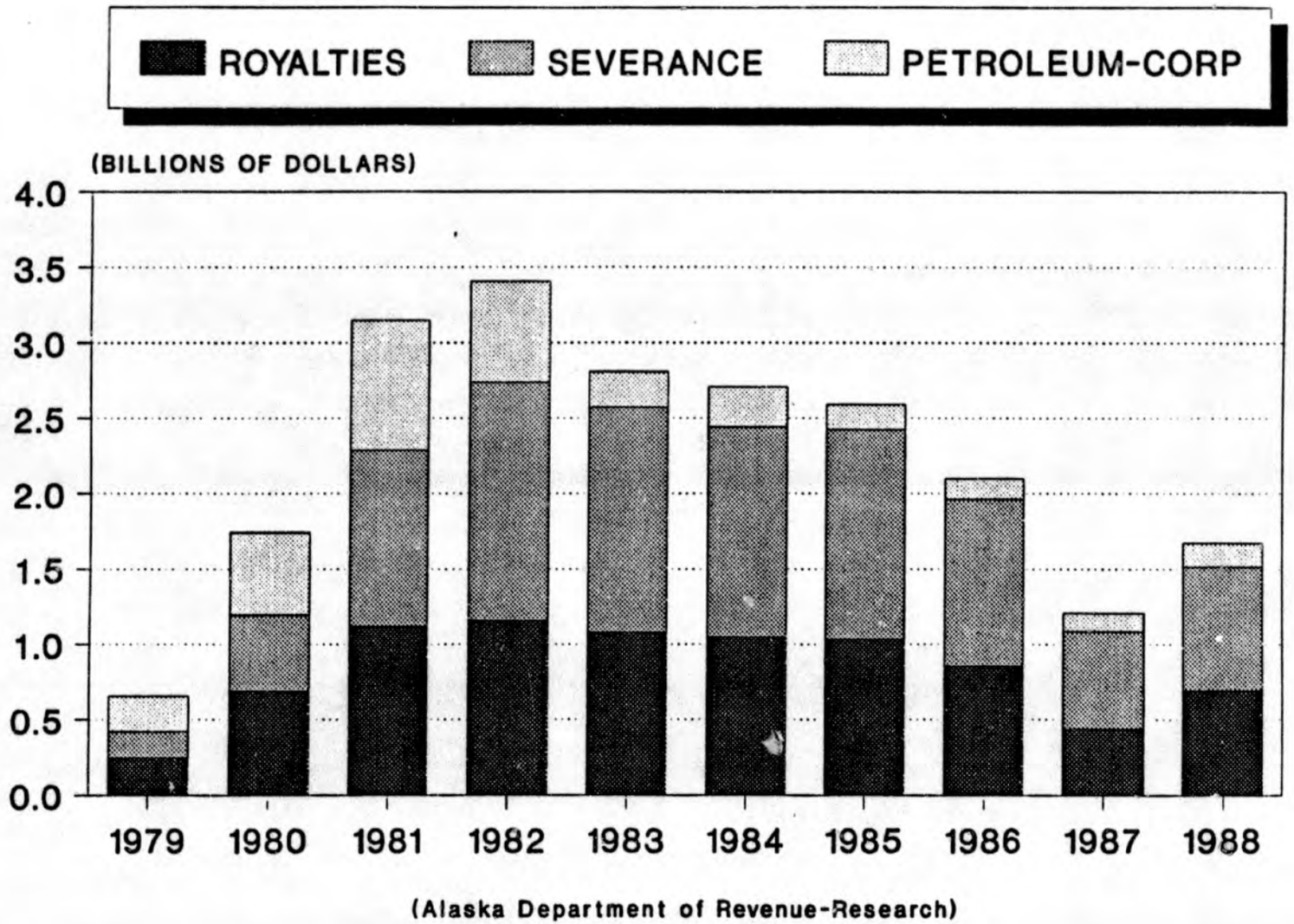


HOW REVENUE NEUTRAL WERE THE 1987 CHANGES?
($mm)

	What collections would have been under pre 1982 Law			Actual Collections			
	Petro. Corp. Income Tax	Sev. Tax	Total	Petro. Corp. Income Tax	Sev. Tax	Total	Loss from change in Law
1982	980	1219	2199	669	1582	2251	52
1983	915	1099	2014	236	1494	1730	(284)
1984	836	1033	1869	265	1393	1658	(211)
1985	812	1014	1826	169	1389	1558	(268)
1986	658	805	1463	134	1108	1242	(221)
1987	375	464	839	120	649	769	(70)
Total	4576	5634	10210	1593	7615	9208	(1002)*

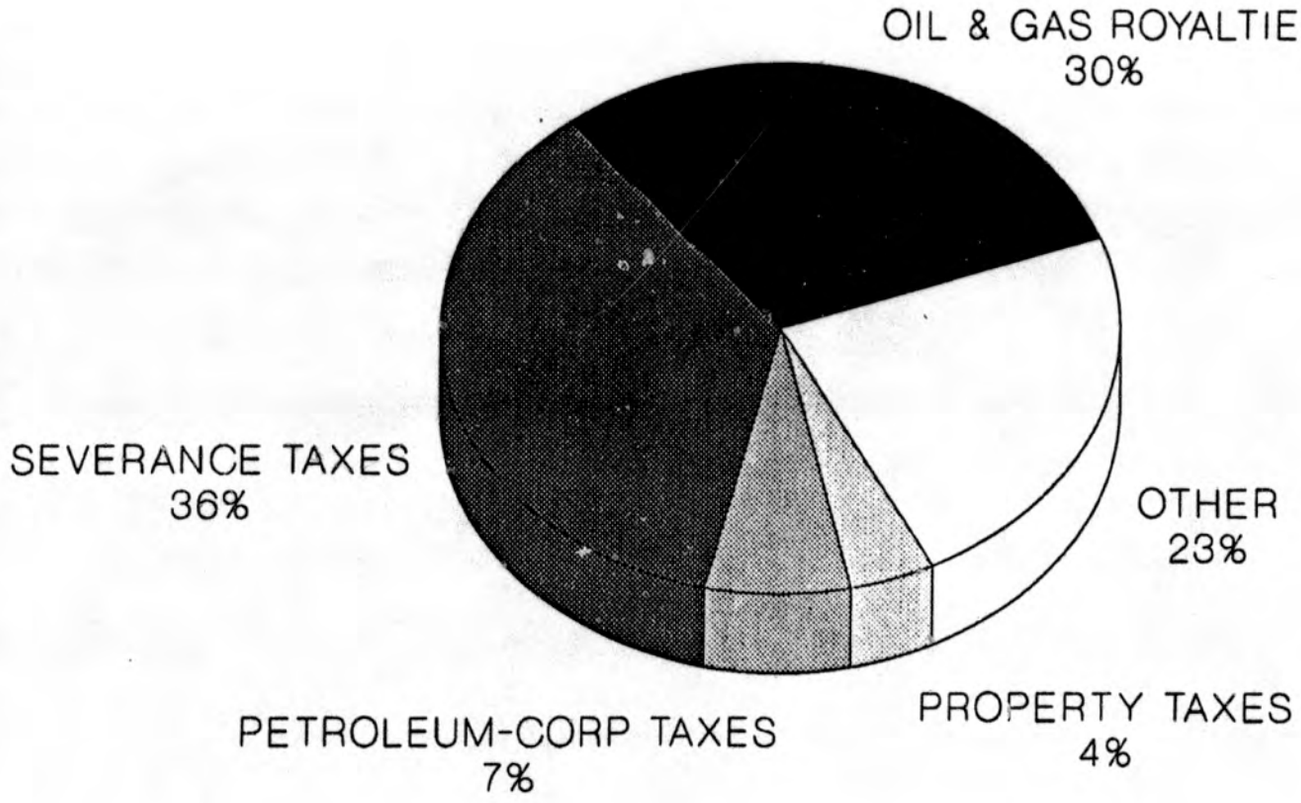
*Had the Legislature authorized deduction of the Federal Windfall Profits Tax the total loss over the period would have been $670 mm

SELECTED PETROLEUM REVENUES
(FY 1979 - 1988)



(Alaska Department of Revenue-Research)

GENERAL FUND UNRESTRICTED REVENUES
(FY 1988)



(Alaska Department of Revenue-Research)

Severance Tax Receipts as Percentage of Gross Wellhead Value - Prudhoe Bay

Year	Wellhead Price ($/bbl)	Volume (mmbbl)	Gross Value ($mm)	Sev Tax ($mm)	Sev Tax as % of Gross Value	Loss from ELF ($mm)
1982	24.45	557	13619	1787	13.1%	NA
1983	20.27	560	11351	1499	13.1%	NA
1984	19.73	562	11088	1455	13.1%	NA
1985	18.48	564	10423	1368	13.1%	NA
1986	12.74	563	7173	941	13.1%	NA
1987	8.08	567	4581	601	13.1%	NA
		(Suspension of ELF on Prudhoe Bay ends)				
1988	10.68	565	6034	657	10.9%	135
1989	7.36	540	3974	430	10.8%	92
1990	7.00	502	3514	368	10.5%	93
1991	7.56	466	3523	357	10.1%	105

Offered: 3/31/89
Referred: Oil and Gas, Resources and Finance

6-0652T

Original sponsor: Finance Committee

IN THE HOUSE BY THE JUDICIARY COMMITTEE

SENATE CS FOR CS FOR HOUSE BILL NO. 118 (Judiciary)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to the oil and gas properties production tax."

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

* Section 1. AS 43.55.013(b) is repealed and reenacted to read:

(b) The economic limit factor for oil production of a lease or property shall be computed according to the following formula:

(1-[PEL/TP]) exp ([150,000/(TP/Days)] exp [(460 X WD)/PEL])

where: PEL = the monthly production rate at the economic limit;

TP = the total production during the month for which the tax is to be paid;

WD = the total number of well days in the month for which the tax is to be paid;

Days = the number of days in the month for which the tax is to be paid; and

exp = exponent.

* Sec. 2. AS 43.55.013(d) is repealed and reenacted to read:

(d) The monthly production rate at the economic limit for a lease or property is 300 barrels times the number of well days for the lease or property during the month for which the tax is to be paid.

* Sec. 3. AS 43.55.013(e) and 43.55.013(f) are repealed.

STATE OF ALASKA
1989 LEGISLATIVE SESSION

Bill Version: SCS CSHB 118 (Jud)
Publish Date: _____

FISCAL NOTE

REQUEST:

Revision Date: April 4, 1989
Title: Oil & gas properties production tax - ELF
Sponsor: House Finance Committee
Requestor: Senate Judiciary

Agency Affected: Department of Revenue
BRU: Oil & Gas Audit Division
Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
OPERATING						
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LANDS & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	VARIES - SEE ESTIMATE ATTACHED		181,000	192,000	207,000	207,000

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

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: See attached page for analysis.

Prepared By: Roger Marks
Division: Dept. of Revenue, Oil & Gas Audit Division
Phone: 277-5627
Date: April 4, 1989

Approved by Commissioner: Hugh Malone
Agency: Department of Revenue
Date: 4/4/89

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

page 1 of 4

Fiscal Analysis of HB 118

This bill modifies the economic limit factor (ELF) formula used in computing the production (severance) tax on oil.

The bill (1) introduces the rate of field production into the exponent of the current ELF formula; (2) repeals the so-called "rounding rule," the provision of current law which states that for any month during the first 10 years of commercial oil production for which the computed ELF of a lease or property exceeds 0.7 the ELF shall be considered to be one; and (3) fixes the production at the economic limit (PEL) at 300 barrels times the number of well days in the month.

This bill does not explicitly state the date on which it first begins applying to oil production. That date will determine how much revenue is raised for FY 89 and FY 90. The following table shows the revenue raised for each date.

If the bill applies to oil produced after this date	Revenues Raised for FY 89	Revenues Raised for FY 90
12/31/88	64	171
01/31/89	50	171
02/28/89	37	171
03/31/89	24	171
04/30/89	12	171
05/31/89	0	171
06/30/89	0	158
07/31/89	0	145
08/31/89	0	132

The severance tax is paid monthly for the prior month. For example, the tax for production in April is due in May.

This fiscal note was calculated using the oil price and production assumptions of the Department of Revenue's Spring 1989 Petroleum Production Revenue Forecast mid-case scenario. That forecast was predicated on Alaska North Slope crude prices at the U.S. Gulf of $14.29 a barrel in FY 89 and $16.41 a barrel in FY 90.

Additional revenues for future years in millions of dollars are as follows:

1995	194
1996	180
1997	165
1998	157
1999	148
2000	139
2001	129
2002	110

2003	86
2004	69
2005	45
2006	21
2007	4
2008	(3)
2009	0
2010	0

A price - revenue matrix is included. It is based on an application date of December 31, 1988.

Price/Revenue Increase for HB 118
(Millions of $)

Saudi Light ($/bbl)	ANS @ US Gulf ($/bbl)	Fiscal Year 1989	1990	1991	1992	1993	1994	1995
10	11	35	85	88	98	104	104	99
12	13	48	115	116	129	146	148	139
14	15	63	151	153	161	174	175	164
16	17	78	187	189	198	213	214	200
18	20	92	223	226	235	253	253	236
20	22	107	259	262	272	283	277	258

Price/Revenue Increase for SCS CSHB 118 (Judiciary)
(Millions of $)

ANS @ US Gulf ($/bbl)	Fiscal Year 1990*	1991	1992	1993	1994	1995
11	85	88	98	104	104	99
13	115	116	129	146	148	139
15	151	153	161	174	175	164
17	187	189	198	213	214	200
20	223	226	235	253	253	236
22	259	262	272	283	277	258

*Assumes 5/31/89 application date.

Size of Field Where Taxes Will Increase or Decrease Under HB 118

HB 118 modifies the ELF statute in two ways which affect the relationship of field size to the tax rate for the field: (1) by modifying the formula; and (2) by repealing the "rounding rule." (Under current law, if a field has an ELF of greater than 0.7 for the first ten years of the field, the ELF is elevated to 1.0. This is called the "rounding rule.") The combined effect of these two changes will increase the severance tax on fields producing an average of more than approximately 150,000 barrels per day, and will reduce the severance tax on fields producing an average of less than approximately 150,000 barrels per day. An analysis of these two changes and the underlying assumptions follows.

The change in the formula would raise taxes on fields which produce more than approximately 115,000 barrels per day and for which the rounding rule does not apply. (Only Prudhoe Bay and Kuparuk fit this description. The rounding rule does not apply to them now because Prudhoe Bay is older than ten years and Kuparuk's current ELF is less than 0.7.) The Bill would cut taxes -- or leave them at zero -- for any field producing less than approximately 115,000 barrels per day. If a field produces an average of less than 300 barrels per well per day, their taxes are zero under current law and the new Bill.

The Bill also initially decreases the ELF for <u>new</u> higher productivity (where average well productivity is greater than 1500 barrels per day) large fields (over the 115,000 barrel per day level). Under current law, fields producing more than an average of 1500 barrels per well per day will have an ELF of greater than 0.7, and would have an initial effective ELF of 1.0 because of the rounding rule. Since the first ten years of the field is when the greatest proportion of oil is produced (upwards of 75 percent), these large fields could have reduced weighted average severance taxes over the entire life of the field under the Bill since it eliminates the rounding rule.

The repeal of the rounding rule will only benefit fields whose ELF's would be greater than 0.7 for the first ten years of the field, and will only benefit such fields initially, the first ten years at most. (If the ELF for such a field dropped to 0.65 in year 4, for example, the proposed ELF only helps it out for the first three years.) Depending on the dynamics of the field, specifically its per well productivity and its decline profile as well as the discount rate used to evaluate the time value of money, the repeal of the rounding rule may or may not help such fields <u>over the entire life of the field as measured by the weighted average severance tax rate over the life of the field</u>. For instance, if a field has a reduced ELF for the first ten years, but an increased ELF for the next 20 years, its average severance tax rate over the 30 year period may or may not be lower under HB 118 than under current law.

The exact size of field that will benefit over the entire life of the field will depend on its well productivity, decline profile, and the discount rate. We estimate that a field with the same well productivity and decline characteristics as Endicott, for example, (which produces 100,000 barrels per day and produces 2500 barrels per well per day average), but with peak production of 280,000 barrels per day, would have the same discounted (8%) weighted average effective ELF over the life of the field under the Bill as it would under current law. Fields producing less than that amount would have a lower ELF than under current law.

The question was what size field would benefit from HB 118 and there were two answers. The first answer stems from the change in the formula itself and that was approximately 115,000 barrels per day. The second answer stems from the repeal of the rounding rule and that was estimated at 280,000 barrels per day. The final step necessary to get a single answer is to weight these two effects.

The two effects were weighted as follows. First, if a field produced less than 115,000 barrels per day, it would benefit from the formula. Second, it was assumed that if a field were to benefit from repeal of the rounding rule, it would be a field that produced 280,000 barrels per day. Finally, it was necessary to estimate the probability that a field would benefit from repeal of the rounding rule.

A field would benefit from repeal of the rounding rule if its ELF would be greater than 0.7 and it produced more than 115,000 barrels per day. To have an ELF of greater than 0.7, its average per well productivity must be approximately 1450 barrels per day or more. Thus, we need to see what is the probability of a field having average per well productivity of 1450 barrels per day and total production of greater than 115,000 barrels per day.

To gauge this probability, we looked at the characteristics of the fields actually producing in Alaska. There were five fields considered: Prudhoe Bay, Kuparuk, Milne Point, Lisburne, and Endicott. The prospective fields were not considered since their characteristics are not really known. The Cook Inlet fields were not considered since any field that will benefit from the proposed ELF is probably on the North Slope.

Of the five fields, only one, Prudhoe Bay, had production of greater than 115,000 barrels per day and average well productivity of greater than 1450 barrels per day. Thus, there is a one in five chance (0.2) that a field would have these characteristics. The two effects were weighted as follows:

$$\begin{aligned} .2 \times 280{,}000 &= 56{,}000 \\ + .3 \times 115{,}000 &= \underline{92{,}000} \\ & \quad 148{,}000 \end{aligned}$$

That is how the 150,000 barrel figure was derived.

SECTIONAL ANALYSIS OF SCS CSHB 118 (JUDICIARY): LEGISLATION REVISING THE ECONOMIC LIMIT FACTOR

Section 1. This section modifies the severance tax's Economic Limit Factor (ELF) as it relates to oil production.

Under current law and under this section, the ELF statute reduces the effective severance tax rate on oil production by applying a formula which considers productivity. The ELF formula always produces a fraction between zero and one. That fraction is multiplied with the nominal tax rate to get the effective tax rate. This means that the higher the ELF, the higher the actual tax paid; the lower the ELF, the lower the actual tax paid. This also means that if the ELF is zero, the severance tax rate is zero.

This section changes the ELF statute in two ways.

First, this section modifies the formula for calculating the "economic limit" of oil production. The current law considers only average per-well productivity of the field. The formula here adds consideration of total field productivity to the current ELF formula. Second, this section repeals the provision of current law which states

that for any month during the first 10 years of commercial oil production for which a lease or property's computed ELF exceeds 0.7, the ELF shall be considered to be one. This section's repeal of this "rounding" rule of current law would result in initial lower taxes for any field in this situation.

Compared to current law, these two changes raise taxes on fields producing on average more than 150,000 barrels a day and reduce taxes on fields producing on average less than 150,000 barrels a day.

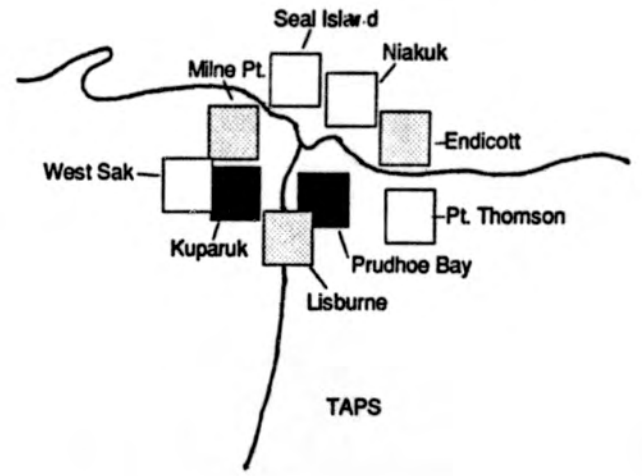
Section 2. This section fixes the monthly production at the economic limit (PEL) at 300 barrels per well per day. The PEL is a rough approximation of the number of barrels a well must produce to cover costs.

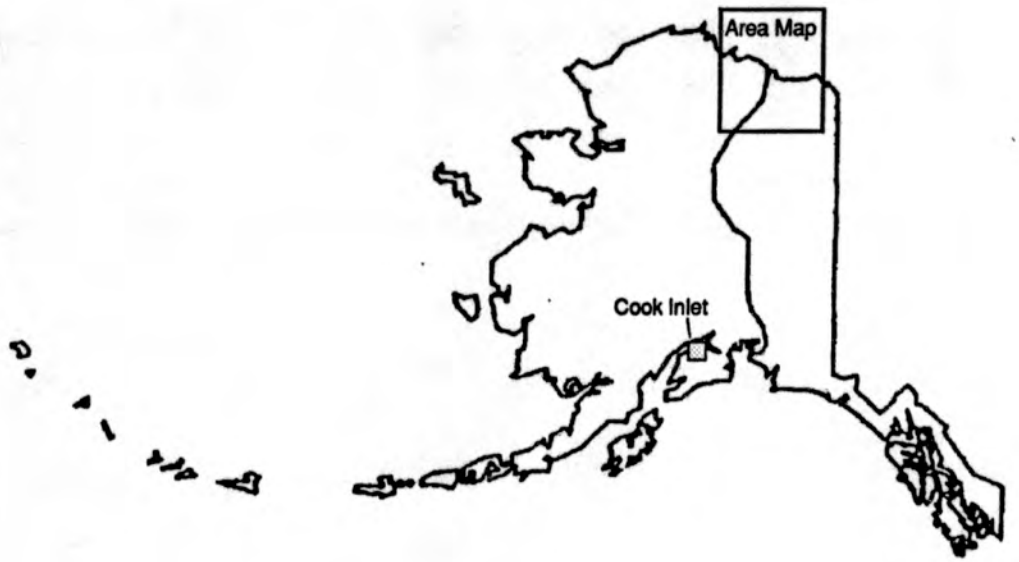
Under current law, the PEL is presumed to be 300 barrels a day, and the taxpayer may rebut this presumption at a hearing. This section repeals the provisions for rebutting the 300 barrel per day presumption.

Section 3. This section repeals two provisions of current law which are only necessary for setting a PEL in a hearing.

Section 4. This section applies the legislation to oil produced after December 31, 1988.

State of Alaska
Approximate Field Locations
(Current and Prospective Fields)





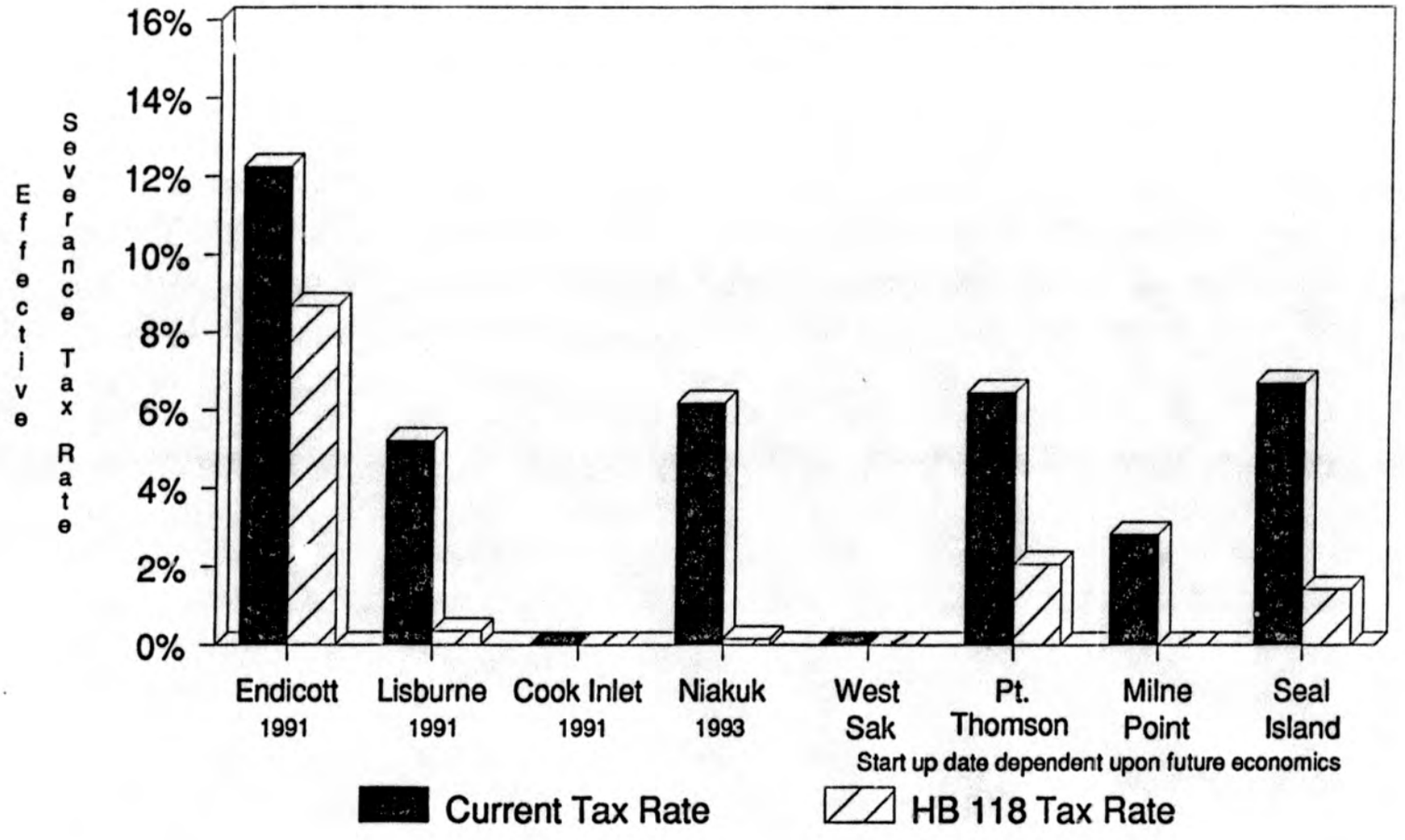
Legend

- Existing Fields - Taxes Up
- Existing Fields - Taxes Down or stay at zero
- Prospective Fields - Taxes Down or stay at Zero

Date: April 20, 1989

Fields Where Taxes Would Decrease Under HB 118

(For Representative Years)



Source: Department of Revenue

Date: February 7, 1989

Fields Where Taxes Would Increase Under HB 118

Field	Current Tax Rate[1]	HB 118 Tax Rate[1]
Prudhoe Bay	11.59	14.91
Kuparuk	8.36	13.18

[1] Estimated effective severance tax rate for 1991.

Date: February 7, 1989

Effective Severance Tax Rates Under Different ELF Formulas

Field	Volume (mmbbl/day)	Wells	Current Law	SB 97	HB 118
Prudhoe	1.452	634	12.1%	14.7%	14.9%
Kuparuk	.279	342	7.4%	11.1%	12.6%
Milne ('91)	.031	39	5.9%	0.8%	0.1%
Endicott	.106	44	12.3%	9.8%	9.8%
Lisburne	.044	60	5.4%	1.3%	0.4%
Niakuk ('93)	.021	12	12.3%	2.4%	0.3%

Based on the mid-case scenario of the Department of Revenue's Spring 1989 forecast for FY 1990, unless otherwise indicated. Nominal rates are 15% for Prudhoe Bay and Kuparuk and 12.25% for the other fields. Well numbers are adjusted for well days.

Synopsis of Alaska Fields

Field	Volume (bbls/day)	Wells	Daily Volume p/well
Current Fields			
North Slope			
Prudhoe Bay	1,471,701	709	2076
Kuparuk	312,319	331	944
Lisburne	36,441	55	663
Endicott	98,774	39	2533
Cook Inlet			
Beaver Creek	322	2	161
Granite Point	7,351	29	253
McArthur River	18,872	75	252
Middle Ground Shoals	7,494	41	183
Swanson River	5,162	27	191
Trading Bay	3,638	40	91
Prospective Fields			
Milne Point	30,000	40	750
West Sak	150,000	4000	38
Point Thomson	50,000	50	1000
Seal Island	100,000	100	1000
Niakuk	20,000	12	1667

For current fields, actual February 1989 data. For prospective fields, the expected values at peak production.

Top Ten Lower 48 Fields

	Volume (bbls/day)	Wells	Daily Volume p/well	*Effctv Sev Tax Rate - Alaska Law
1. Belridge South (CA)	165,981	6000	28	0.00%
2. Midway-Sunset (CA)	157,526	9180	17	0.00%
3. Kern River (CA)	128,490	6709	19	0.00%
4. East Texas (TX)	111,225	9363	12	0.00%
5. Elk Hills (CA)	107,244	1099	98	0.00%
6. Yates (TX)	91,890	1146	80	0.00%
7. Wilmington (CA)	81,975	2050	40	0.00%
8. Wasson (TX)	78,510	2152	36	0.00%
9. Spraberry Trend (TX)	60,585	7321	8	0.00%
10. Slaughter (TX)	55,792	3001	19	0.00%

*Either Current Alaska Law or HB118.

U.S. fields with reserves exceeding 100 million bbl

State	Field	Disc. date	1988 prod.	Cum. prod. 1-1-89	Est. rem. reserves	Est. No. wells
			1,000 bbl			
ALABAMA						
	Citronelle	1955	1,827	147,861	7,000	435
ALASKA						
	Endicott	1978	36,098	43,098	324,902	37
	Granite Point	1965	2,787	109,535	16,213	29
	Kuparuk River	1969	112,055	503,397	994,945	328
	Lisburne	1967	14,600	35,600	175,689	49
	McArthur River	1965	7,040	529,040	34,960	76
	Middle Ground Shoal	1962	2,737	155,889	5,263	42
	Prudhoe Bay	1967	576,335*	6,053,018†	3,533,665	691
	Swanson River	1957	2,154	209,490	8,846	29
ARKANSAS						
	Smackover	1922	2,654	556,907	9,097	2,100
CALIFORNIA						
San Joaquin Valley						
	Belridge South	1911	60,583	677,083	435,286	6,000
	Buena Vista	1909	1,574	647,274	38,271	895
	Coalinga	1890	10,212	753,845	161,188	2,174
	Coalinga Nose	1928	1,285	498,685	17,370	78
	Coles Levee North	1938	442	160,432	2,748	85
	Cuyama South	1949	469	218,191	6,938	105
	Cymric	1909	8,479	199,308	40,000	1,013
	Edison	1928	1,470	134,391	25,670	674
	Elk Hills	1911	39,144	893,374	579,776	1,099
	Fruitvale	1928	577	115,553	13,709	274
	Greeley	1935	237	112,647	1,763	27
	Kern Front	1912	1,500	173,056	55,230	950
	Kern River	1899	46,899	1,204,479	743,000	6,709
	Kettleman North Dome	1928	172	456,648	1,298	44
	Lost Hills	1910	5,627	178,293	61,603	1,634
	McKittrick	1926	2,551	266,822	90,919	931
	Midway-Sunset	1894	57,497	1,879,347	373,963	9,180
	Mount Poso	1926	6,620	263,250	79,230	411
	Rio Bravo	1937	151	115,051	1,319	15
	Yowlumne	1974	6,570	81,368	27,015	65
Coastal Area						
	Carpinteria	1965	2,690	88,101	29,289	114
	Cat Canyon E. & W.	1908	2,735	288,236	46,930	512
	Dos Cuadras	1969	4,371	212,804	54,140	140
	Elwood	1928	317	105,705	2,283	7
	Honda	1959	9,952	89,621	112,223	20
	Orcutt	1901	906	165,874	10,236	136
	Point Pedernales	1982†	6,515	11,715	331,544	10
	Rincon	1927	1,118	148,759	14,832	240
	San Ardo	1947	4,641	408,351	122,903	600
	Santa Maria valley	1934	1,751	198,131	40,408	172
	South Mountain	1915	727	145,984	12,035	352
	Ventura	1919	7,072	894,742	97,026	570
Los Angeles Basin						
	Beta	1976	6,013	40,423	173,825	60
	Beverly Hills	1900	2,034	122,616	42,356	116
	Brea Olinda	1880	2,143	383,894	54,787	720
	Coyote East	1909	584	108,663	13,212	103
	Coyote West	1909	808	249,969	7,481	113
	Dominguez	1923	607	269,266	7,448	113
	Huntington Beach	1920	5,816	1,066,268	72,044	990
	Inglewood	1924	2,790	345,453	54,149	366
	Long Beach	1921	2,466	909,757	17,216	410
	Montebello	1917	525	192,357	10,267	155
	Richfield	1919	1,494	189,165	27,412	203
	Santa Fe Springs	1919	987	613,077	9,036	151
	Seal Beach	1924	876	203,118	14,119	168
	Torrance	1922	1,693	212,083	35,847	365
	Wilmington	1932	29,921	2,292,229	495,633	2,050
COLORADO						
	Rangely	1933	12,492	739,418	35,000	488
FLORIDA						
	Jay	1970	4,676	360,612	55,944	121
ILLINOIS						
	Clay City	1938	2,448	393,860	6,000	2,600
	Lawrence	1906	2,919	394,521	5,500	2,700
	Louden	1936	1,345	388,237	3,555	1,340
	Main	1906	2,066	283,273	5,000	3,356
	New Harmony	1939	1,072	153,545	4,000	1,140
	Salem	1938	2,167	386,983	4,500	1,325
KANSAS						
	Bemis-Shutts	1928	1,169	244,247	4,405	973
	Chase-Silica	1930	1,019	301,003	4,499	1,103
	El Dorado	1915	839	296,734	2,615	822
	Hall-Gurney	1931	1,032	145,677	4,051	1,130
	Trapp	1929	1,200	225,858	4,643	1,000
LOUISIANA						
Offshore						
	Bay Marchand Blk. 2	1949	5,547	596,972	53,758	120
	Eugene Island Blk. 330	1990	7,859	269,080	55,920	169
	Grande Isle Blk. 16	1948	1,659	263,729	85,645	44
	Grande Isle Blk. 43	1956	4,312	272,256	85,688	126
	Mississippi Canyon Blk. 194	1980	4,929	116,858	76,311	44
	Main Pass Blk. 41	1957	2,985	237,854	23,384	112
	Main Pass Blk. 306	1969	1,776	201,869	78,335	94
	South Pass Blk. 27	1954	1,659	125,317	73,198	118
	South Pass Blk. 61	1968	9,140	152,151	45,000	156
	South Pass Blk. 62	1965	3,331	106,364	81,594	73
	South Pass Blk. 55	1969	4,032	100,875	89,252	61
	Ship Shoal Blk. 204	1968	1,591	66,070	38,930	40
	Ship Shoal Blk. 207	1967	1,023	87,818	38,000	25
	Ship Shoal Blk. 208	1962	4,117	160,169	65,274	67
	South Timbalier Blk. 21	1939	1,324	216,239	47,133	45
	South Timbalier Blk. 135	1956	1,390	139,337	25,663	37
	West Delta Blk. 30	1949	6,754	446,083	47,375	153
	West Delta Blk. 73	1952	4,469	188,700	86,291	73
Onshore South						
	Bay de Chene	1941	390	96,382	17,952	24
	Bay St. Elaine	1928	321	164,508	25,292	18
	Bayou Sale	1941	769	161,269	3,417	20
	Black Bay West	1953	1,971	144,799	10,432	94
	Caillou Island	1930	2,308	602,231	74,020	136
	Cote Blanche Bay West	1940	741	181,594	46,374	86
	Delta Farms	1944	293	115,351	7,019	13
	Garden Island Bay	1934	1,406	221,261	31,954	144
	Golden Meadow	1938	894	135,439	4,290	176
	Grand Bay	1938	454	170,514	3,760	41
	Hackberry, East	1927	777	109,087	7,603	60
	Hackberry, West	1928	1,771	141,995	6,492	107
	Iowa	1931	134	99,303	697	25
	Jennings	1901	315	116,409	700	181
	Lafitte	1935	1,665	255,304	9,550	111
	Lake Barre	1929	941	204,023	20,057	31
	Lake Pelto	1929	477	117,000	17,415	23
	Lake Washington	1931	2,353	242,390	16,376	93
	Leeville	1931	447	141,646	7,221	37
	Paradis	1939	725	126,650	8,600	31

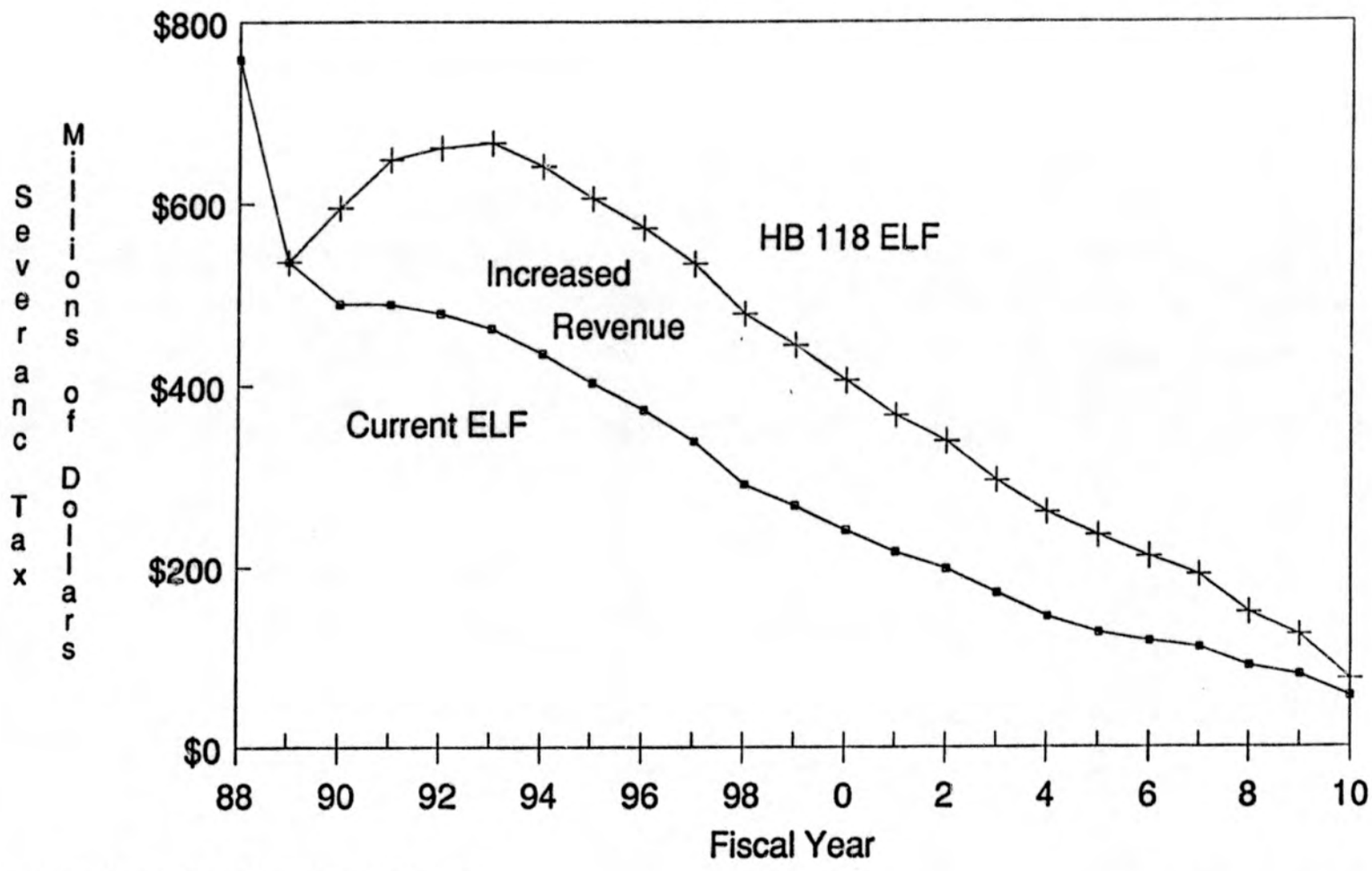
*Includes about 30.66 million bbl of condensate. †Includes about 138.66 million bbl of condensate.

State Field	Disc. date	1988 prod.	Cum. prod. 1-1-89 (1,000 bbl)	Est. rem. reserves	Est. No. wells
Quarantine Bay, 1937		761	172,672	1,654	71
Timbalier Bay, 1938					
Venice, 1937		858	181,978	7,590	59
Vinton, 1910		287	161,001	900	96
Weeks Island, 1945		816	225,939	21,355	33
West Bay, 1940		1,349	228,246	16,355	79
North					
Caddo-Pine Island	1905	3,310	360,899	12,888	10,688
Delhi, 1944		673	211,707	34,651	59
Haynesville, 1921		761	168,237	2,373	166
Homer, 1919		434	98,375	1,908	198
Rodessa, 1935		331	106,027	1,506	67
MISSISSIPPI					
Basterville, 1944		2,509	239,164	10,391	316
Heidelberg, 1944		2,829	174,809	12,171	316
Tinsley, 1939		834	29,677	3,197	173
MONTANA					
Bell Creek, 1967		958	128,836	22,984	91
Cut Bank, 1926		994	162,459	37,169	575
Pine, 1951		1,302	105,145	5,657	96
NEW MEXICO					
Denton, 1949		652	138,693	3,000	179
Empire-Abo, 1957		1,424	219,983	50,017	405
Eunice-Monument, 1929		2,500	125,414	10,894	879
Hobbs, 1928		8,460	297,482	20,000	613
Maljamar, 1926		1,869	144,961	5,070	851
Vacuum, 1929		12,359	432,242	40,000	1,556
NORTH DAKOTA					
Beaver Lodge, 1951		1,704	111,574	16,684	132
Billings Nose, 1979		2,580	61,689	51,744	153
Little Knife, 1977		3,392	51,437	57,924	131
Mondak, 1976		439	13,165	82,837	96
OKLAHOMA					
Burbank, 1920		1,135	536,746	8,377	1,105
Eola-Roberson, 1920		746	103,124	8,210	603
Fitts, 1934		2,963	199,894	12,000	589
Glenn Pool, 1905		1,170	327,865	5,000	714
Golden Trend, 1945		4,333	474,100	28,000	1,396
Healdton, 1913		1,938	334,645	9,563	1,000
Hewitt, 1919		5,152	268,371	13,615	923
Oklahoma City, 1928		902	816,170	5,966	174
Postle, 1955		1,216	106,393	14,921	226
Shoe-vel-Tum, 1905		18,398	1,167,379	60,000	7,616
Sooner Trend, 1945		4,147	295,544	20,000	4,746
TEXAS					
District 2					
Greta, 1933		746	147,570	12,530	100
Lake Pasture, 1953		2,194	87,784	12,644	143
Tom O'Connor, 1934		10,380	747,849	55,000	646
West Ranch, 1938		2,640	350,034	8,504	307
District 3					
Ananuac, 1935		1,068	284,886	15,112	106
Conroe, 1931		3,864	727,215	33,728	278
Giddings, 1971		8,666	278,570	148,032	2,281
Hastings, 1934		3,084	697,237	72,764	206
Magnet Withers, 1936		1,284	110,960	5,000	150
Oyster Bayou, 1941		864	160,204	18,096	39
Thompson, 1931		3,972	472,540	27,360	262
Tomball, 1933		402	121,055	9,858	85
Webster, 1937		5,304	573,192	20,000	243
District 4					
Agua Dulce-Stratton, 1928		360	146,623	24,751	94
Banegas, 1945		192	114,021	20,186	40
Kelsey, 1938		200	114,359	36,247	60
Plymouth, 1925		400	122,823	3,300	60
Seeligson, 1925		156	271,483	55,544	42
TCB, 1944		456	112,700	52,358	30
White Point E, 1938		60	104,034	6,340	21
District 5					
Alabama Ferry, 1983		3,600	14,600	86,400	253
Van, 1928		3,096	521,960	15,000	366
District 6					
East Texas, 1930		40,597	5,003,747	988,759	9,363
Fairway, 1950		2,424	192,591	17,777	100
Hawkins, 1940		8,244	821,644	42,372	442
Neches, 1953		1,416	103,980	6,036	163
Quitman, 1948		1,680	121,346	8,440	208
District 8					
Andector, 1946		1,500	181,888	6,500	28
Block 31, 1945		3,556	220,068	12,000	325
Cowden, N., 1930		13,596	488,092	40,000	1,210
Cowden, S. Foster, Johnson, 1932		9,696	500,796	40,000	1,593
Dollarnice, 1945		2,568	193,780	11,448	202
Dune, 1938		2,928	183,000	18,704	771
Fullerton, 1942		7,452	348,200	22,000	870
Goldsmith, 1934		7,248	755,516	33,752	2,036
Howard Glasscock, 1925		5,844	404,508	26,000	2,208
Iatan, E., 1926		3,372	142,956	12,000	1,304
Jordan, 1937		480	128,976	2,520	135
Keystone, 1930		1,872	313,080	9,374	812
McElroy, 1926		7,884	465,549	56,800	1,600
Means, 1934		7,020	228,598	20,000	713
Midland Farms, 1944		4,608	241,980	18,616	415
Sand Hills, 1931		2,760	248,207	21,800	1,312
TXL, 1944		2,004	262,515	6,500	600
Waddell, 1927		708	100,712	3,792	188
Ward Estes, N., 1929		3,408	364,177	76,436	1,562
Westbrook, 1923		2,000	88,000	16,000	718
Yates, 1926		33,540	1,171,820	782,698	1,146
District 8-A					
Anton-Irish, 1944		3,554	175,910	24,190	239
Cogdell Area, 1949		1,656	252,218	41,204	103
Diamond M., 1948		1,908	239,415	16,053	474
Kelly-Snyder, 1948		11,592	1,234,962	115,038	805
Levelland, 1938		17,328	464,144	50,000	3,012
Prentice, 1951		6,216	161,036	20,000	437
Salt Creek, 1950		10,404	247,340	12,552	173
Seminole, 1935		17,004	524,765	36,000	624
Slaughter, 1936		20,364	1,029,800	50,000	3,001
Spraberry Trend, 1951		22,212	653,388	50,000	7,321
Wasson, 1936		28,656	1,711,898	60,000	2,152
Welch, 1942		3,324	144,228	14,000	651
District 10					
Pannandle, 1921		7,812	1,423,286	41,240	11,643
UTAH					
Altamont, 1955		3,047	89,493	231,216	227
Aneth, 1956		5,340	354,004	30,000	461
East Anschutz Ranch, 1979		12,756	80,365	727,799	28
Red Wash, 1951		1,075	77,511	13,377	146
WYOMING					
Brady, 1960		2,438	54,537	49,251	22
Byron, 1918		1,119	120,688	7,656	67
Elk Basin, 1915		2,968	446,696	25,750	170
Frannie, 1928		1,122	116,020	5,000	63
Garland, 1906		2,625	154,885	6,000	225
Grass Creek, 1914		2,414	185,120	9,000	288
Hamilton Dome, 1918		2,853	268,103	6,000	239
Hartzog Draw, 1976		6,647	66,722	283,739	157
Hilite, 1969		541	75,416	55,885	93
Lance Creek, 1918		163	107,805	400	24
Little Buffalo Basin, 1914		2,666	118,653	9,389	154
Lost Soldier, 1916		2,308	192,073	6,000	71
Oregon Basin, 1912		8,669	388,180	30,000	500
Painter Reservoir, 1979		1,739	31,674	80,674	31
Salt Creek, 1908		5,210	629,689	25,000	1,217
Wertz, 1920		3,500	99,695	15,000	65
Whitney Canyon, 1980		1,652	10,379	105,485	29

Department of Revenue
April 20, 1989

There is no statutory or precise legal definition of the term "marginal field." The proposed ELF modifications benefit "marginal fields" in the same way that a graduated personal income tax benefits poorer people; the law need not contain a precise definition of the term. Generally, the term "marginal field" refers to a field whose relatively low total daily production and/or relatively low average per well productivity adversely affect the economics of its operation.

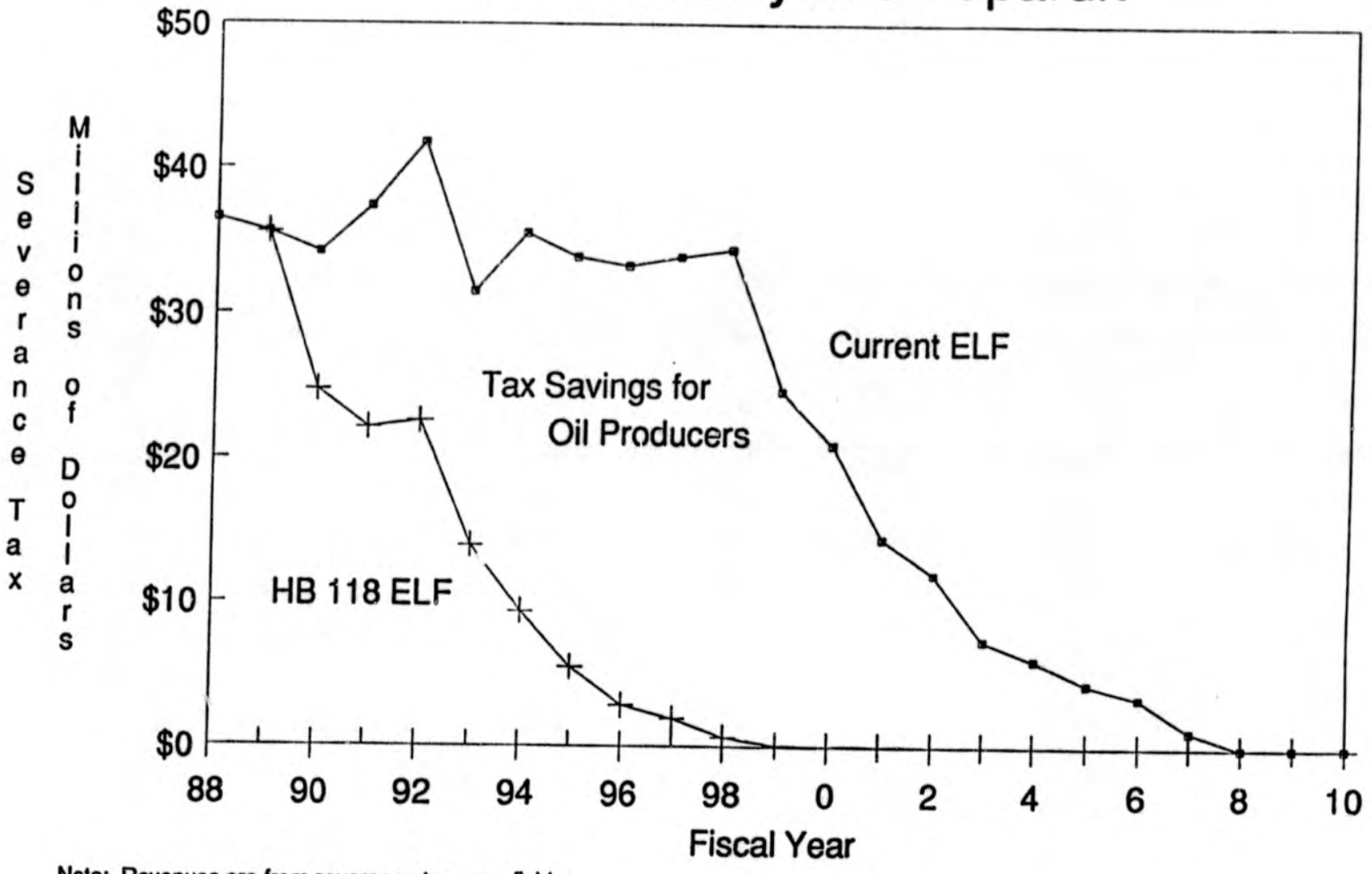
HB 118 Raises More Severance Tax Revenue from Prudhoe Bay and Kuparuk



Note: Revenues are from severance taxes on Prudhoe Bay and Kuparuk

Date: February 15, 1989

HB 118 Gives a Tax Savings for Producers at Oil Fields Other than Prudhoe Bay and Kuparuk



Note: Revenues are from severance taxes on fields other than Prudhoe Bay and Kuparuk

Date: February 15, 1989

Attachment 3

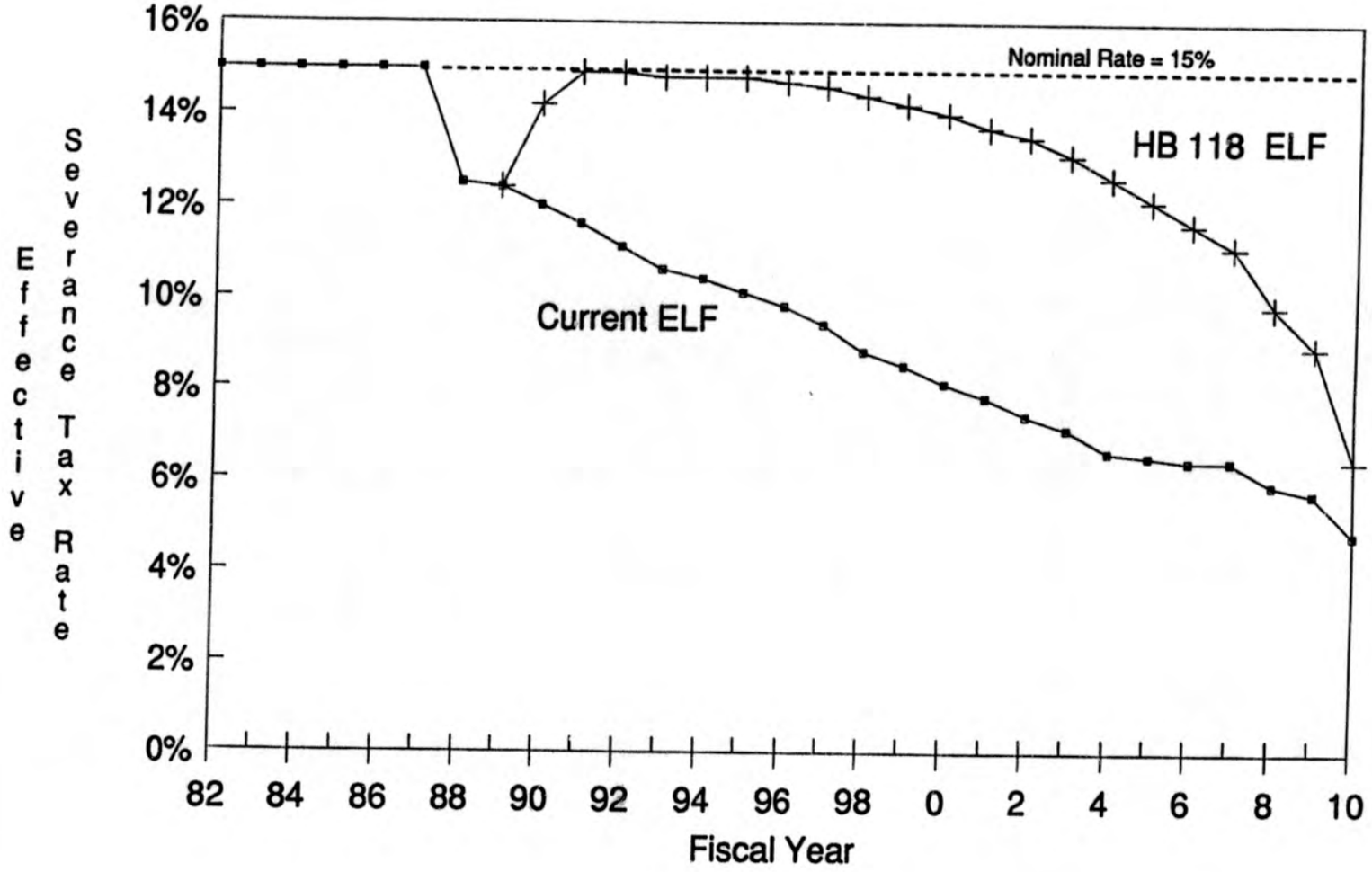
Comparative Severance Tax Payments
1987 Production and Collections
10 Top Oil Producing States

	Production[1] (1000's of bbls)	Severance Tax[2] (1000's of $)	$/Bbl	Severance Tax Rank
Texas	760,145	1,178,052	1.55	6
ALASKA	715,855	648,500	0.91	8
California	364,572	14,600	0.04	10
Louisiana	173,409	439,237	2.53	4
Oklahoma	132,970	372,883	2.80	2
Wyoming	112,597	138,915	1.23	7
New Mexico	71,533	262,290	3.67	1
Kansas	59,120	159,952	2.71	3
North Dakota	41,351	90,665	2.19	5
Utah	35,477	22,781	0.64	9

[1] Source: Department of Energy

[2] Source: Petroleum Independent, September 1988

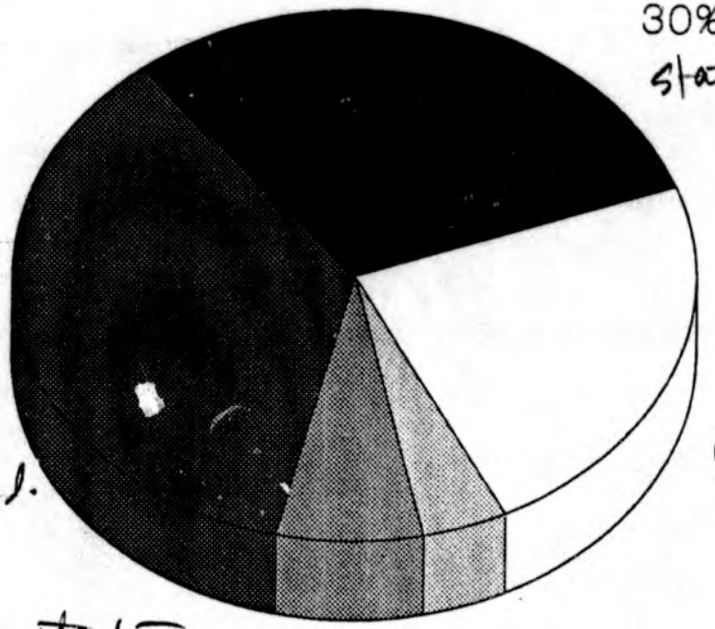
The Tax Rate on Prudhoe Bay Has Dropped Sharply



Date: February 16, 1989

GENERAL FUND UNRESTRICTED REVENUES
(FY 1988)

77% from oil industry



OIL & GAS ROYALTIES
30%
state ownership entitled as lessor
12.5%

SEVERANCE TAXES
36%
on oil removed from prod.

OTHER
23%

PETROLEUM-CORP TAXES
7%

PROPERTY TAXES
4%
20 mil value of property
used trucks - 5 yrs
#17B property tax amt -

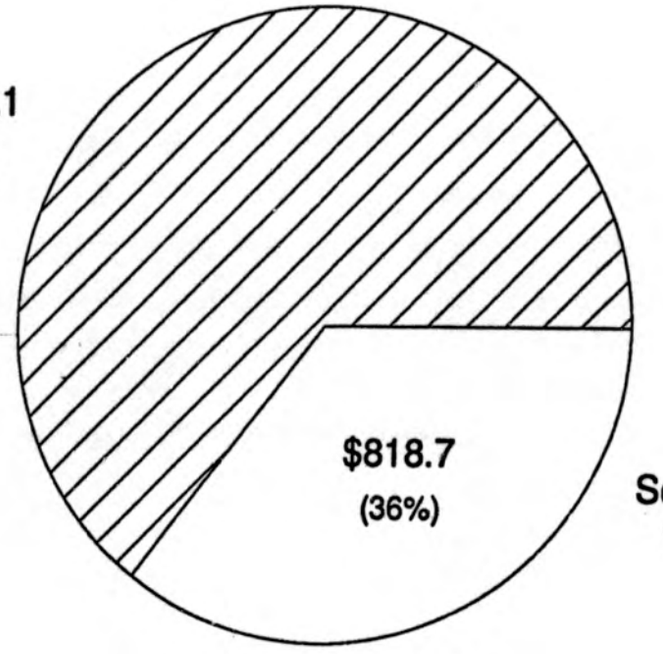
340-350 mill $
1/4 st 3/4 local Re-assigned

(Alaska Department of Revenue-Research)

SEVERANCE TAX, also called production tax, is a tax on oil removed from the ground. The tax compensates for the depletion of the state's non-renewable resources.

Date: February 7, 1989

Severance Taxes are an Important Part of Alaska's Revenues



$2305.8

Total Unrestricted General Fund Revenues For Fiscal Year 1988

Date: February 7, 1989

The Economic Limit Factor or ELF is a fraction which reduces severance taxes as well productivity declines.

Date: February 7, 1989

EFFECTIVE SEVERANCE TAX RATE
equals nominal severance tax rate times ELF.

For example, 15.00% times 0.66 equals
an effective severance tax rate of 9.90 %

Date: February 7, 1989

SB158; HB164

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU
JAY S HAMMOND
GOVERNOR

NEWS RELEASE

HAMMOND SIGNS OIL & GAS LEGISLATION
7-27-81
8131

ALASKA HISTORICAL LIBRARY

FOR IMMEDIATE RELEASE

JUNEAU—Alaska Governor Jay Hammond late today signed into law a bill making major changes in the state's oil and gas taxing system, modifying the oil and gas taxing structure which has been in place for the past three years.

Hammond late Monday signed the oil and gas bill, FCCSSB 524, which besides amending the state's oil and gas laws provides corporate tax relief for most small businesses in the state.

Hammond said he signed the bill since it meets two essential conditions that he laid down in a letter to the Legislature June 23--that any new oil and gas taxing bill must improve the state's case against a challenge by the oil industry over the state's taxing policies, and that the bill will maintain the state's combined royalty and tax "share" from its one-time resource at above 30 percent.

Hammond while saying the bill was not his first preference and is not perfect, said the bill meets his two major conditions.

MORE

Add 1-1-1-1

"It is the view of all pertinent state agencies that we should content ourselves with the present bill since a far worse alternative would be to take no action at all," Hammond said.

The Governor said the bill improves the state's legal posture in relation to a suit filed by the oil companies over the constitutionality of the 1978 state Oil and Gas Corporation Income tax in several ways.

--The bill adopts a series of amendments to ongoing state tax law designed to make the state's oil taxing policy, taken as a whole, look less unfair toward the oil industry. The amendments, designed to remove the "warts" from state tax law, amend state policy on depreciation, tax exemptions and a host of other issues.

--The bill provides for the deduction of the federal windfall profits tax from state tax payments. The windfall profits tax at the federal level had not been proposed when the state passed the oil and gas income tax in 1978, but the state's failure to permit a deduction for the federal tax has been considered a significant unfairness in the state's tax law.

--The bill makes additional technical changes to ensure that state Native corporations are afforded equal treatment under the income tax laws, regardless of whether they fall under the oil and gas income tax or the "ordinary" income tax, being reimplemented by the new tax law.

--And the bill allows the state to concentrate on the defense of the most questionable provision of the 1978 law, its reliance on "separate accounting" rather than income "apportionment," knowing the state will be returning to the apportionment formula to compute taxes starting on Jan. 1, 1982--limiting the state's tax liability under the existing law to just three years.

MORE

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Add 2-2-2-2

The state in 1978 switched to requiring multinational oil companies to figure their state taxes on the basis of income they received worldwide based on the oil they extracted from the state. The law required the companies to use "separate accounting" in figuring their taxable income, rather than the traditional system of apportioning parts of their income earned from Alaska operations.

The companies sued arguing that the separating accounting system caused them to be taxed twice on their income, once in Alaska, and again in other states.

The state in the new tax law will be returning to a modified apportionment taxing formula, raising the state's severance tax to 15 percent from 12.25 percent to make up most of the revenue the abandonment of the old corporate oil and gas tax will cost the state.

While the apportionment approach to state taxation has been repeatedly upheld as constitutional by the Supreme Court, the court has yet to rule on a case where it was advocated by a taxing state, and has ruled twice against its use in cases bought by taxpayers.

"In short, the income tax in the future will incorporate a 'tried and true' approach to multistate taxation, whereas the present, separate-accounting approach does not," Hammond said.

He noted that several recent independent studies have questioned whether the new tax will cost the state more revenue than official state estimates. He said the latest official estimates by the state's Department of Revenue indicated the state between now and Fiscal Year 1985 will retain 31.2 percent of state oil income, compared to the current 31.8 percent.

Hammond said he has been assurred that even if less favorable estimates were to prove correct, the bill will still retain the state 30.7 percent, meeting his bottomline requirement of a minimum of 30 percent.

MORE

Add 3-3-3-3

"As for the possible revenue effects in 1988 and beyond, I have full confidence in the ability of the Legislature to deal at that time with whatever is required to retain the state's "fair share" of our oil wealth," Hammond said.

He added he still intends this coming session to seek voter support for a policy statement that would support the state not letting its share of oil revenues fall below 30 percent. "It is incumbent upon all of us in public office to determine as clearly as possible what the electorate believes that 'fair share' to be," Hammond said.

He mentioned that the bill also substitutes a progressive tax table for the existing flat 5.4 percent corporate income tax—a tax which also contains a 4 percent surtax on taxable income over $50,000. Under the new bill smaller corporations will pay 1 percent on their first $10,000 of taxable income, 2 percent on their second $10,000 and so on.

Hammond said the bill should result in a significant tax savings, especially for so called "Mom and Pop" family businesses in the state. The new bill also makes other modifications in the corporate tax law for 1981.

Hammond said the bill may need some modification next year, noteably to clear up [illegible] over how the bill impacts the municipal revenue sh[illegible] formula—a formula formerly tied to the level of income from the oil and gas corporate income tax. He said he hopes that issue will be re-examined next session.

-30-

Statement of Governor Hammond on Signing FCCSSB 524

I have today signed the Free Conference Committee Substitute for Senate Bill No. 524, the oil tax bill. I do so only after being reassured by the Departments of Law and Revenue that this legislation satisfies the two essential conditions that I set out in my letter to the Legislature last June 23rd -- namely, that it will improve our case in the lawsuits over the oil and gas corporate income tax and that it will maintain the State's combined royalty and tax "share" in this one-time resource above 30 percent.

The Attorney General advises that several provisions in the bill will improve the State's legal posture.

- First, it adopts the so-called "warts" amendments which I originally proposed in House Bill 192. These will eliminate a number of side issues in the litigation that could otherwise divert the court's attention from the basic issue in the case, which is whether states may use the "separate accounting" approach in taxing the income of multistate and multinational corporations.

- Second, the bill provides for the deduction of windfall profit tax payments. The windfall profit tax had not even been thought of when the present tax was passed in 1978, and it is generally recognized that the failure to allow the deduction was an unintended, but significant unfairness in our income tax laws.

- Third, the bill makes additional technical changes to ensure that Native corporations are afforded equal treatment under the income tax laws, regardless of whether they fall under the oil and gas income tax or the "ordinary" income tax.

- And fourth, oil and gas corporate taxpayers will start next year to pay income tax to the state under a modified apportionment approach. It is important to remember that the United States Supreme Court in recent years has repeatedly upheld the apportionment approach as a means for states to tax the income of multistate businesses. In stark contrast to this is the fact that separate accounting has yet to be ruled on in a case where it was advocated by the taxing state, and it has been rejected by the Court twice last year when it was advocated by taxpayers. In other words, the income tax in the future will incorporate a "tried and true" approach to multistate taxation, whereas the present, separate-accounting approach does not.

Additionally, I am advised by the Department of

First: besides dealing with oil and gas taxes, this bill will provide significant tax relief for smaller corporations. Beginning this year, their tax rate will be one percent on their first $10,000 of taxable income, two percent on their second $10,000, and so on. For the many "mom and pop" enterprises that have incorporated themselves over the years, this is major relief from the present 5.4 percent rate on the first $50,000 and 9.4 percent on any excess. Signing the bill now allows them to begin enjoying those benefits immediately, instead of waiting until the next session of the Legislature to see if something similar can be passed again.

Second, at present certain municipal revenue sharing refers to the total amount of income tax collected as the basis for the amount of revenue shared. Since this bill will reduce the actual income tax receipts (transferring much of the reduction over to the production tax), the formula for continued revenue sharing should be re-examined next year.

Revenue that the State's "share" during the period from FY 82 to FY 85 will be 31.2 percent. Some have objected to Revenue's estimate of the revenue effects of this bill and assert that the revenue consequences during that time will be as much as three or four times greater. However, even if the revenue effect should prove to be as great as those people fear, Alaska's "share" I'm advised will remain 30.7 percent -- thus still fulfilling my pronounced 30-percent requirement to avoid veto. As for possible revenues effects in 1988 and beyond, I have full confidence in the ability of the Legislature to deal at that time with whatever is required to retain the states "fair share" of the oil wealth. Meanwhile, it is uncumbant upon all the public officers to determine as clearly as possible what the electorate believes that a "fair share" to be.

Critics of this particular bill have argued that it was hastily drafted and ill-considered and that the "backstop" approach -- which, incidentally, I introduced -- would have been far preferable. I can sympathize: the bill is not perfect, nor is it my own preferred choice. I would rather have seen the people get a chance to vote on the question of whether Alaska's "share" in its oil wealth is too great, and I fully intend to introduce legislation next year that will give them precisely this opportunity. In the meantime, it is the view of all pertinent state agencies that we should content ourselves with the present bill. Since a alternative would be to take no action at all.

In conclusion I wish to make two final points.

SENATE

OFFICE OF MAJORITY LEADER

Rep. Furnace:

Here's the material you requested concerning ELF and Governor Hammond.

Hope it helps.

Max

Synopsis of Alaska Fields

Field	Volume (bbls/day)	Wells	Daily Volume p/well	Effctv Sev Tax Rate Under Current Law	Effctv Sev Tax Rate Under HB118
Current Fields					
North Slope					
Prudhoe Bay	1,526,932	691	2210	11.59%	14.91%
Kuparuk	320,685	337	952	8.36%	13.18%
Lisburne	38,293	51	751	5.22%	0.36%
Endicott	98,099	35	2803	12.25%	8.68%
Cook Inlet					
Beaver Creek	263	2	132	0.00%	0.00%
Granite Pt.	7,454	29	257	0.00%	0.00%
McArthur River	19,053	76	251	0.00%	0.00%
Middle Ground Shoals	7,913	44	180	0.00%	0.00%
Swanson River	5,684	27	211	0.00%	0.00%
Trading Bay	2,310	34	68	0.00%	0.00%
Prospective Fields					
Milne Pt.	30,000	40	750	4.67%	0.00%
West Sak	260,000	4000	65	0.00%	0.00%
Pt. Thomson	50,000	45	1111	7.62%	2.43%
Seal Island	100,000	112	893	6.57%	5.75%
Niakuk	20,000	12	1667	12.25%	0.01%

For current fields actual November 1988 data. For prospective fields the expected values at peak production.

prudhoe 04 120 well 10,000 one 1.2 m
664 well 2300 one 1.59 m

IF LOWER 48 FIELDS WERE IN ALASKA THEY WOULD PAY
NO SEVERANCE TAX UNDER EITHER CURRENT LAW OR HB 118

Top 10 Lower 48 Fields	Daily Production	Average Daily Per Well Production	ELF (Current or Proposed)	Severance Tax Under Alaska Law
1. Belridge South (CA)	165,981	28	0	0
2. Midway-Sunset (CA)	157,526	19	0	0
3. Kern River (CA)	128,491	17	0	0
4. East Texas (TX)	111,225	12	0	0
5. Elk Hills (CA)	107,244	98	0	0
6. Yates (TX)	91,890	80	0	0
7. Wilmington (CA)	81,975	40	0	0
8. Wasson (TX)	78,510	36	0	0
9. Spraberry Trench (TX)	60,585	8	0	0
10. Slaughter (TX)	55,792	19	0	0

Source: Oil and Gas Journal

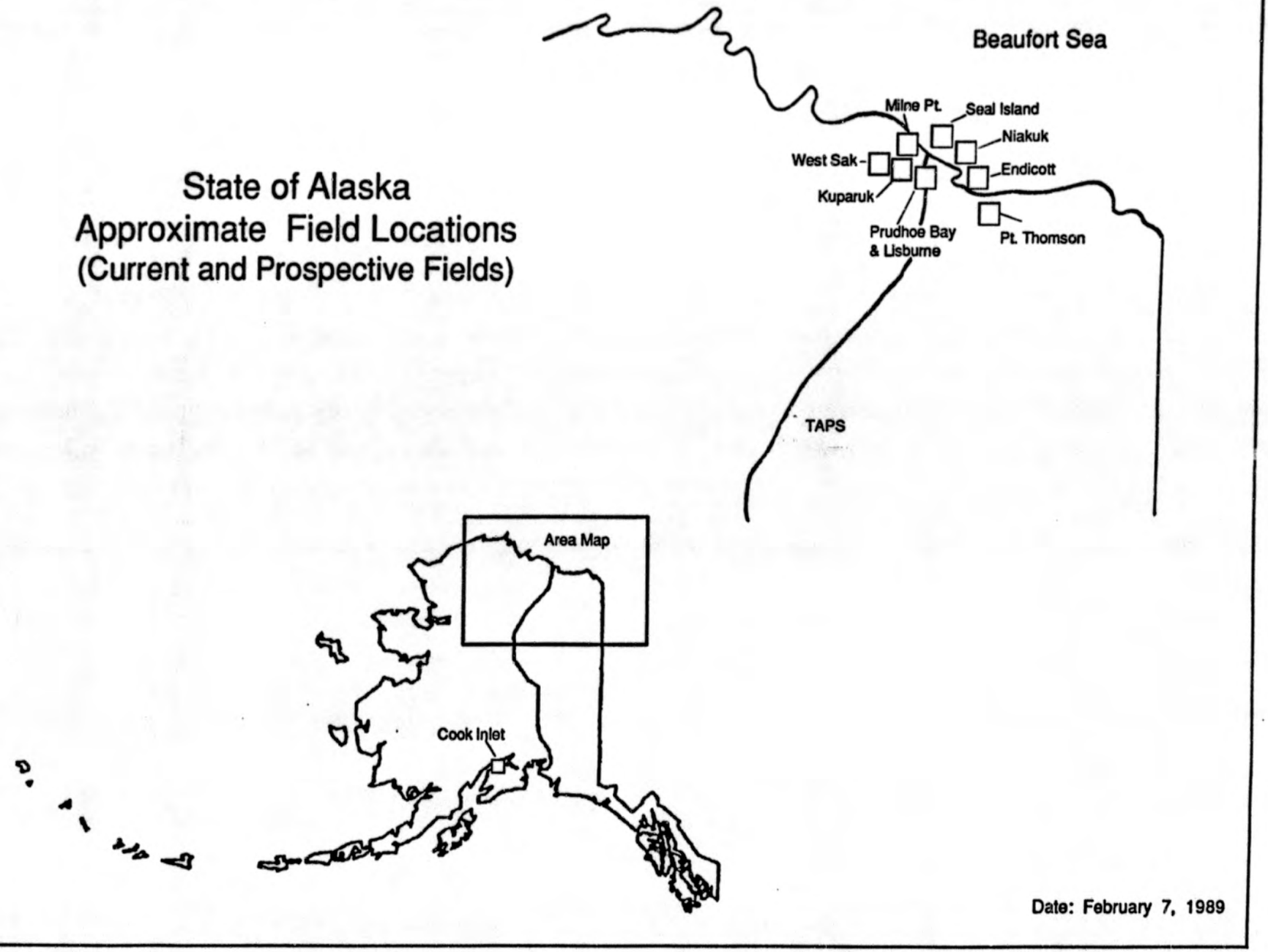
U.S. fields with reserves exceeding 100 million bbl

State	Field	Disc. date	1988 prod.	Cum. prod. 1-1-89	Est. rem. reserves	Est. No. wells
			1,000 bbl			
ALABAMA						
	Citronelle	1955	1,827	147,861	7,000	435
ALASKA						
	Endicott	1978	36,098	43,098	324,902	37
	Granite Point	1965	2,787	109,535	16,213	29
	Kuparuk River	1969	112,055	503,397	994,945	328
	Lisburne	1967	14,600	35,600	175,689	49
	McArthur River	1965	7,040	529,040	34,960	76
	Middle Ground Shoal	1962	2,737	155,889	5,263	42
	Prudhoe Bay	1967	576,335*	6,053,018†	3,503,665	691
	Swanson River	1957	2,154	209,490	8,846	29
ARKANSAS						
	Smackover	1922	2,664	556,907	9,097	2,100
CALIFORNIA						
San Joaquin Valley						
	Belridge South	1911	60,583	677,083	435,286	6,000
	Buena Vista	1909	1,574	647,274	38,271	895
	Coalinga	1890	10,212	753,845	161,188	2,174
	Coalinga Nose	1938	1,285	498,685	17,370	78
	Coles Levee North	1938	442	160,432	2,748	85
	Cuyama South	1949	469	218,191	6,938	105
	Cymric	1909	8,479	199,308	40,000	1,013
	Edison	1928	1,470	134,391	25,670	674
	Elk Hills	1911	39,144	893,374	579,776	1,099
	Fruitvale	1928	577	115,553	13,709	274
	Greeley	1936	237	112,647	1,763	27
	Kern Front	1912	1,500	173,066	55,230	950
	Kern River	1899	46,899	1,204,479	743,000	6,709
	Kettleman North Dome	1928	172	456,648	1,298	44
	Lost Hills	1910	5,627	178,293	61,603	1,634
	McKittrick	1896	2,551	266,822	90,919	931
	Midway-Sunset	1894	57,497	1,879,347	373,863	9,180
	Mount Poso	1926	6,620	263,250	79,280	411
	Rio Bravo	1937	151	116,051	1,319	15
	Yowlumne	1974	6,570	81,368	27,015	65
Coastal Area						
	Carpinteria	1966	2,690	88,101	29,289	114
	Cat Canyon E. & W.	1908	2,735	298,236	46,930	512
	Dos Cuadras	1969	4,371	212,804	54,140	140
	Elwood	1928	317	105,705	2,283	7
	Hondo	1959	9,952	89,621	112,223	20
	Orcutt	1901	906	165,874	10,236	136
	Point Pedernales	1982†	6,515	11,715	331,544	10
	Rincon	1927	1,118	148,759	14,832	240
	San Ardo	1947	4,641	408,351	122,903	600
	Santa Maria Valley	1934	1,751	198,131	40,408	172
	South Mountain	1915	727	145,984	12,035	352
	Ventura	1919	7,072	894,742	97,026	570
Los Angeles Basin						
	Beta	1976	6,013	40,423	173,825	60
	Beverly Hills	1900	2,034	122,616	42,356	116
	Brea Olinda	1880	2,143	383,994	54,787	720
	Coyote East	1909	584	108,663	13,212	103
	Coyote West	1909	808	249,969	7,481	113
	Dominguez	1923	607	269,266	7,448	113
	Huntington Beach	1920	5,816	1,066,368	72,044	990
	Inglewood	1924	2,790	345,453	54,149	366
	Long Beach	1921	2,466	909,757	17,216	410
	Montebello	1917	526	192,357	10,267	155
	Richfield	1919	1,494	189,165	27,412	203
	Santa Fe Springs	1919	987	613,077	9,036	151
	Seal Beach	1924	876	203,118	14,118	168
	Torrance	1922	1,693	212,083	35,847	366
	Wilmington	1932	29,921	2,292,229	495,633	2,050
COLORADO						
	Rangely	1933	12,492	739,418	35,000	488
FLORIDA						
	Jay	1970	4,676	360,612	55,944	121
ILLINOIS						
	Clay City	1938	2,448	393,860	6,000	2,600
	Lawrence	1906	2,919	394,521	5,500	2,700
	Louden	1938	1,345	388,237	3,555	1,340
	Main	1906	2,066	233,273	5,000	3,356
	New Harmony	1939	1,072	153,545	4,000	1,140
	Salem	1938	2,167	386,983	4,500	1,325
KANSAS						
	Bemis-Shutts	1928	1,169	244,247	4,405	973
	Chase-Silica	1930	1,018	301,003	4,499	1,103
	El Dorado	1915	839	296,734	2,616	822
	Hall-Gurney	1931	1,032	145,677	4,051	1,130
	Trapp	1929	1,200	225,858	4,643	1,000
LOUISIANA						
Offshore						
	Bay Marchand Blk. 2	1949	5,547	596,972	53,758	120
	Eugene Island Blk. 330	1930	7,859	269,080	55,920	169
	Grande Isle Blk. 16	1948	1,659	263,729	85,645	44
	Grande Isle Blk. 43	1956	4,312	272,256	85,688	126
	Mississippi Canyon Blk. 194	1980	4,929	116,868	76,311	44
	Main Pass Blk. 41	1957	2,985	237,854	23,384	112
	Main Pass Blk. 306	1969	1,776	201,869	78,335	94
	South Pass Blk. 27	1954	1,659	125,317	73,198	118
	South Pass Blk. 61	1968	9,140	152,151	45,000	156
	South Pass Blk. 62	1965	3,331	106,364	81,594	73
	South Pass Blk. 55	1969	4,032	100,875	89,252	61
	Ship Shoal Blk. 204	1968	1,591	66,070	38,930	40
	Ship Shoal Blk. 207	1967	1,023	87,818	38,000	25
	Ship Shoal Blk. 208	1962	4,117	160,169	65,274	67
	South Timbalier Blk. 21	1939	1,324	216,239	47,133	45
	South Timbalier Blk. 135	1956	1,390	139,337	25,663	37
	West Delta Blk. 30	1949	6,754	446,083	47,375	153
	West Delta Blk. 73	1962	4,469	188,700	86,291	73
Onshore South						
	Bay de Chene	1941	390	96,382	17,952	24
	Bay St. Elaine	1928	321	164,808	25,292	18
	Bayou Sale	1941	769	161,369	3,417	20
	Black Bay West	1953	1,971	144,799	10,432	94
	Caillou Island	1930	2,308	602,231	74,020	136
	Cote Blanche Bay West	1940	741	181,594	46,374	86
	Delta Farms	1944	293	115,351	7,019	13
	Garden Island Bay	1934	1,406	221,261	31,954	144
	Golden Meadow	1938	894	135,439	4,290	176
	Grand Bay	1938	454	170,514	3,760	41
	Hackberry, East	1927	777	109,087	7,603	60
	Hackberry, West	1928	1,771	141,895	6,492	107
	Iowa	1931	134	99,303	697	25
	Jennings	1901	315	116,409	700	181
	Lafitte	1935	1,665	255,304	9,550	111
	Lake Barre	1929	941	204,023	20,061	31
	Lake Pelto	1929	477	117,000	17,415	23
	Lake Washington	1931	2,353	242,390	16,376	93
	Leeville	1931	447	141,646	7,221	37
	Paradis	1939	725	126,650	8,600	31

*Includes about 30.66 million bbl of condensate. †Includes about 138.66 million bbl of condensate.

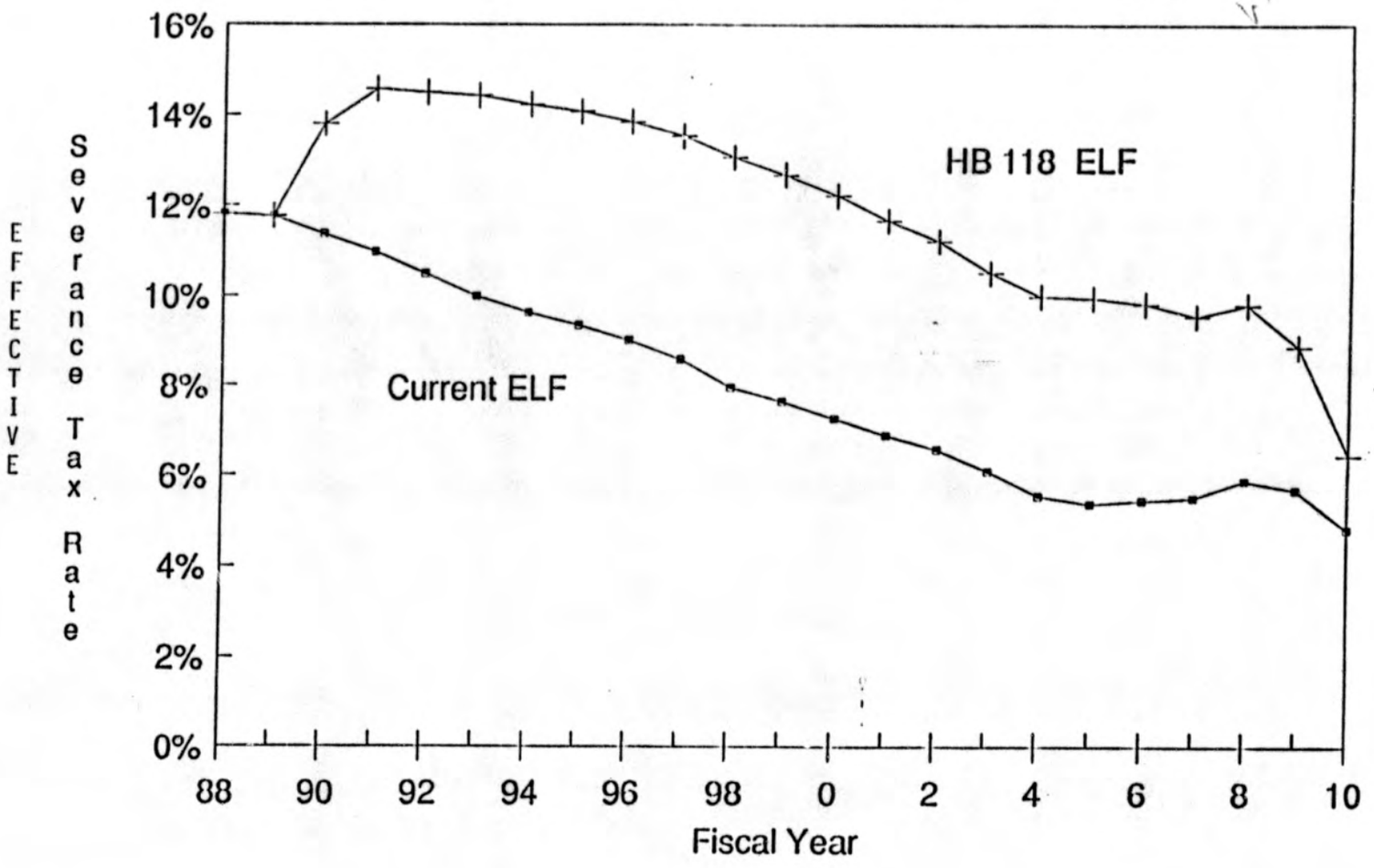
State Field	Disc. date	1988 prod.	Cum. prod. 1-1-89	Est. rem. reserves	Est. No. wells
			1,000 bbl		
Quarantine Bay, 1937		761	172,672	1,654	71
Timbalier Bay, 1938					
Venice, 1937		858	181,878	7,590	59
Vinton, 1910		287	161,001	800	96
Weeks Island, 1945		816	225,939	21,356	33
West Bay, 1940		1,349	228,246	16,355	79
North					
Caddo-Pine Island 1905		3,310	360,899	12,888	10,688
Delhi, 1944		673	211,707	34,651	58
Haynesville, 1921		761	168,237	2,373	166
Homer, 1919		434	98,375	1,908	198
Rodessa, 1935		331	106,027	1,506	67
MISSISSIPPI					
Baxtervilie, 1944		2,609	239,164	10,391	316
Heidelberg, 1944		2,829	174,809	12,171	316
Tinsley, 1939		834	29,677	3,197	173
MONTANA					
Bell Creek, 1967		958	128,836	22,984	91
Cut Bank, 1926		994	162,459	37,169	575
Pine, 1951		1,302	105,145	5,687	96
NEW MEXICO					
Denton, 1949		652	138,693	3,000	179
Empire-Abo, 1957		1,424	213,983	50,017	405
Eunice-Monument, 1929		2,500	125,414	10,894	879
Hobbs, 1928		8,480	297,482	20,000	613
Maljamar, 1926		1,869	144,961	5,070	851
Vacuum, 1929		12,359	432,242	40,000	1,556
NORTH DAKOTA					
Beaver Lodge, 1951		1,704	111,574	16,684	132
Billings Nose, 1978		2,560	61,669	51,744	153
Little Knife, 1977		3,392	51,437	57,924	131
Mondak, 1976		439	13,165	82,887	96
OKLAHOMA					
Burbank, 1920		1,135	536,746	8,377	1,105
Eola-Robberson,					
1920		746	133,124	8,210	603
Fitts, 1934		2,963	199,894	12,000	589
Glenn Pool, 1905		1,170	327,865	5,000	714
Golden Trend, 1945		4,333	474,100	28,000	1,396
Healdton, 1913		1,938	334,645	9,563	1,000
Hewitt, 1919		3,152	268,371	13,615	923
Oklahoma City, 1928		802	816,170	5,966	174
Postle, 1958		1,216	106,393	14,921	226
Sho-Vel-Tum, 1905		18,398	1,167,379	60,000	7,616
Sooner Trend, 1945		4,147	295,544	20,000	4,746
TEXAS					
District 2					
Greta, 1933		748	147,570	12,530	100
Lake Pasture, 1953		2,184	87,784	12,644	143
Tom O'Connor, 1934		10,380	747,848	55,000	646
West Ranch, 1938		2,640	380,034	8,504	307
District 3					
Ananuac, 1935		1,068	284,888	15,112	106
Conroe, 1931		3,864	727,215	33,728	278
Giddings, 1971		8,868	278,570	148,032	2,281
Hastings, 1934		3,084	697,237	72,764	206
Magnet Withers, 1936		1,284	110,960	5,000	150
Oyster Bayou, 1941		864	160,204	18,096	39
Thompson, 1931		3,972	472,540	27,360	262
Tomball, 1933		400	121,056	9,868	85
Webster, 1937		5,304	573,192	20,000	243
District 4					
Agua Dulce-Stratton,					
1928		360	146,623	24,751	94
Borregos, 1945		192	114,021	20,186	40
Kelsey, 1938		200	114,359	36,247	60
Plymouth, 1925		400	122,823	3,300	60
Seeligson, 1925		156	271,483	55,544	42
TCB, 1944		456	112,700	52,358	30
White Point E, 1938		60	104,034	6,340	21
District 5					
Alabama Ferry, 1983		3,600	14,600	86,400	253
Van, 1928		3,096	521,960	15,000	366
District 6					
East Texas, 1930		40,597	5,008,787	988,758	9,363
Fairway, 1960		2,424	192,691	17,777	100
Hawkins, 1940		8,244	821,644	42,372	442
Neches, 1953		1,416	103,980	6,036	163
Quitman, 1948		1,680	121,346	8,440	208
District 8					
Andector, 1946		1,500	181,888	6,500	28
Block 31, 1945		3,556	220,068	12,000	325
Cowden, N., 1930		13,596	488,092	40,000	1,210
Cowden, S. Foster,					
Johnson, 1932		9,696	500,796	40,000	1,593
Dollarhide, 1945		2,568	193,780	11,448	202
Dune, 1938		2,928	183,000	18,704	771
Fullerton, 1942		7,452	348,200	22,000	870
Goldsmith, 1934		7,248	755,516	33,752	2,036
Howard Glasscock, 1925		5,844	404,508	26,000	2,208
Iatan, E., 1926		3,372	142,956	12,000	1,304
Jordan, 1937		480	128,976	2,520	138
Keystone, 1930		1,872	313,080	9,374	812
McElroy, 1926		7,884	465,549	56,800	1,600
Means, 1934		7,020	228,598	20,000	713
Midland Farms, 1944		4,608	241,980	18,616	415
Sand Hills, 1931		2,760	248,207	21,600	1,312
TXL, 1944		2,004	263,516	6,500	600
Waddell, 1927		708	100,712	3,792	188
Ward Estes, N., 1929		3,408	364,177	76,436	1,562
Westbrook, 1923		2,000	88,000	16,000	718
Yates, 1926		33,540	1,171,820	782,685	1,146
District 8-A					
Anton-Irish, 1944		3,564	175,910	24,190	239
Cogdell Area, 1949		1,656	292,218	41,204	103
Diamond M., 1948		1,908	239,418	16,063	474
Kelly-Snyder, 1948		11,592	1,234,962	115,038	806
Levelland, 1938		17,328	484,144	50,000	3,012
Prentice, 1951		6,216	161,036	20,000	437
Salt Creek, 1950		10,404	247,340	12,552	173
Seminole, 1936		17,004	524,765	36,000	624
Slaughter, 1936		20,364	1,029,800	50,000	3,001
Spraberry Trend, 1951		22,212	653,388	50,000	7,321
Wasson, 1936		28,656	1,711,898	60,000	2,152
Welch, 1942		3,324	144,228	14,000	651
District 10					
Panhandle, 1921		7,812	1,423,286	41,240	11,643
UTAH					
Altamont, 1955		3,047	89,493	231,216	227
Aneth, 1956		5,340	354,004	30,000	461
East Anschutz Ranch,					
1979		12,756	80,365	727,799	28
Red Wash, 1951		1,075	77,511	13,377	146
WYOMING					
Brady, 1960		2,438	54,537	49,251	22
Byron, 1918		1,119	120,688	7,656	67
Elk Basin, 1915		2,968	446,698	25,750	170
Frannie, 1928		1,122	116,020	5,000	63
Garland, 1906		2,625	154,885	6,000	225
Grass Creek, 1914		2,414	185,120	9,000	288
Hamilton Dome, 1918		2,853	268,109	6,000	239
Hartzog Draw, 1976		6,647	66,722	283,739	157
Hilite, 1969		541	75,416	55,885	93
Lance Creek, 1918		163	107,805	400	24
Little Buffalo Basin,					
1914		2,666	118,653	9,389	154
Lost Soldier, 1916		2,308	192,073	6,000	71
Oregon Basin, 1912		8,669	388,180	30,000	500
Painter Reservoir, 1979		1,739	31,674	80,674	31
Salt Creek, 1906		5,210	629,689	25,000	1,217
Wertz, 1920		3,500	99,695	15,000	65
Whitney Canyon, 1980		1,652	10,379	105,485	29

State of Alaska
Approximate Field Locations
(Current and Prospective Fields)



Date: February 7, 1989

HB 118 Will Raise the Tax Rates on Prudhoe Bay and Kuparuk ...



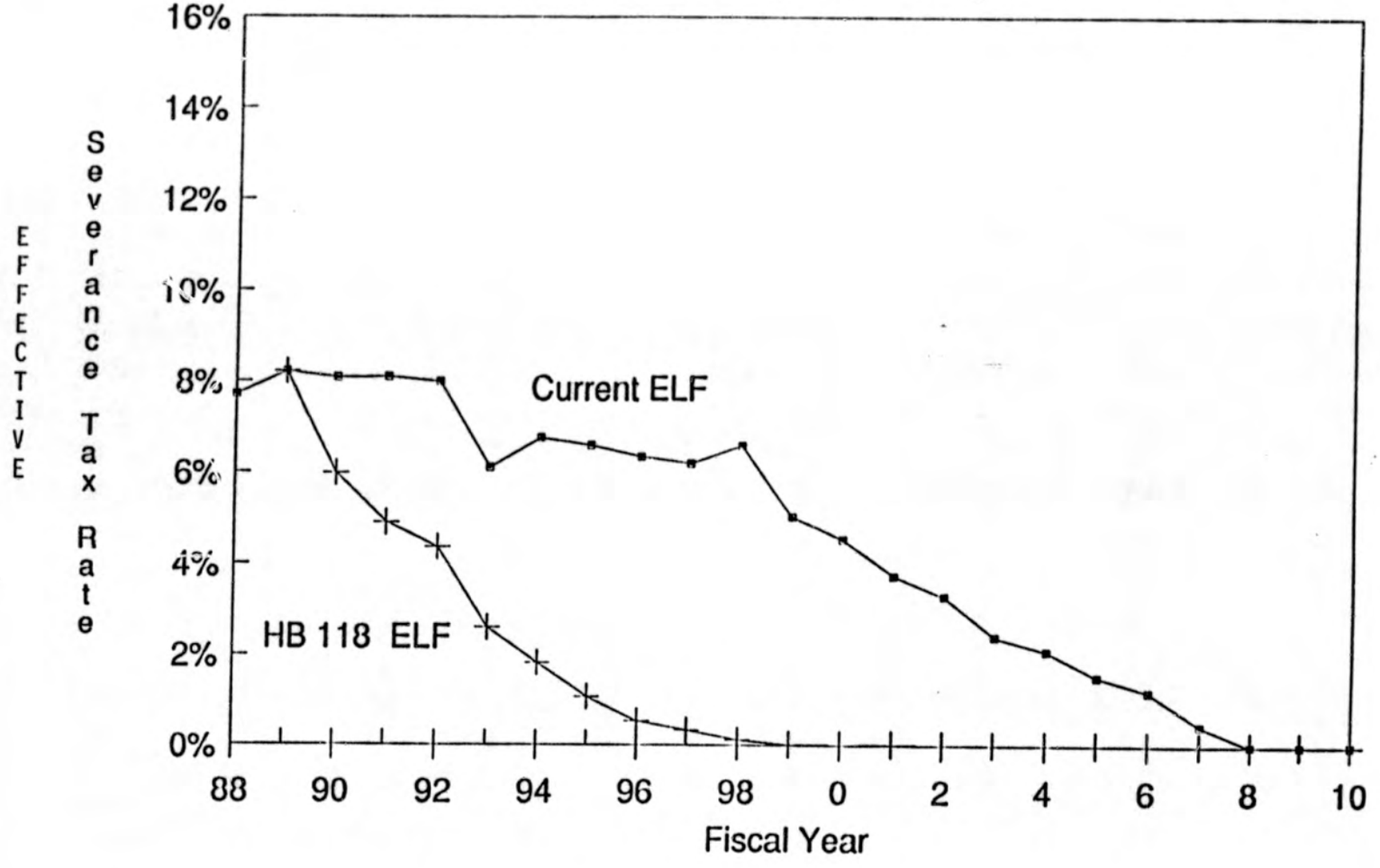
Fields Where Taxes Would Increase Under HB 118

Field	Current Tax Rate[1]	HB 118 Tax Rate[1]
Prudhoe Bay	11.59	14.91
Kuparuk	8.36	13.18

[1] Estimated effective severance tax rate for 1991.

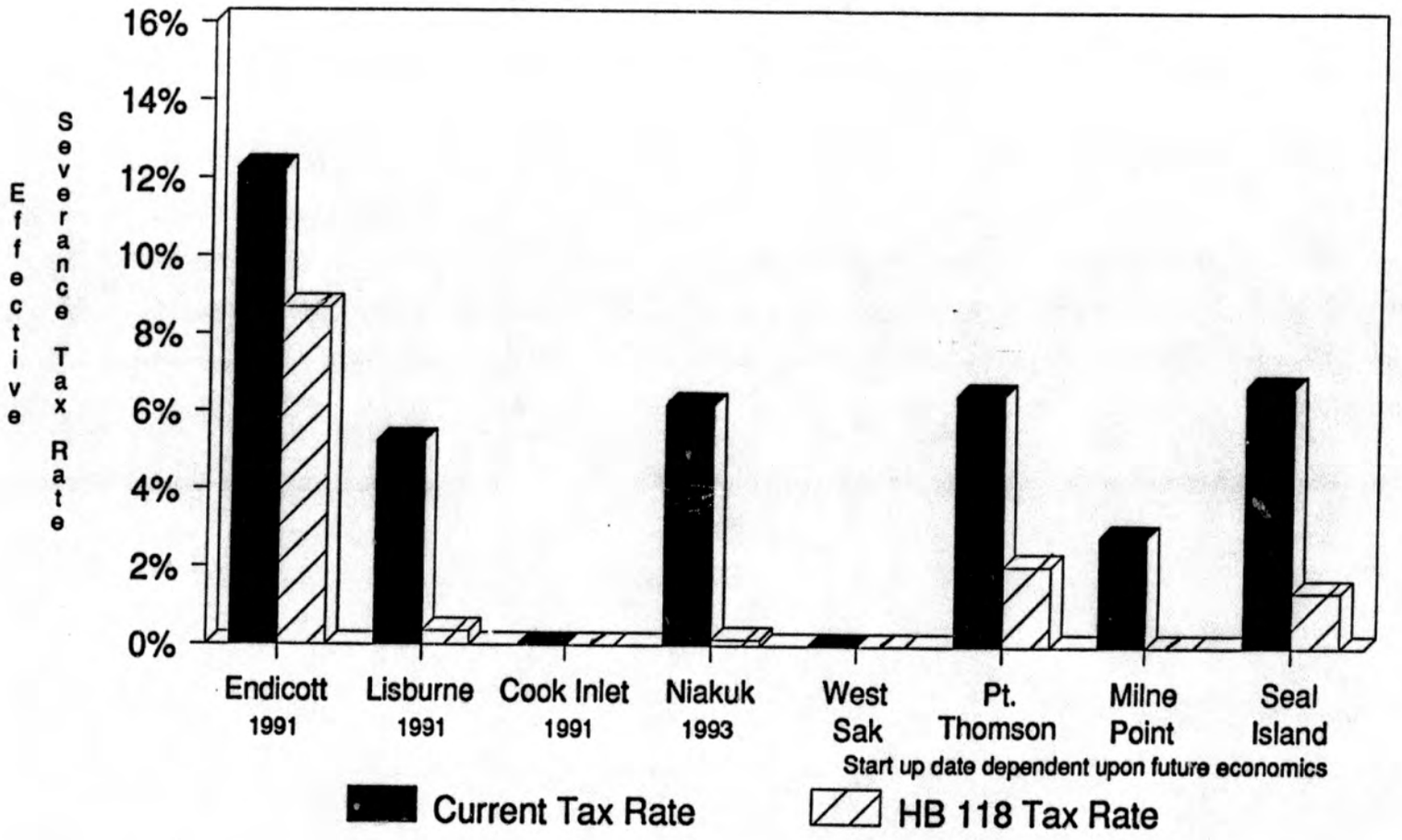
Date: February 7, 1989

HB 118 Will Lower the Tax Rates on All Fields in Alaska Other than Prudhoe Bay and Kuparuk



Fields Where Taxes Would Decrease Under HB 118

(For Representative Years)



Source: Department of Revenue

Date: February 7, 1989

STATE OF ALASKA
1989 LEGISLATIVE SESSION

Bill Version: HB 118
Publish Date:

REQUEST: FISCAL NOTE

Revision Date:
Title: Act relating to the oil and gas properties production tax
Sponsor: House Finance Committee
Requestor: House Resources

Agency Affected: Department of Revenue
BRU: Oil & Gas Audit Division
Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LANDS & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	96,000	144,000	163,000	187,000	180,000

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

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: See attached page for analysis.

Prepared By: Roger Marks
Division: Dept. of Revenue, Oil & Gas Audit Division
Phone: 277-5627
Date: January 31, 1989

Approved by Commissioner:
Agency: Department of Revenue
Date: 2/3/89

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

Fiscal Analysis of HB 118

This bill modifies the economic limit factor (ELF) formula used in computing the production (severance) tax on oil.

The bill (1) introduces the rate of field production into the exponent of the current ELF formula; (2) repeals the so-called "rounding rule," the provision of current law which states that for any month during the first 10 years of commercial oil production for which the computed ELF of a lease or property exceeds 0.7 the ELF shall be considered to be one; and (3) fixes the production at the economic limit (PEL) at 300 barrels times the number of well days in the month.

Since the bill does not carry an effective date, this analysis has assumed that the bill will be enacted June 1, 1989 and go into effect September 1, 1989 and will apply to oil produced after August 31, 1989. (Because the severance tax on oil for a given month is due during the following month, a tax change which takes effect on September 1 would not affect revenues until October.)

This fiscal note was calculated using the oil price and production assumptions of the Department of Revenue's Fall 1988 Petroleum Production Revenue Forecast mid-case scenario updated for actual data through November of 1988. 1/

Additional revenues for future years in millions of dollars are as follows:

1995	174
1996	169
1997	163
1998	153
1999	152
2000	144
2001	136
2002	129
2003	117
2004	110
2005	104
2006	91
2007	80
2008	60
2009	45
2020	19

1/ Had the fiscal note used the oil price and volume assumptions of the "Consensus Revenue Analysis" of January 24, 1989, the FY 90 fiscal impact would be $99 million.

6-0652U
Chenoweth
4/26/89

Original sponsor: Finance Committee

IN THE HOUSE

BY THE SENATE SPECIAL COMMITTEE ON OIL AND GAS

SENATE CS FOR CS FOR HOUSE BILL NO. 118 (Oil & Gas)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to the oil and gas properties production tax; and providing for an effective date."

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

* Section 1. AS 43.55.013(b) is repealed and reenacted to read:

(b) The economic limit factor for oil production of a lease or property shall be computed according to the following formula:

(1-[PEL/TP]) exp ([150,000/(TP/Days)] exp [(460 X WD)/PEL])

where: PEL = the monthly production rate at the economic limit;

TP = the total production during the month for which the tax is to be paid;

WD = the total number of well days in the month for which the tax is to be paid;

Days = the number of days in the month for which the tax is to be paid; and

exp = exponent.

* Sec. 2. This Act takes effect July 1, 1989.