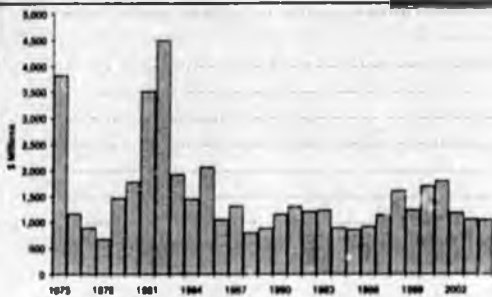


11588 HOUSE RESOURCES

## Capital Spending on ANS Wells, Field Facilities & Exploration



Source: 1975-1980 Data from "International Oil Tax Comparison Study", April 1981.  
 1981-2002 Data from "ANSO Annual Reports and Information Service".  
 2003-2004 Data from "ANSO Annual Reports and Information Service".

## 1. How the World Works (2005)

	Volume Millions barrels	\$ per barrel	\$ Million
Destination Value at Market:	330	\$43.43	\$14,332
Less Tankering & Pipelines	330	\$ 4.51	(\$1,488)
Gross Value at Point of Production	330	\$38.92	\$12,844
Less Upstream Costs			
Operating:		\$ 3.33	
Capital and Exploration:		\$ 3.18	
Total	330	\$ 6.52	(\$2,150)
Net Value at Point of Production:	330	\$32.40	\$ 10,694

## 2. Current Production Tax

	\$ Million
Gross Value at Point of Production	\$12,843.60
Royalty Rate	0.875
Value Net of Royalty	\$11,238.15
Tax Rate	0.15
ELF Rate	0.55
Tax (current)	\$ 927.15

## 3. Proposed Production Tax (PPT)

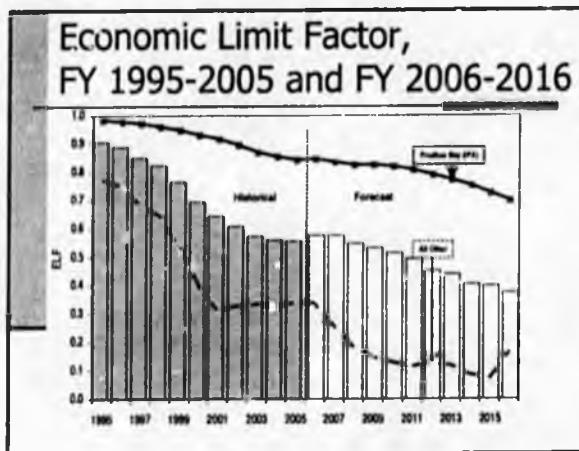
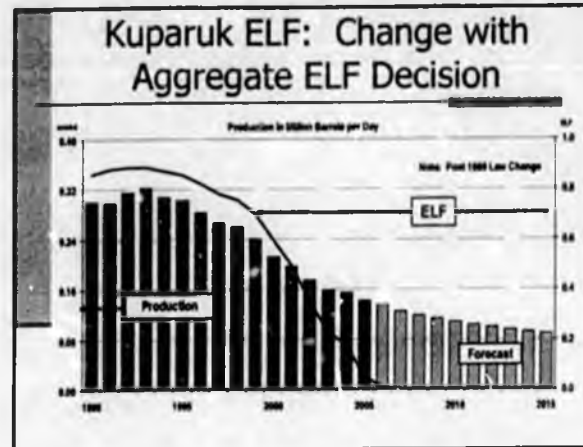
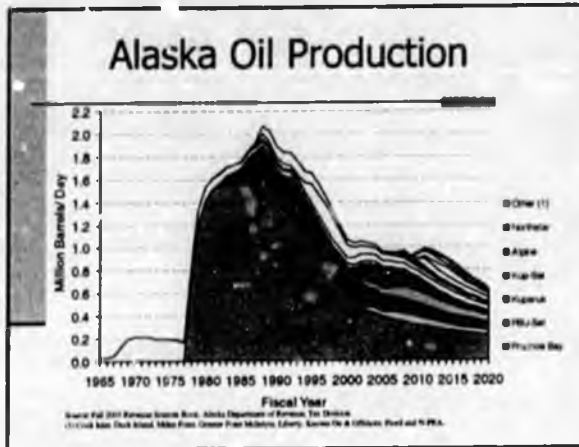
	Billion
Value Net of Royalty	\$11,238.2
Less Upstream Cost Deductions	(\$2,150.0)
Taxable Value at Point of Production	\$ 9,088.2
	.20
Tax Prior to Credits	\$ 1,817.6
Credits (1.050 * 2)	(\$210.0)
Proposed Production Tax	\$ 1,607.6

## 4. PPT with Investment

	\$ in Billion
Production Tax Net of Royalty	\$11,238.2
Less Upstream Cost Deductions	(\$ 3,850.0)
Taxable Value at Point of Production	\$ 7,388.2
Times Tax Rate	.20
Tax Prior to Credits	\$ 1,477.2
Credits (1.050 + 1.700) * 2	(\$550.0)
Proposed Production Tax	\$ 927.6

## 5. Implicit Cost From Proxy

	\$ in Billion
Production Tax Net of Royalty	\$11,238.15
Less Implicit Costs from Proxy	(\$ 5,057.00)
	\$ 6,181.00
Tax Rate	0.15
Same Production Tax	\$ 927.15



## PPT REVENUE STUDIES

Presentation to  
House & Senate Resources

Alaska Department of Revenue  
Tax Division  
February 23, 2006

1

## OVERVIEW

- Description of tax
- Description of model
- Long-term cumulative revenues
- Annual revenues
- Corporate take

2

## PPT

- Start with **WELLHEAD VALUE** (market value less transportation)
- Subtract **UPSTREAM COSTS** (capital, operating, royalties, property tax)
- Subtract additional **STANDARD ALLOWANCE** of \$73 million
- This is **TAXABLE INCOME**
- Multiply taxable income by **TAX RATE**
- This is the **TAX BEFORE CREDITS**
- Credits are capital costs multiplied by **CREDIT RATE**
- This is subtracted from the tax before credits to yield the **PPT PAID**

3

## PPT Example

- 20 million barrels @ \$50/bbl ANS West Coast = **MARKET VALUE** of \$1,000 million
- \$2/bbl shipping + \$3/bbl TAPS = \$5/bbl = \$100 million
- **WELLHEAD VALUE** = \$900 million
- **UPSTREAM COST** = Capital + Operating + Royalty + Property Tax = \$300 million
- **STANDARD ALLOWANCE** of \$73 million
- **TAXABLE INCOME** = \$900 - \$300 - \$73 = \$527 million
- If **TAX RATE** = 20%, **TAX BEFORE CREDITS** = 20% X \$527 = \$105 million
- If capital = \$200 million and the **CREDIT RATE** = 20%, credit = \$40 million
- **PPT PAID** = \$105 - \$40 = \$65 million

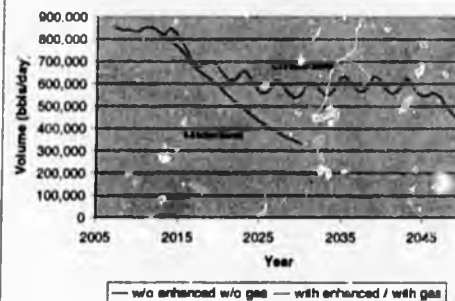
4

## Volume Scenarios

- No enhanced volumes / No gasline
  - Totals 5.5 billion barrels through 2030
    - Including 0.8 billion barrels of heavy oil
      - No additional heavy oil at prices under \$30
- Gasline and enhanced volumes
  - Totals 10.5 billion barrels through 2050
    - Includes additional 3.2 billion barrels conventional
      - 700 million barrels net stemming from gasline
    - Including additional 1.8 billion barrels heavy oil
      - No additional heavy oil at prices under \$30

5

Figure 1  
Volume Scenarios



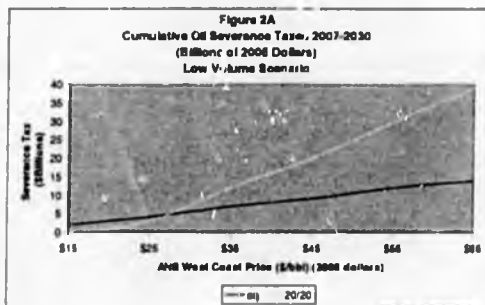
6

## Costs and Prices

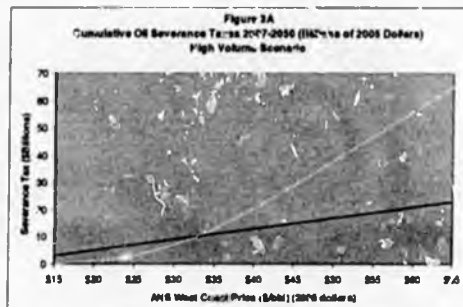
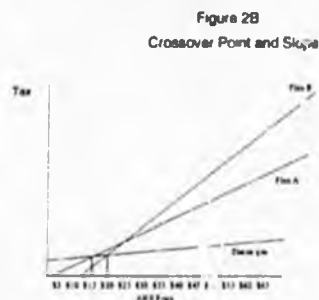
- Costs
  - \$100 mm/yr exploration through 2040
  - \$1/bbl on-going capital on all barrels
  - \$3.50/bbl developmental capital on 2/3 of existing conventional oil
  - \$8/bbl developmental capital on 2/3 of existing heavy oil
  - \$3.50/bbl developmental capital on new conventional oil
  - \$8/bbl developmental capital on new heavy oil
  - \$3/bbl operating costs on conventional oil
  - \$5/bbl operating costs on heavy oil
- Costs and prices are real \$2005 dollars
- Heavy oil discounted 8% for quality

## Cumulative Revenues

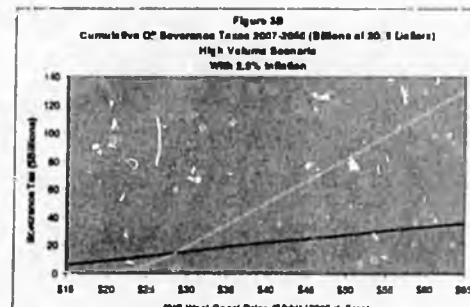
- Without enhanced volumes / without gasoline (through 2030)
- With enhanced volumes / with gasoline (through 2050)
  - Does not include gasoline severance taxes
  - Includes gasoline costs



Total revenues \$2 billion less to \$28 billion more than status quo



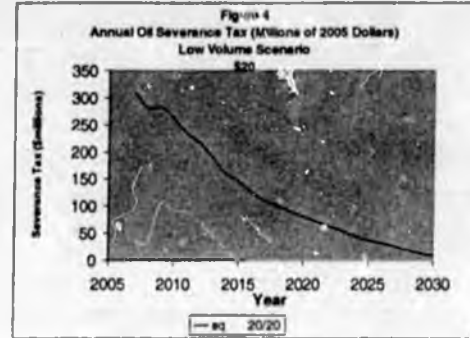
Total revenues \$3 billion less to \$42 billion more than status quo



## Annual Revenues

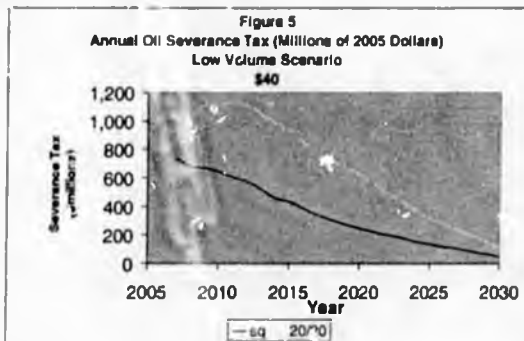
- Without enhanced volumes / without gasoline (through 2030)
  - \$20
  - \$40
  - \$60
- With gasoline / with enhanced volumes (through 2050) (does not include gasoline severance taxes; includes gasoline costs)
  - \$20
  - \$40
  - \$60

13



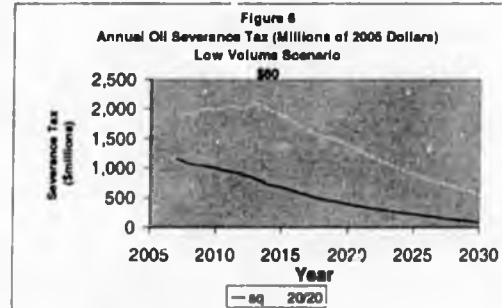
Average annual revenue \$100 million less than status quo

14



Average annual revenue \$330 million more than status quo

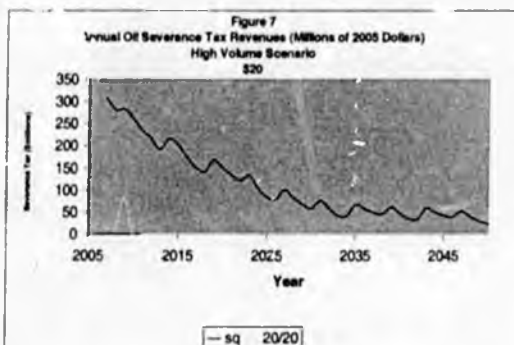
15



Average annual revenue \$800 million more than status quo

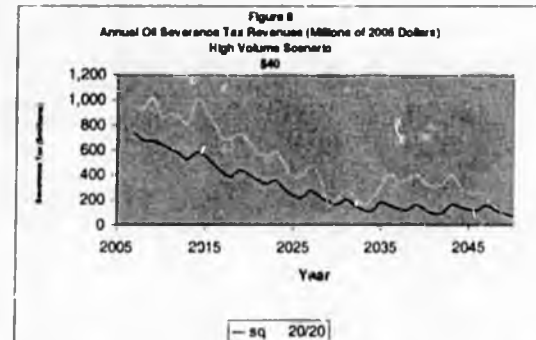
This is equivalent to total State Gasoline revenues at a \$4.70/mbbl mark of price

16



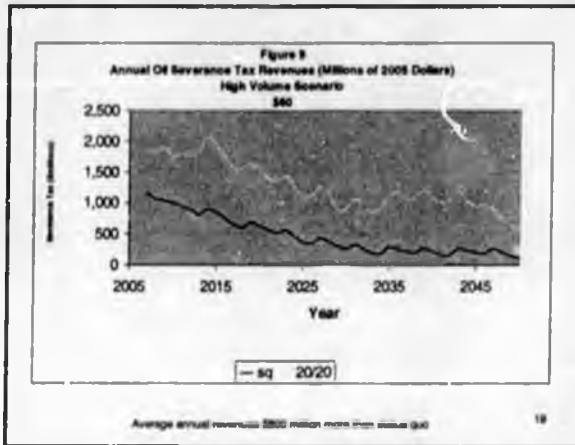
Average annual revenue \$110 million less than status quo

17



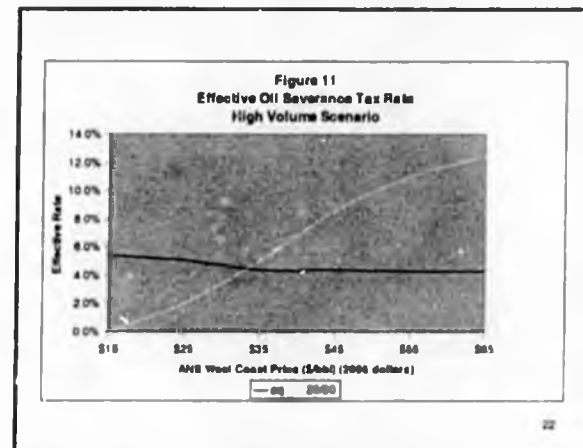
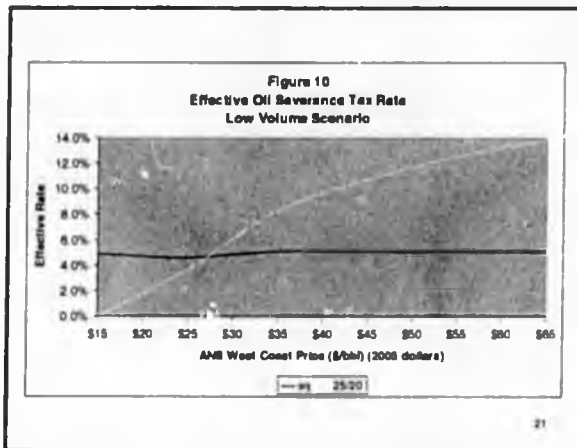
Average annual revenue \$180 million more than status quo

18

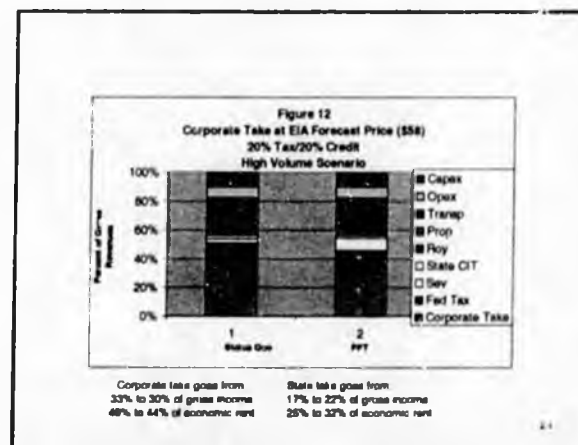


### Effective Tax Rate

- Without enhanced volumes / without gasoline
- With enhanced volumes / with gasoline



**Conclusion:**  
Corporate Take



## Petroleum Profits Tax (PPT)

### Overview

Alaska Department of Revenue  
Before the Alaska State Legislature

Robynn J. Wilson

## Problems with Current Production Tax

- No incentive in tax system to reinvest in Alaska
- Low take (internationally) at high prices, high take at low prices
- Maturing of North Slope leads to declines in tax revenue

2/22/08

2

## Components of PPT

- Tax Base
- Rate
- Incentive Credits
- Base Allowance
- Transition Provision

2/22/08

3

## Gross vs. Net

Current Tax on Gross		PPT on Net	
Value at wellhead	\$50.00	Value at wellhead	\$50.00
		Less:	
		Lease op exps	(12.50)
Times: tax rate	15%	Net taxable	\$37.50
		Times: tax rate	20%
Tax before ELF	\$7.50	Tax before credits	\$7.50

2/22/08

4

## Tax Base

Gross value at point of production

- Less: Lease expenditures
- operating costs
  - capital expenditures
  - allowance for overhead

2/22/08

5

## Non-deductible expenses

- Depreciation
- Royalty payments
- Taxes based on net income
- Interest & financing charges
- Lease acquisition costs
- Other costs

2/22/08

6

### Determining value under current system

West coast value

\$



2/22/06

7

### Gross Value under PPT

Producer can elect to use:

- Royalty value
- DOR formula that estimates a value at a specific location such as point of delivery into a common carrier pipeline

2/22/06

8

Tax Rate 20%

of Net Profits

### Incentive Credits

- 20% of qualified capital expenditures
- May be taken on:
  - Exploration costs
  - Capital costs **incurred on lease**
- Credits are transferable

2/22/06

10

### How are losses handled?

Gross value	\$50.00
less:	
Lease op exps	(12.50)
Capital exp's	<u>(60.00)</u>
Net loss (NOL)	(\$22.50)

2/22/06

11

### Net Operating Losses (NOL's)

- Can be converted to Credits
- 20% of loss

2/21/06

12

### Base Allowance

- \$73 million deduction
- Available to each corporation
- Cannot reduce taxable income below zero

2/22/06

13

### Other provisions

- Monthly return filing
- 90% payment safe harbor
- Yearly true-up on 3/31
- Effective date 7/1/06

2/22/06

14

### Transition Provisor.

- Allows cost recovery of assets placed in service 7/01–6/06
- Deduction of 1/6 of cost in each of 6 transition years
- Deduction available only when average price of oil exceeds \$40

2/22/06

15

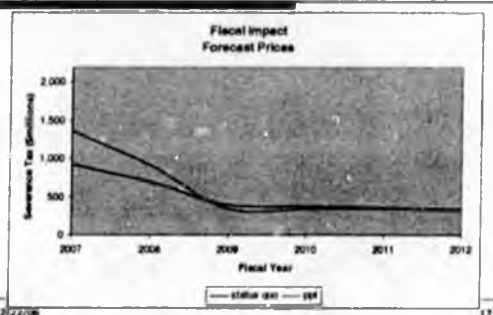
### Revenue

- Additional revenue from PPT will depend primarily on two factors:
  - Price of oil/gas
  - Producer investment in the state

2/22/06

16

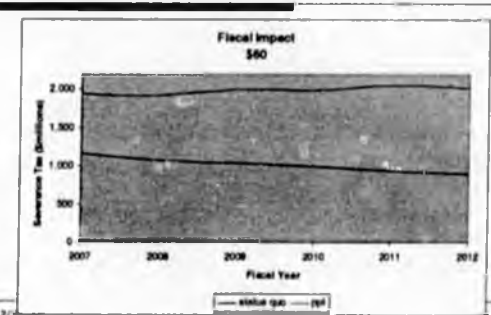
### Incremental Revenue based on DOR Forecast:



2/22/06

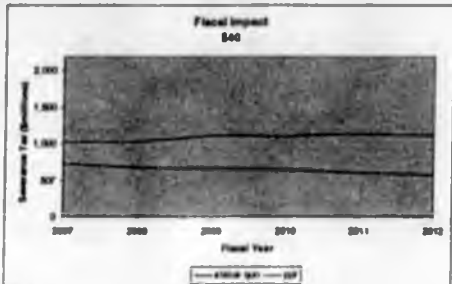
17

### Incremental Revenue based on \$60 oil



2/22/06

### Incremental Revenue based on \$40 oil:



2/22/06

18

### PPT: A Tax for Alaska's Future



2/22/06

19

## Glossary of Terms Related to the Production Profit Tax

### Capitalize.

1. In an accounting sense, the periodic expensing (amortization) of capital costs through depreciation or depletion.
2. To convert an (anticipated) income stream to a present value by dividing by an interest rate, as in the dividend discount model.
3. To record capital outlays as additions to asset value rather than as expense.

Generally, expenditures that will yield benefits to future operations beyond the accounting period in which they are incurred are capitalized—that is, they are depreciated at either a statutory rate or a rate consistent with the useful life of the asset.

### Cash Flow

1. Net income plus depreciation, depletion, and amortization and other non-cash expenses. Usually synonymous with cash earnings and operating cash flow.
2. An analysis of all the changes that affect the cash account during an accounting period.

### Dollars-of-the Day

A term usually associated with cost estimates that indicate the effects of anticipated inflation have been taken into account. For example, if a well costs \$5 million right now in "today's dollars" (the opposite of dollars-of-the day), then the cost of the well two years from now might be estimated at \$5.51 million in dollars-of-the-day assuming a 5% inflation factor. Also called *escalated dollars*.

### Dutch Disease

The adverse results of large-scale positive shock to a single sector of a nation's economy, so named because of the problems associated with large-scale development of the Groningen Gas field in the Netherlands in the 1970s. Typically the sector of economy that is booming causes widespread inflation and other sectors, particularly agriculture, suffer from inability to attract workers. The drastic increase in foreign exchange can cause problems with local currencies and fiscal and monetary problems can occur without proper management.

### Equity Oil

Usually this term refers to oil or revenues after cost recovery (or cost oil). It is also referred to as profit oil or share oil—terms that are most often associated with PSCs. Generally speaking, the analog to equity oil in a concessionary system would be pretax cash flow. Like pretax cash flow, equity oil may also be subject to taxation.

### Expense

1. In a financial sense, a non-capital cost associated most often with operations or production.
2. In accounting, costs incurred in a given accounting period as expenses and charged against revenues. To expense a particular cost is to charge it against income during the accounting period in which it was spent. The opposite would be to capitalize the cost and charge it off through some depreciation schedule.

**Exploratory Well**

A well drilled in an unproved area. This can include: (1) a well in proved area seeking a new reservoir in a significantly deeper horizon, (2) a well drilled substantially beyond the limits of existing production. Exploratory wells are defined partly by distance from proved production and by degree of risk associated with the drilling. Wildcat wells involve a higher degree of risk than exploratory wells.

**Fiscal System**

Technically, the legislated taxation structure for a country including royalty payments. In popular language, the term includes all aspects of contractual and fiscal elements that make up a given government-foreign oil company relationship.

**Government Take**

The total government share of profit oil or revenues not associated with cost recovery. Same as government after-tax equity split and government marginal take.

**Heavy Oil**

A type of crude oil which is very viscous and does not flow easily. There is no one definition, and may be characterized as having an American Petroleum Institute [API] gravity less than 20°. The common characteristics properties are the following:

- High specific gravity
- Low hydrogen to carbon ratios
- High carbon residues and
- High contents of asphaltenes, heavy metal, sulphur and nitrogen

**Incentives**

Fiscal or contractual elements employed by host government that make petroleum exploration or development more economically attractive includes such things as:

- Royalty Holidays
- Tax holidays
- Tax credits
- Reduced government participation
- Lower government take
- Investment credits/uplifts
- Accelerated depreciation

**Intangible Drilling and Development Costs (IDCs)**

Expenditures for wages, transportation, fuel, fungible supplies used in drilling and equipping wells for production.

**Intangibles**

All intangible assets such as goodwill, patents, trademarks, unamortized debts discounts, and deferred charges.

**Investment Credit**

A fiscal incentive where the government allows a company to recover an additional percentage of tangible capital expenditure. For example, if a contractor spent \$10 million on expenditures eligible for a 20% investment credit, then the contractor would actually be able to recover \$12 million through cost recovery (see Uplift). These incentives can be taxable. Sometime the investment credit is mistakenly referred to as an investment tax credit.

**Netback**

Many royalty calculations are based upon gross revenues from some point of valuation, usually the last value off of a production platform or at the boundary of a field or license area. The point of sale, however, may be different than the point of valuation. The statutory royalty calculation may allow the transportation costs from the point of valuation to the point of sale to be deducted. This is called *netback formula*.

**Operating Profit (or Loss)**

The difference between business revenues and the associated costs and expenses exclusive of interest or other financing expenses, and extraordinary items, or ancillary activities. Synonymous with net operating profit (or loss), operating income (or loss), and net operating income (or loss).

**Production Sharing Agreement**

This (PSA) is the same as a Production Sharing Contract (PSC). While at one time this term was quite common, it is use less frequently now, and the term *Production Sharing Contract* is becoming more common.

**Production Sharing Contract**

A contractual agreement between a contractor and a host government whereby the contractor bears all exploration costs and risks and development and production costs in return for a stipulated share of the production resulting from this effort.

**Progressive Taxation**

Where tax rates increase as the basis to which the applied tax increases. Or where tax rates decrease as the basis decreases. The opposite of regressive taxation.

**Severance Tax**

A tax on the removal of minerals or petroleum from the ground, usually levied as a percentage of the gross value of the minerals removed. The tax can also be levied on the basis of so many cents per barrel or per million cubic feet of gas.

**Tax**

A compulsory payment pursuant to the authority of a government. Fines, penalties, interest, and customs duties are not taxes.

**Working Interest**

The percentage of interest ownership a company (or government) has in joint venture, partnership, or consortium. The expense-bearing interest of various working-interest owners during exploration, development, and production operations may change at certain stages of a contract or license. For example, a partner with a 20% working interest in a concession may be required to pay 30% of exploration costs but only a 20% share of development costs. With government participation, the host government usually pays no exploration expenses by pays prorated development and operating costs and expenses.

# FISCAL NOTE

**STATE OF ALASKA**  
**2006 LEGISLATIVE SESSION**

Fiscal Note Number: \_\_\_\_\_  
Bill Version: CS for HB 488(RES)  
( ) Publish Date: \_\_\_\_\_

Revision Date/Time (Note if correction): \_\_\_\_\_ Dept. Affected: Revenue  
Title: An Act Relating to the Production Tax on RDU: Tax and Treasury  
Oil and Gas Component: Tax  
Sponsor: Rules Committee Component No. 2476  
Requester: Governor

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

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Personal Services	359.2	366.4	373.7	371.2	388.8	396.6
Travel						
Contractual	400.0	370.0				
Supplies	24.0					
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous [OH office, etc]	18.0	18.0	18.0	18.0	18.0	18.0
<b>TOTAL OPERATING</b>	<b>801.2</b>	<b>754.4</b>	<b>391.7</b>	<b>399.2</b>	<b>406.8</b>	<b>414.6</b>

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

<b>CHANGE IN REVENUES ( )</b>	<i>See analysis section</i>					
-------------------------------	-----------------------------	--	--	--	--	--

**FUNC SOURCE** (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF	801.2	754.4	391.7	399.2	406.8	414.5
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type—Do not abbreviate)						
<b>TOTAL</b>	<b>801.2</b>	<b>754.4</b>	<b>391.7</b>	<b>399.2</b>	<b>406.8</b>	<b>414.6</b>

Estimate of any current year (FY2006) cost: 275.0

Check this box (X) if funding for this bill is included in the Governor's FY 2007 budget proposal:

**POSITIONS**

Full-time	4	4	4	4	4	4
Part-time						
Temporary						

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

Relative to Status Quo

This bill would amend the oil and gas production tax by basing the tax on the net value of the oil and gas. The net value is the wellhead value (net of royalty) less all qualified lease expenditures, including capital and operating costs, property taxes. The net income would be subject to a 20% tax, less a credit of 20% which applies to capital costs upstream of the point of production. There would also be a progressive surcharge based on .3% of the difference between actual West Texas Intermediate (WTI) oil price and \$50 applied to the gross value at the point of production. There would be no surcharge when the WTI price was under \$50. The surcharge would also be considered a deductible lease expenditure. There would be an additional annual credit per company of up to the lesser of actual net income or \$12 million per year. In addition, as a transition provision, there would be a deduction for capital costs incurred over the 3 month period January through March 2006, which can be realized over the 9 month period April

Prepared by: Robynn Wilson, Michael Williams, and Roger Marks  
Division: Tax Division

Phone 269-1019  
Date/Time 3/24/06 2:00 PM

Approved by: Jerry Burnett  
Agency: Department of Revenue

Date 3/25/2006

## FISCAL NOTE

STATE OF ALASKA  
2006 LEGISLATIVE SESSION

BILL NO. CS for HB 488 (RES)

### ANALYSIS CONTINUATION

through December 2006. It is estimated this would reduce revenues about \$50 million total over that 9 month period. Finally, the conservation surcharge on oil is decreased from 2 cents/bbl to 1 cent/bbl, while the additional conservation surcharge on oil is increased from 3 cents to 4 cents. The net impact of this, assuming that the oil and hazardous substance release prevention account is at capacity, would be a 1 cent/bbl increase in revenues.

The bill would be effective April 1, 2006.

#### Relative to Governor's Bill

The Governor's bill had no progressive surcharge. There was an deductible allowance of up to \$73 million of net income per company per year. There was a transition provision where all qualified capital expenditures incurred between July 1, 2001 through July 1, 2006 would be deductible over six years. The 3 cent additional conservation surcharge on oil would have been a credit against the oil tax.

The bill would have been effective July 1, 2006.

The figures in the table below reflect the revenues that would be received from the bill relative to the status quo under various prices. Columns 1-3 reflect the original fiscal note for the bill. Columns 4-5 reflect adjustments to the original fiscal note to reflect net adjustments in state corporate income tax from changes in the severance tax, the recognition of the credit for the additional conservation surcharge on oil, the re-assessment of the number of full allowances from 7 company equivalents to nine, and minor model changes. Columns 6-8 reflect changes from converting from the Fall 2005 Department of Revenue Source Book data to Spring 2006. The volumes for the last quarter have been adjusted to reflect short-term adjustments resulting from the North Slope oil spill in March. Finally, Columns 9-11 reflect the House Resources CS. The figures reflect North Slope activity; the impact on Cook Inlet is expected to be modest. The status quo assumes the January 2005 E.F. aggregation decision by the Department of Revenue for Prudhoe Bay continues.

The cost assumptions are as follows:

- \$100 mm/yr exploration
- \$1/bbl on-going capital on all barrels
- \$3.50/bbl developmental capital on 2/3 of existing conventional oil
- \$8/bbl developmental capital on 2/3 of existing heavy oil
- \$3.50/bbl developmental capital on new conventional oil
- \$8/bbl developmental capital on new heavy oil
- \$3/bbl operating cost on conventional oil
- \$5/bbl operating cost on heavy oil

The table shows the 2006-2012 receipts from the bill, sensitive to different oil prices. These include the Department of Revenue forecast, a \$40 price, and a \$60 price. (Note that the status quo numbers are slightly different from what is reflected in the Spring 2006 Revenue Sources Book because of volume adjustments from the oil spill, and because of some differences between what some taxpayers actually remit and what is ultimately expected to be collected.)

Operating expenditures include costs for 3 additional positions for auditors: 1 O & G Specialist (Range 23), 1 O & G Revenue Auditor IV (Range 22), and 1 O & G Revenue Auditor III (Range 20). These positions would be used to fulfill additional audit responsibilities inherent in a net profits tax. In addition, we request 1 additional position for a Tax Technician (Range 14) to process additional information and tax returns that will be required, and additional credit applications anticipated. Personal Services reflect a 2% yearly increase.

Contractual expenses include \$100,000 and \$70,000 for programming in FY 07 and FY 08, respectively, and \$300,000 in each of FY 07 and FY 08 for help in writing regulations. Supplies include computers and other supplies necessary for new positions.

See Page 3 for revenue estimates

**ANALYSIS CONTINUATION (MILLIONS OF 2005 DOLLARS)**

GOVERNOR'S BILL  
ORIGINAL FISCAL NOTE

GOVERNOR'S BILL  
WITH CORPORATE INCOME TAX,  
CONSERVATION SURCHARGE  
NINE COMPANY ALLOWANCES  
MINOR MODEL CHANGES

Fiscal Year	DOR Forecast	Col. 1 Status Quo Tax	Col. 2 Tax from Bill	Col. 3 Gain from Bill	Col. 4 Tax from Bill	Col. 5 Gain from Bill
2006	na	na	na	na	na	na
2007	\$49.20	934	1,363	429	1,317	383
2008	\$40.95	697	915	217	876	179
2009	\$25.50	404	349	-55	320	-84
2010	\$25.50	387	339	-48	310	-77
2011	\$25.50	362	351	-11	319	-43
2012	\$25.50	343	332	-10	300	-42

Fiscal Year	Medium Price	Status Quo Tax	Tax from Bill	Gain from Bill	Tax from Bill	Gain from Bill
2006	na	na	na	na	na	na
2007	\$40.00	737	1,038	301	997	260
2008	\$40.00	679	1,031	353	988	309
2009	\$40.00	673	1,118	445	1,070	397
2010	\$40.00	646	1,106	460	1,058	411
2011	\$40.00	606	1,138	532	1,086	480
2012	\$40.00	576	1,112	536	1,059	483

Fiscal Year	High Price	Status Quo Tax	Tax from Bill	Gain from Bill	Tax from Bill	Gain from Bill
2006	na	na	na	na	na	na
2007	\$60.00	1,165	1,938	773	1,879	714
2008	\$60.00	1,069	1,917	848	1,855	786
2009	\$60.00	1,042	2,007	965	1,939	897
2010	\$60.00	1,003	1,992	989	1,923	921
2011	\$60.00	941	2,051	1,110	1,977	1,036
2012	\$60.00	896	2,014	1,117	1,939	1,043

FISCAL NOTE

STATE OF ALASKA  
2006 LEGISLATIVE SESSION

BILL NO. CS for HB 488 (RES)

ANALYSIS CONTINUATION (MILLIONS OF 2005 DOLLARS)

GOVERNOR'S BILL  
CHANGES FROM FALL 2005 FORECAST  
TO SPRING 2006 FORECAST

Fiscal Year	DOR Forecast	Col. 6 Status Quo Tax	Col. 7 Tax from Bill	Col. 8 Gain from Bill	Col. 9 Status Quo Tax	Col. 10 Tax from Bill	Col. 11 Gain from Bill
2006	na	na	na	na	262	517	255
2007	\$53.60	989	1,514	526	989	1,825	836
2008	\$46.90	759	1,136	377	759	1,318	558
2009	\$25.50	355	302	-52	355	323	-32
2010	\$25.50	315	283	-32	315	304	-11
2011	\$25.50	281	291	10	281	312	31
2012	\$25.50	271	291	20	271	312	41

Fiscal Year	Medium Price	Status Quo Tax	Tax from Bill	Gain from Bill	Status Quo Tax	Tax from Bill	Gain from Bill
2006	na	na	na	na	174	227	53
2007	\$40.00	708	978	270	708	967	259
2008	\$40.00	655	953	298	655	974	319
2009	\$40.00	631	1,021	390	631	1,042	411
2010	\$40.00	582	990	408	582	1,011	429
2011	\$40.00	544	1,012	468	544	1,033	489
2012	\$40.00	536	1,021	485	536	1,042	506

Fiscal Year	High Price	Status Quo Tax	Tax from Bill	Gain from Bill	Status Quo Tax	Tax from Bill	Gain from Bill
2006	na	na	na	na	275	572	297
2007	\$60.00	1,120	1,840	720	1,120	2,380	1,260
2008	\$60.00	1,032	1,786	754	1,032	2,350	1,318
2009	\$60.00	978	1,848	871	978	2,421	1,443
2010	\$60.00	901	1,800	899	901	2,366	1,465
2011	\$60.00	842	1,841	999	842	2,414	1,572
2012	\$60.00	831	1,861	1,029	831	2,438	1,606

INCLUDES VOLUMES, PRICE, TAPS, MARINE, UPSTREAM, WELLS

SPRING 2006 VOLUMES FOR THE LAST QUARTER OF FY 2006 HAVE BEEN REDUCED TO REFLECT SHORT TERM ADJUSTMENTS FROM THE NORTH SLOPE OIL SPILL

# **PETROLEUM PRODUCTION TAX**

**Presentations to the Senate  
Resources Committee and to  
the House Resources  
Committee**

**February 23, 2006**

# FISCAL SYSTEM OF ALASKA

The fiscal system applicable to oil and gas of Alaska consists primarily of four components:

- Royalties
- Production tax (severance tax, "ELF")
- Property tax
- State corporate income tax

Additionally, there is federal corporate income tax.

This presentation is about the international competitive aspects of the proposed petroleum production tax.

In international comparisons always the entire State and Federal package together is compared.

# PETROLEUM PRODUCTION TAX

The most recent proposal for the petroleum production tax is as follows:

Tax rate: 20%

Tax credit rate: 20%

Tax free allowance: Up to \$ 73 million

Capex clawback: 20% of capex over last 5 years

# PETROLEUM PRODUCTION TAX

The presentation is primarily aimed at the discussion of my PPT report. The preparation of the report started in July 2005 and continued until February 14<sup>th</sup> this month.

Until early January 2006, I recommended a system with a 20% tax and 15% tax credit based on the international competitiveness analysis.

As a result of the economic analysis done in DOR in January 2006, and input from various other consultants, I amended my recommendation to a 25% tax rate and 20% tax credit rate.

Therefore, the report contains chapters about 20/15 and 25/20. Sensitivity analysis was done on other combinations.

The 20/20 concept and the capex clawback were adopted after the finalization of this report. However, from an international perspective of competitiveness, all these options are rather close and therefore the general conclusions of the report remain valid for the 20/20 concept as well.

# PETROLEUM PRODUCTION TAX

The report contains the following chapters:

## Executive Summary

1. Introduction
2. New international trends in government take
3. Economic analysis
4. Analysis of the 20/15 PPT
5. Analysis of alternative PPT's
6. International competitiveness of the 20/15 PPT
7. International rating of the 20/15 PPT
8. Competitiveness and PPT rate
9. International rating of the 25/20 PPT
10. Heavy Oil Incentives
11. Review of 25/20 PPT

# PETROLEUM PRODUCTION TAX

COST SCENARIOS			FIELD#1	FIELD#2	FIELD#3	FIELD#4	FIELD#5	FIELD#6	
Per barrel costs			DRY HOLE	50MM-LOW	150MM-LOW	500MM-LOW	50MM-HIGH	150MM-HIGH	500MM-HIGH
TOTAL OIL PRODUCTION	(MMbbls)		0.0	50.0	150.0	500.0	50.0	150.0	500.0
<b>HIGH COSTS:</b>									
TOTAL CAPEX	Exploration (m\$)		45	45	45	45	45	45	45
	Development (\$/bbl)			7.50	6.00	5.25	6.00	4.50	3.00
TOTAL OPEX	(\$/bbl)			6.00	5.00	3.75	4.50	3.75	3.00
<b>AVERAGE COSTS:</b>									
TOTAL CAPEX	Exploration (m\$)		37.5	37.5	37.5	37.5	37.5	37.5	37.5
	Development (\$/bbl)			6.25	5.00	4.37	4.80	3.75	2.50
TOTAL OPEX	(\$/bbl)			5.00	4.17	3.12	3.75	2.92	2.50
<b>LOW COSTS:</b>									
TOTAL CAPEX	Exploration (m\$)		30	30	30	30	30	30	30
	Development (\$/bbl)			5.00	4.00	3.50	4.00	3.00	2.00
TOTAL OPEX	(\$/bbl)			4.00	3.33	2.50	3.00	2.33	2.00

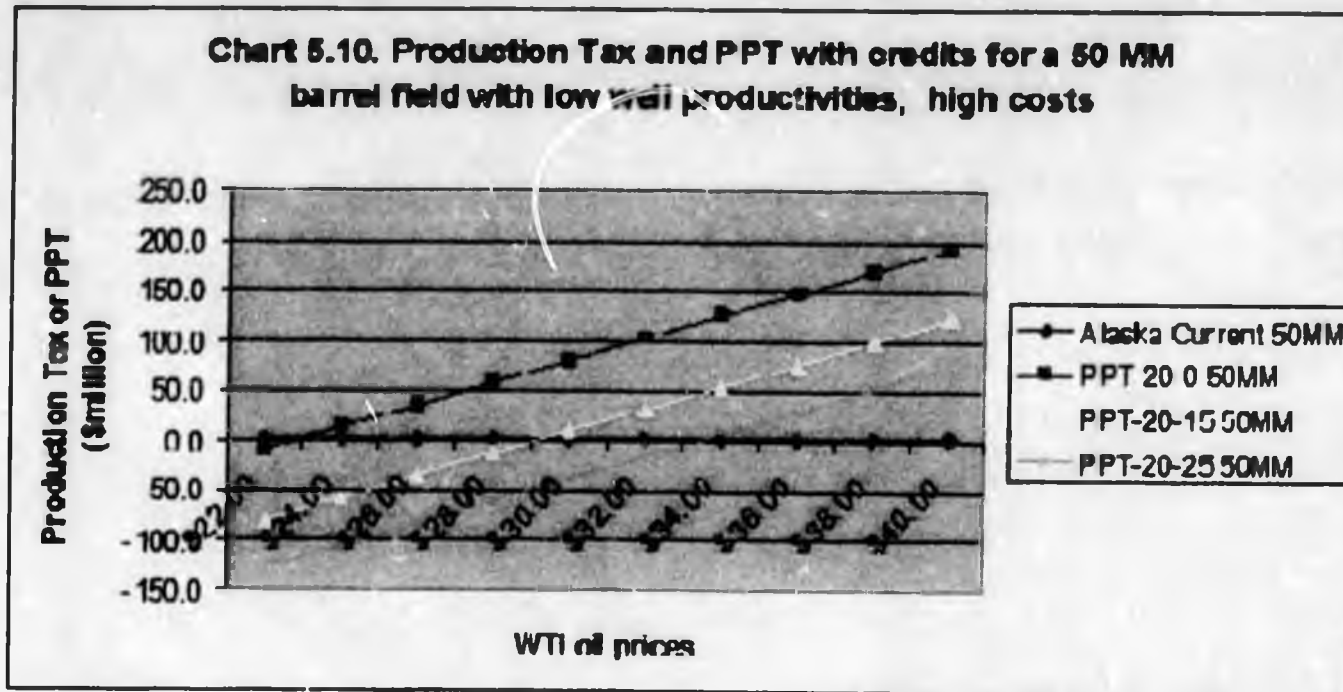
The main focus of the economic work was on high cost fields of 50 million and 150 million barrels, since these field types represent North Slope conditions.

# PETROLEUM PRODUCTION TAX

20/20 PPT \$ 40 CASE	HIGH COSTS	DRY HOLE	50 MM	150 MM	500 MM
ROYALTIES		0.0	264.4	820.6	2827.5
PPT		-18.7	-110.1	180.6	1730.3
PROPERTY TAXES		0.0	28.3	86.3	292.3
STATE CIT		-2.6	100.6	318.1	1131.2
FEDERAL CIT		-8.9	340.3	1075.8	3825.5
ALASKA GOVERNMENT TAKE		45.6%	22.6%	31.4%	35.4%
FEDERAL GOVERNMENT TAKE		19.1%	27.2%	24.1%	22.7%
TOTAL		64.7%	49.8%	55.5%	58.1%

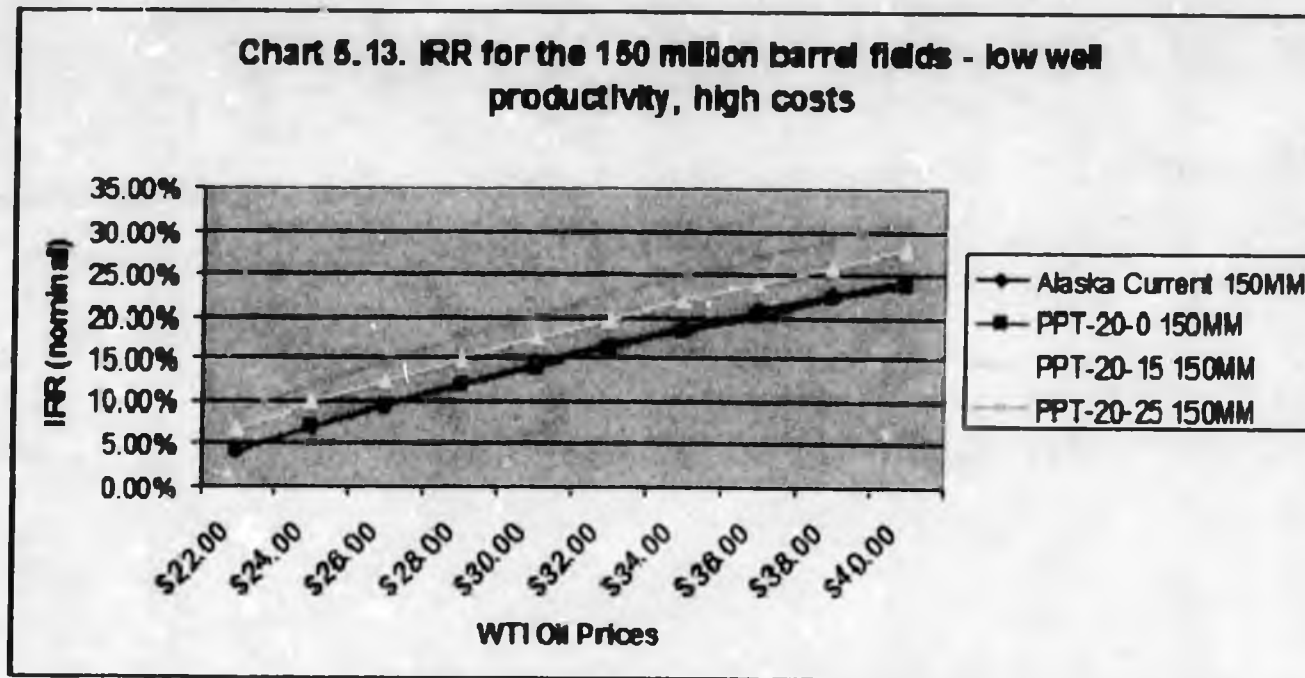
The 20/20 PPT provides for a progressive system for new investors, with a negative PPT on small fields to encourage investment.

# PETROLEUM PRODUCTION TAX



For small fields, the tax credits have a considerable impact on the break even point. Graph illustrates PPT for large producers

# PETROLEUM PRODUCTION TAX



The level of tax credit is the main determinant of the rate of return. The higher the tax credits the higher the rate of return.

# PPT AND COMPETITION

The competitive position of the Alaska system was analyzed using the same field sizes and applying international terms. Eight fiscal systems were analyzed. They all reflect areas in the world where currently considerable investment is taking place:

- Norway
- UK
- US Gulf Coast
- Alberta Oil Sands
- Nigeria
- Angola
- Russia-Sakhalin
- Azerbaijan

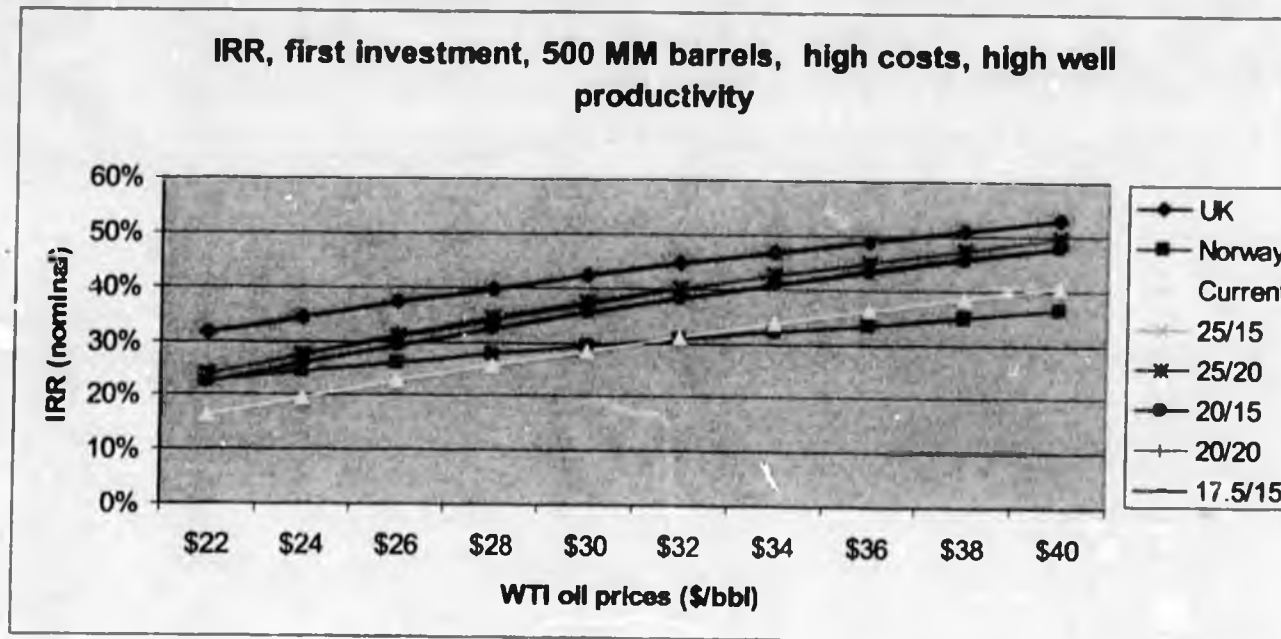
# PETROLEUM PRODUCTION TAX

Jurisdiction	Net differential	back
	(\$ per barrel)	
Alaska-North Slope	\$ 7	
Norway	\$ 1	
UK	\$ 1	
US Gulf of Mexico - Deep water	0	
Nigeria - Deep Water	\$ 2	
Alberta - oil sands	\$ 2	
Angola	\$ 2	
Russia-Sakhalin	\$ 1	
Azerbaijan	\$ 6	

The international comparison was corrected for the low net back of Alaska crude oil.

# PPT AND COMPETITION

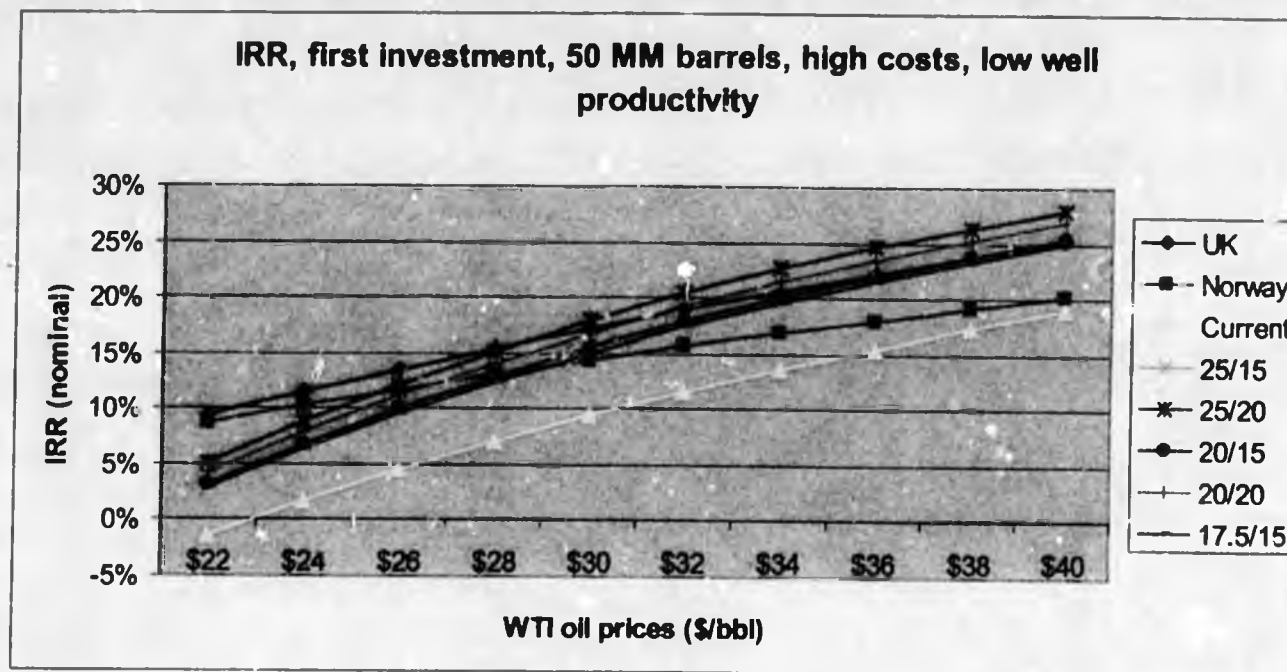
First Investment in 500 MM barrel field



The PPT creates a very material improvement in IRR relative to Norway and UK, for a first investment in a large field.

# PPT AND COMPETITION

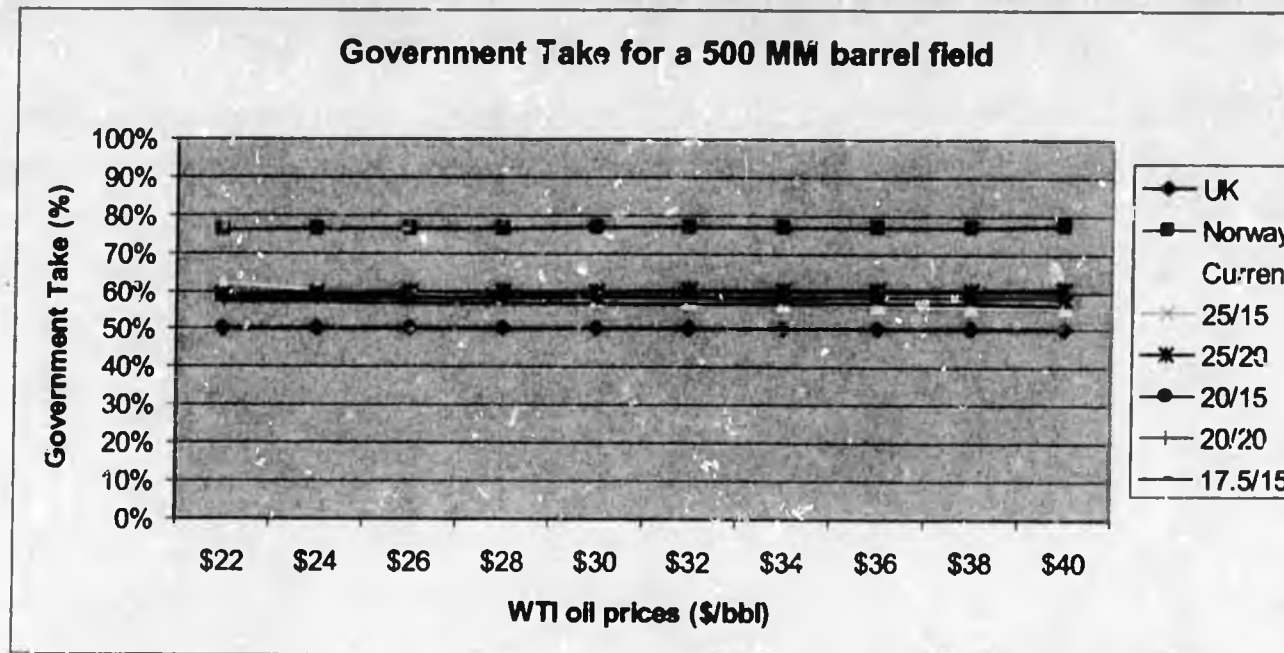
First Investment in 50 MM barrel field



The PPT creates a very significant improvement in IRR relative to Norway and UK, for a first investment in a small field.

# PPT AND COMPETITION

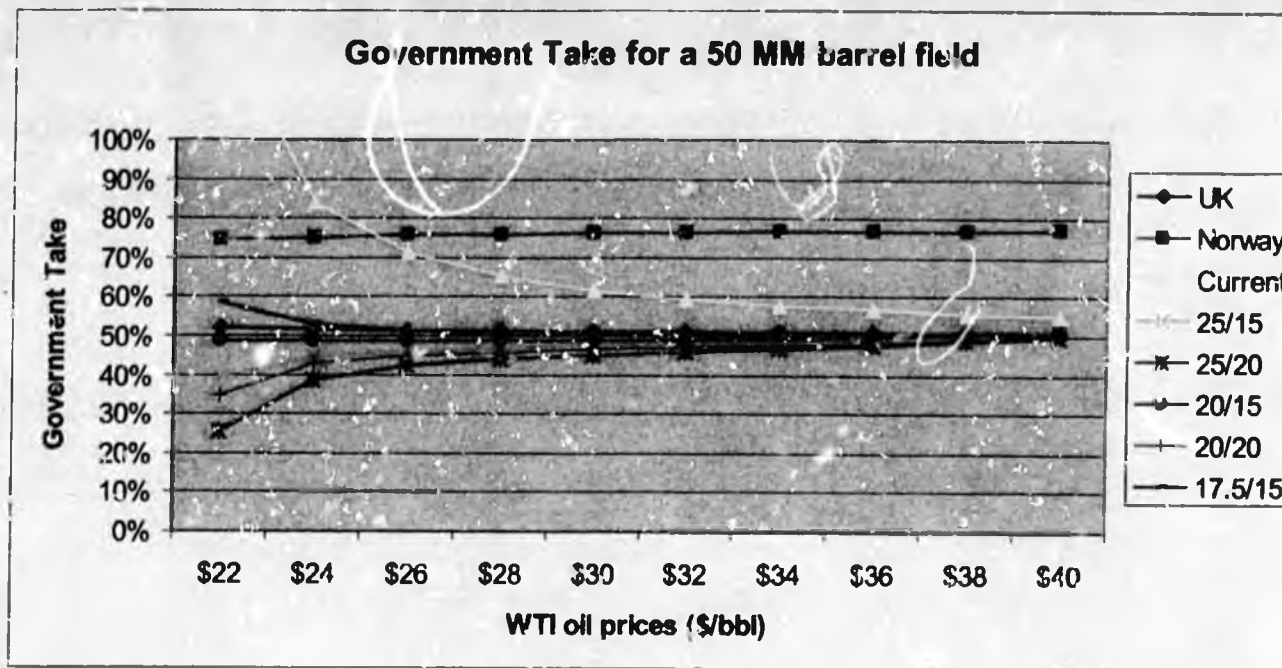
First Investment in 500 MM barrel field



The PPT provides for a modest total government take for each of the five options, in order to compensate for the low net back prices and high costs.

# PPT AND COMPETITION

## First Investment in 50 MM barrel field



For first investors or small producers there is a reduction of government take compared to the Current System. The regressive nature of the government take is removed for each of the five options.

# PPT and competition

A competitiveness index was prepared by evaluating 48 economic yardsticks for 10 fiscal terms.

If a fiscal system was the best in all of them the rating was 48. If the system was the worst in all of them the rating was 480

# PPT and competition

## RATING 20/15

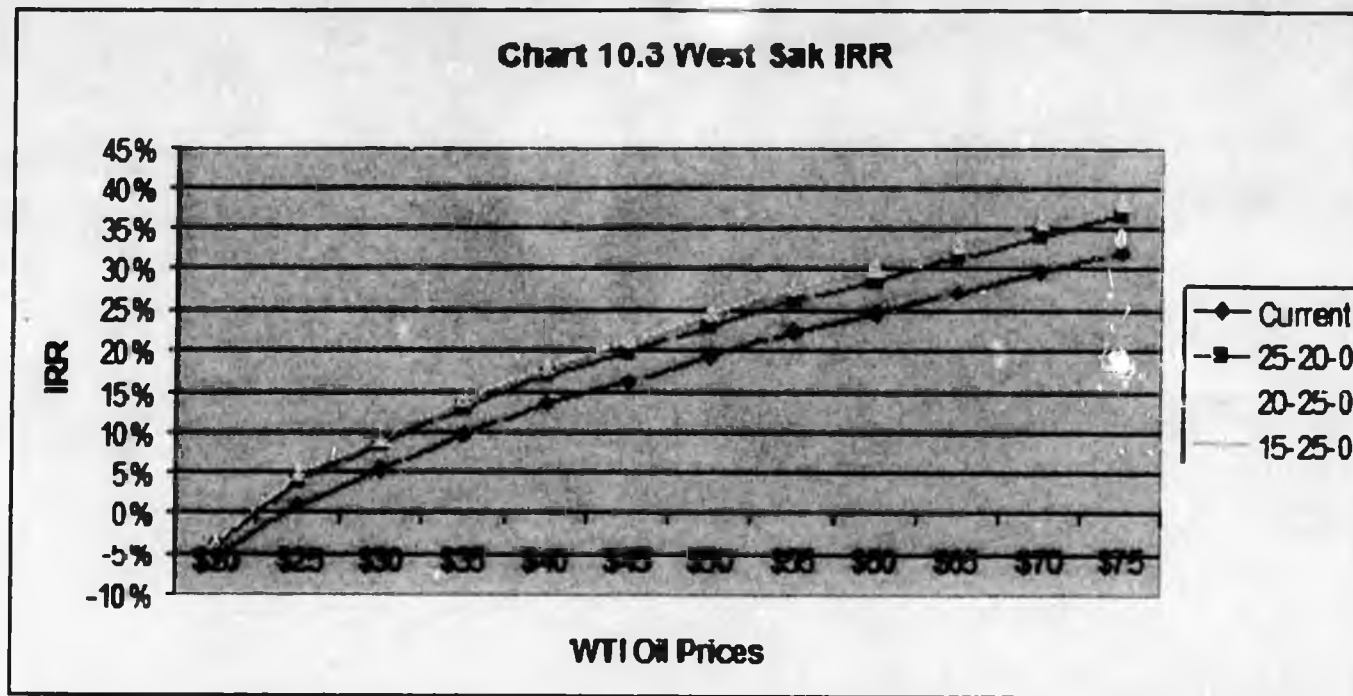
<b>US GOM</b>	<b>52</b>
<b>UK</b>	<b>135</b>
<b>Alberta-Oil Sands</b>	<b>157</b>
<b>Nigeria</b>	<b>172</b>
<b>Alaska PPT</b>	<b>272</b>
<b>Angola</b>	<b>318</b>
<b>Azerbaijan</b>	<b>329</b>
<b>Alaska Current</b>	<b>364</b>
<b>Norway</b>	<b>397</b>
<b>Russia-Sakhalin</b>	<b>444</b>

## RATING 25/20

<b>US GOM</b>	<b>54</b>
<b>UK</b>	<b>139</b>
<b>Alberta-Oil Sands</b>	<b>163</b>
<b>Nigeria</b>	<b>179</b>
<b>Alaska PPT</b>	<b>244</b>
<b>Angola</b>	<b>322</b>
<b>Azerbaijan</b>	<b>329</b>
<b>Alaska Current</b>	<b>363</b>
<b>Norway</b>	<b>402</b>
<b>Russia-Sakhalin</b>	<b>445</b>

The rating of 25/20 was better than 20/15, because tax credits are very important in international rating. The system 20/20 would rate somewhat more attractive to investors than 25/20, but not significantly more

# PPT AND HEAVY OIL



The tax credit system will strongly enhance the rate of return on heavy oil projects, because the higher capital requirements will automatically result in more credits. The graph, however, also shows that it is not necessary to have very high credits of 25%.

# Conclusion

The 20/20 proposal results in very competitive terms from an international perspective for new investors as well as for existing petroleum companies.

The system will therefore result in more investment in Alaska, while at the same time creating much higher revenues, primarily from existing production and under average and high prices also from new production.

# Petroleum Profits Tax (PPT)

## Overview

Alaska Department of Revenue  
Before the Alaska State Legislature

Robynn J. Wilson

# Problems with Current Production Tax

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- No incentive in tax system to reinvest in Alaska
- Low take (internationally) at high prices, high take at low prices
- Maturing of North Slope leads to declines in tax revenue

# Components of PPT

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- Tax Base
- Rate
- Incentive Credits
- Base Allowance
- Transition Provision

# Gross vs. Net

## Current Tax on Gross

Value at wellhead      \$50.00

Times: tax rate            15%

Tax before ELF            \$7.50

## PPT on Net

Value at wellhead      \$50.00

Less:

Lease op exps            (12.50)

Net taxable                \$37.50

Times: tax rate            20%

Tax before  
credits                      \$7.50

# Tax Base

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Gross value at point of production

Less: Lease expenditures

- ♦ operating costs
- ♦ capital expenditures
- ♦ allowance for overhead

# Non-deductible expenses

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- Depreciation
- Royalty payments
- Taxes based on net income
- Interest & financing charges
- Lease acquisition costs
- Other costs

# Determining value under current system

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West coast value

\$



# Gross Value under PPT

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Producer can elect to use:

- Royalty value
- DOR formula that estimates a value at a specific location such as point of delivery into a common carrier pipeline

Tax Rate 20%

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of **Net** Profits

# Incentive Credits

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- **20%** of qualified capital expenditures
  
- May be taken on:
  - ♦ Exploration costs
  - ♦ Capital costs **incurred on lease**
  
- Credits are transferable

# How are losses handled?

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Gross value	\$50.00
less:	
Lease op exps	(12.50)
Capital exp's	<u>(60.00)</u>
Net loss (NOL)	(\$22.50)

# Net Operating Losses (NOL's)

- Can be converted to Credits
- 20% of loss

# Base Allowance

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- \$73 million deduction
- Available to each corporation
- Cannot reduce taxable income below zero

# Other provisions

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- Monthly return filing
- 90% payment safe harbor
- Yearly true-up on 3/31
- Effective date 7/1/06

# Transition Provision

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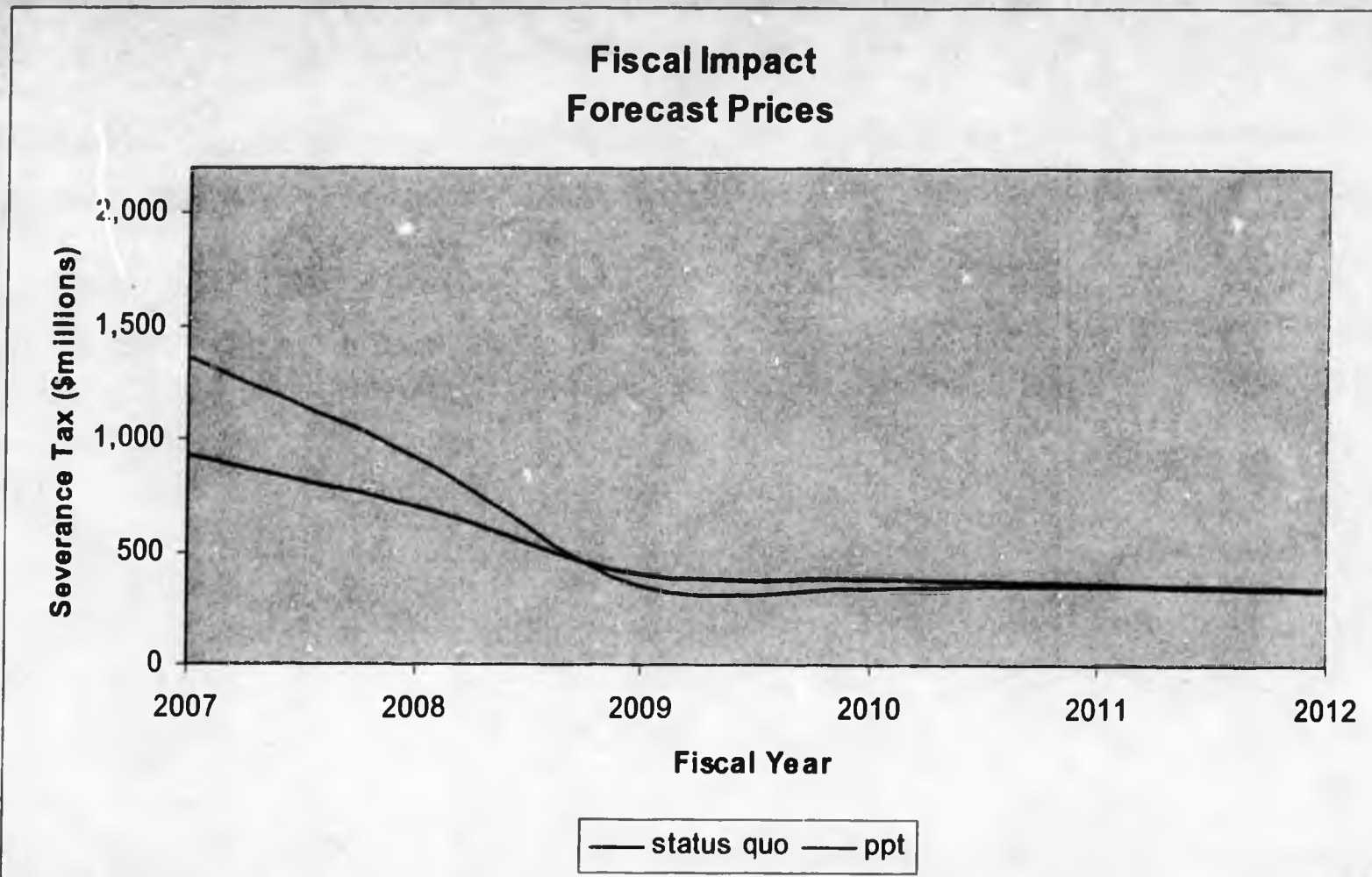
- Allows cost recovery of assets placed in service 7/01—6/06
- Deduction of  $1/6$  of cost in each of 6 transition years
- Deduction available only when average price of oil exceeds \$40

# Revenue

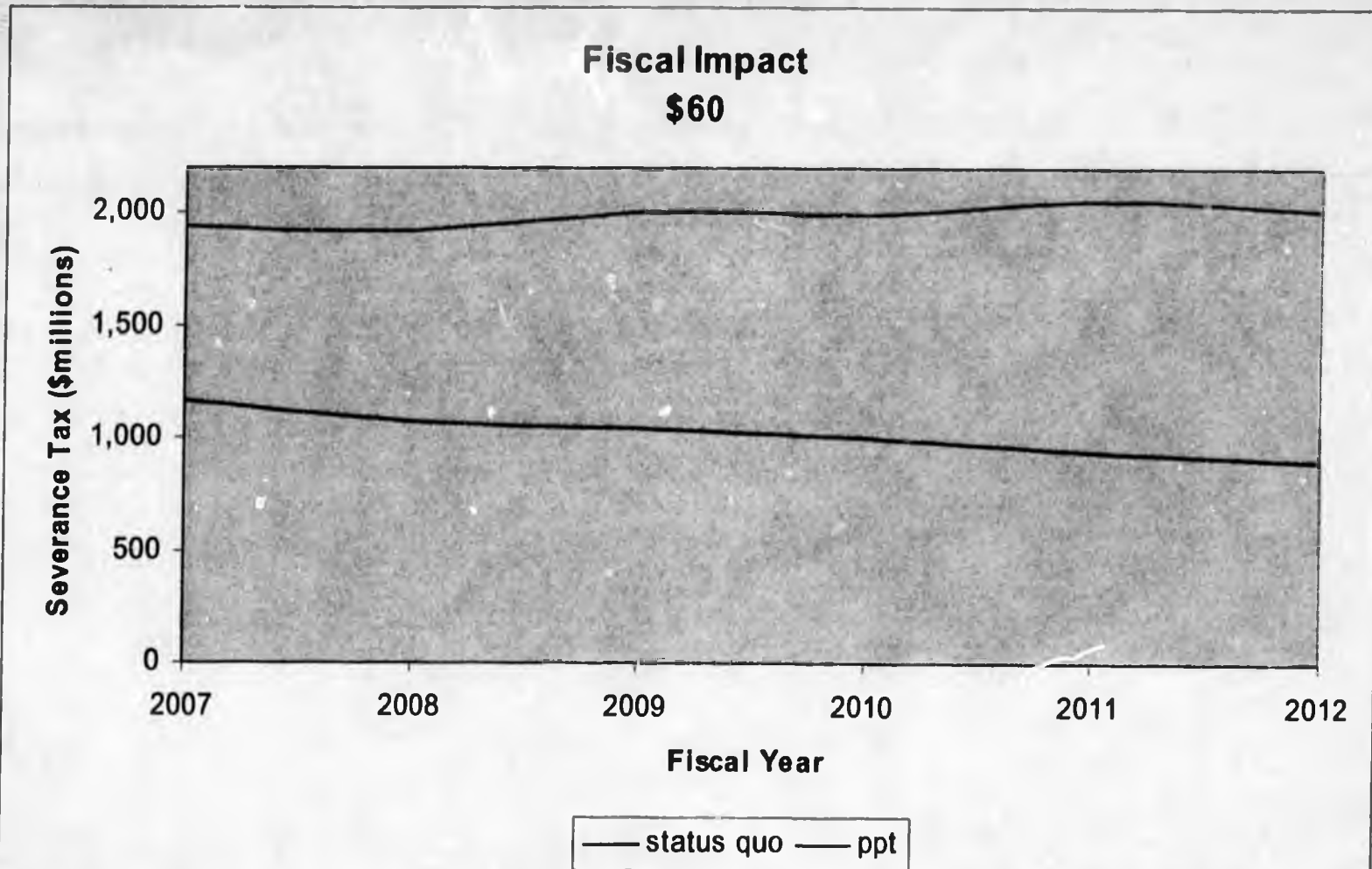
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- Additional revenue from PPT will depend primarily on two factors:
  - Price of oil/gas
  - Producer investment in the state

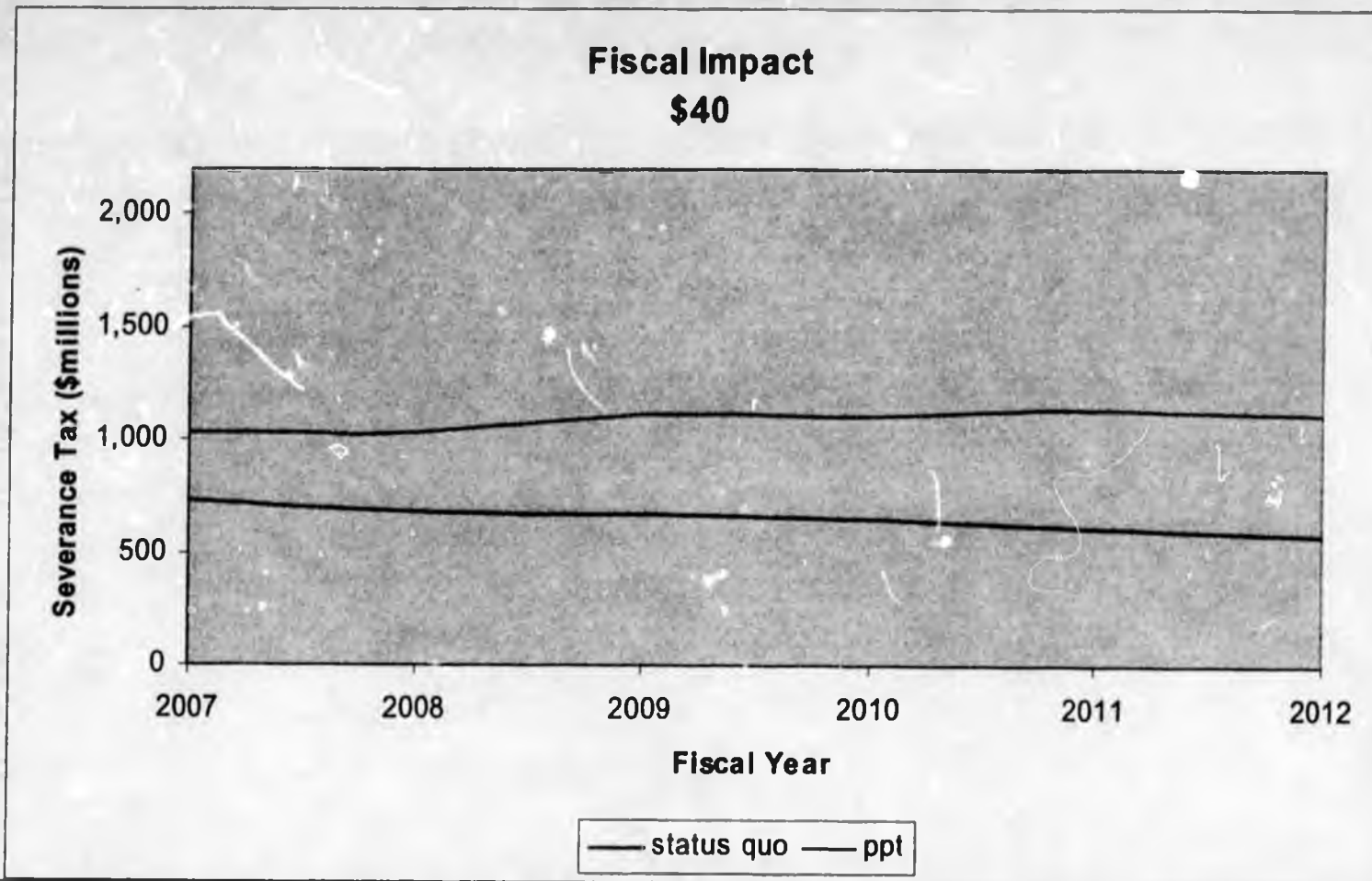
# Incremental Revenue based on DOR Forecast:



# Incremental Revenue based on \$60 oil



# Incremental Revenue based on \$40 oil:



# PPT: A Tax for Alaska's Future

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**BP Presentation on Proposed PPT**  
Alaska State Legislature  
House & Senate Resource Committees  
28th February 2006

**Introduction – Ken Konrad**

My name is Ken Konrad. I am Vice President, Gas for BP Alaska. We are here today to talk to you about the proposed PPT legislation – HB488 / SB305. I will make a few opening comments and then turn things over to Angus Walker and our PPT team.

Agenda



- How we got here
- Current realities of the Alaska North Slope
- Global perspective
- Impact of PPT on BP Alaska

*Ken Konrad* – Gas Vice President BP Alaska  
*Angus Walker* – Commercial Vice President BP Alaska  
*Ray Hall* – Senior Tax Economist BP Group  
*Tom Williams* – Alaska Tax Counsel BP Alaska

2

**How we got here**

Last week, after more than two years of negotiations, and a lot of hard work on all sides, we reached a very finely balanced agreement with the administration on a predictable and durable Fiscal Contract with Alaska. The Fiscal Contract will establish clear rules governing payments-in-lieu of taxes we would make to the State, including a PPT payment incorporated by reference from this legislation. Once ratified, the Fiscal Contract will enable a gas pipeline to advance in partnership with the State as an equity participant.

1

Much of what is contained in the PPT legislation was born in part out of the Fiscal Contract negotiations we've been in with the administration. I thought it would be useful to share an overview as to how and why we arrived at this point given that many of the discussions to date have been confidential as stipulated in the SGDA.

**Mother Nature - oil and gas are unavoidably linked**

Oil and gas form together when plants (and dinosaurs) are buried deep beneath the Earth's surface and, under great heat and pressure, are transformed into oil and gas.

The oil and gas co-exist in the same underground reservoirs, they are produced together through the same wells, flow together through the same flowlines and are processed together in the same facilities. Some fields have more oil than gas and some fields have more gas than oil or condensate. But it is exceedingly rare that one is produced without the other.

Because oil and gas co-exist physically, and are produced together through the same investments made in wells and facilities, they are also linked economically.

This inextricable physical and economic linkage is widely recognized by both governments and investors around the world.

North American royalty contracts cover both oil and gas. Internationally, production sharing contracts include terms for both oil and gas. General oil and gas tax laws across the U.S. and internationally always address both oil and gas.

Governments want to know how much money they will receive from oil and gas production. Similarly, investors need to know how much they will pay governments when oil and gas is produced and sold and make their investment decisions accordingly.

The economic linkage of oil and gas is particularly acute here in Alaska when considering a gas pipeline given the unique operating challenges on the North Slope and the criticality of economies of scale.

**Oil Decline - additional oil investment needed to support ANS gas development**

We, the producers and the State, currently have a problem. ANS oil production has been declining for over 15 years and *has been on an unsustainable trajectory*. Investment by all of industry has been insufficient to limit decline.

Unless we, and here I mean the entire industry in partnership with the State, are able to maintain economic levels of oil production to support and maintain vital North Slope infrastructure for many decades to come, a gas project can't be successful – it simply cannot be burdened with the cost of uneconomic oil production.

Investors need confidence that the fiscal regime will be sufficiently competitive to attract the enormous amounts of additional capital needed to maintain economic levels of ANS oil production for decades. Providing this confidence benefits both the State and investors against our common enemy – *production decline*.

Building a gas pipeline is effectively a commitment by the major producers to maintain vital North Slope infrastructure for another 40-50 years – This is a daunting challenge.

- Will there be enough investment to stem the long term decline in ANS production?
- Will there be sufficient oil production to keep the unit costs of operating TAPS at an economically viable level?
- Will there be sufficient oil production to cover the operating and maintenance investment costs of operating aging production facilities?

The answer can be yes. We know the oil is up there. Billions of barrels of oil that might otherwise be left behind in producing fields can be accessed. Viscous oil in and around existing infrastructure that was discovered decades ago holds promise. Exploration near existing fields and beyond in areas like NPRA may have potential.

But it is all very difficult. ANS production is declining for a reason – not for lack of oil, but for a lack of profitable ways to extract it. The totality of industry costs and taxes are high. But, we do believe with the right technology and the right fiscal regime, these historically unprofitable investments can be made viable so industry can convert resources into production to sustain ANS infrastructure.

This is why oil taxation policy should *appropriately balance risks and rewards* to enable this additional investment. Even prior to this proposed tax increase, investment has been insufficient to prevent ongoing production decline. The legislature needs to very carefully consider the impacts of a very large tax increase on future investment and long term production.

This is an important decision. And it should not and cannot be a shortsighted decision based on next year's budget or political calculus – this is our collective future.

Are we feeding or starving the golden goose? Will North Slope investment increase or decrease as a result of significantly higher taxes? Will the long term decline in oil production increase or decrease as a result?

What are the knock-on revenue effects on royalty, State Corporate Income Tax, and AVT taxes if investment is impacted? Is a high tax rate at modest prices appropriate?

### **The evolution of PPT and the Fiscal Contract negotiations**

There has been a lot of speculation and innuendo about positions taken by both sides through the negotiation on the PPT. Unfortunately, this appears to be driving perceptions about what the tax rate should be rather than what is right for Alaska and what is right for industry.

I'd like to briefly give you an overview of how the PPT negotiation unfolded to hopefully clear the air and help us focus directly on the real issues at hand.

Since the onset of the fiscal contract negotiations, and indeed years before, BP has sought to make clear the importance of having a competitive and durable fiscal platform for both oil and

gas to underpin a massive gas investment. Including both in the Fiscal Contract is important for two fundamental reasons among others.

First, it provides confidence that the level of taxation will be competitive to enable the additional investments needed to mitigate the ongoing decline in ANS oil production so vital infrastructure can be maintained for another 40-50 years.

Second, it protects us from after the fact tax increases on our business after a gas pipeline has been built and we have no choice but to pay and produce regardless. This is what happened as TAPs entered service some 30 years ago.

In summary, both a competitive and durable oil tax regime are essential and should align well with State goals.

In the summer of 2005, the administration advised us that although they respected the importance to investors of having competitive and durable rules for both oil and gas in the Fiscal Contract, they did not see the ELF regime as properly suited as a long term solution. The concern being the tax base underpinning ELF was declining with time.

The concept of a PPT type structure was proposed by the administration to fix the so called ELF problem. We responded to the administration that if populated with balanced numbers, the PPT could be a viable long term structure with potentially positive attributes for both the State and industry.

In this regard we agreed to move off our preferred position which was to simply utilize the existing ELF based system for the duration of the fiscal contract and consider the PPT structure.

At that time, the mutually agreed goals of both sides for the PPT included:

1. all barrels should be subject to taxation
2. provide the State a balanced and proportionate share of the price / profit upside
3. stimulate additional investment critical to reduce long term production decline

Proposals were discussed intermittently through yearend and it was clear that there was a significant difference of opinion as to what numbers would create a balanced PPT that met these goals.

During that time, the State initially proposed and held to a 20% tax rate. The Sponsor Group had proposed a tax rate of 12.5% which we estimated would have increased State revenues by hundreds of millions of dollars per year at current prices and tens of billions of dollars over the long term relative to ELF. It would also have, we believe, stimulated more investment, more jobs and most critically more long term production.

On Saturday, February 18<sup>th</sup>, following a long and at times difficult negotiation, we were able to agree and conclude the gas portion of the Fiscal Contract with the State. The following day, we made another PPT proposal for the State to consider in advance of the planned executive meeting, including our Chief Executive, Dr. Tony Hayward.

This proposal made a very substantial move towards the administration's position while providing more support for investors at low to moderate prices where everyone agrees Alaskan investments are extremely challenged.

On Monday morning, February 20<sup>th</sup>, the Governor outlined to Dr. Hayward and the other executives his 20 / 20 PPT proposal. The proposal we had made to the administration the day before was rejected.

BP has agreed with the Governor that we will not oppose the rates and figures in the proposed PPT legislation before you today. Our Chief Executive and others have made the extremely difficult decision to accept the Governor's terms as a means to finalize a Fiscal Contract. We do believe that this PPT is at the far outer fringe of what should be seen as a reasonable or plausible range of outcomes.

We also need to be very frank with this legislature by saying upfront that we do not believe the 20% rate will maximize investment or in turn maximize long term production. Although the PPT structure has significant merit, and we support it, the overall size of the tax increase outweighs, we believe, the other benefits and goes well beyond optimum.

I hope this context has been helpful. We genuinely hope that this bill can be progressed in a thoughtful and objective manner. Alaska is at a crossroads.

I'll now turn things over to Angus Walker and our PPT team.

## **Introduction – Angus Walker**

I am Angus Walker and I am the Commercial Vice President of BP Alaska.

I would like to start by thanking this Committee for this opportunity to provide testimony on the very important matter of House Bill 488 / Senate Bill 305

We recognise that between PPT and in due course the Gas Fiscal Contract you have decisions to make of great importance for the future of Alaska. We respect the responsibility that the Legislature has to do the right thing for Alaska and hope that we can inform those decisions through our testimony.

I would like to introduce my associates –

**Ray Hall:** Senior Tax Economist with BP Group in London

An economist by background, Ray has worked with BP since 1988, initially in commercial roles but latterly as a senior adviser on fiscal issues. Ray has held positions in organizations outside of BP including the United Kingdom Offshore Operators Association (UKOOA) and the International Association of Oil & Gas Producers (OGP). His most recent focus areas have been UK, Norway, Egypt and Trinidad.

**Tom Williams:** Tax Counsel for BP Alaska

It is particularly appropriate to have Tom here. He was Commissioner of Revenue for Governor Hammond and is widely recognised as the creator of ELF.

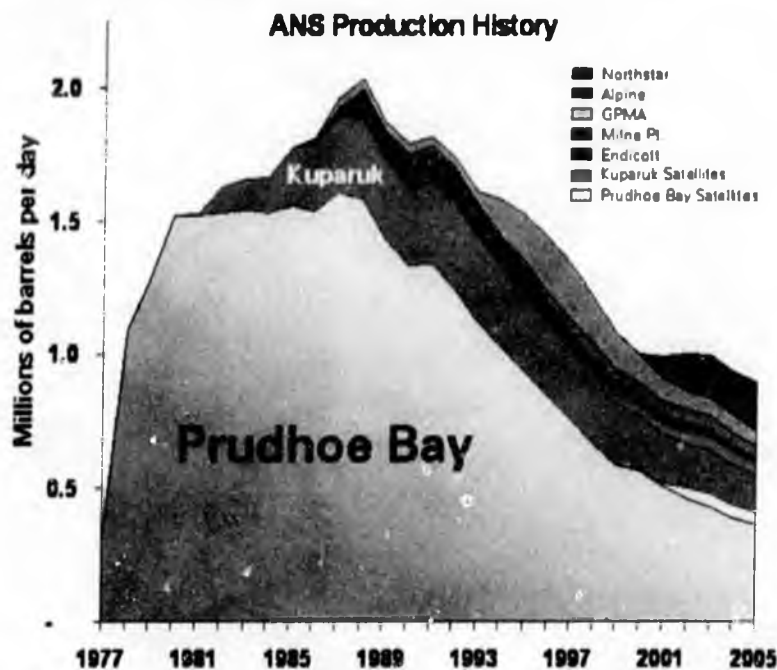
Our testimony will be in three parts, all of which are directly relevant to PPT and the issues before you:

- I will start by describing the current realities of our business and the remaining resources of the North Slope
- Ray will provide a global perspective by comparing fiscal regimes in a selection of the countries in which we do business
- I will conclude by describing the impact of this PPT legislation on BP's business in Alaska

It should be noted that since BP only has leases on the North Slope and in the Beaufort Sea, our remarks will be confined to that business and not other basins like the Cook Inlet in which we do not participate.

## Current realities of the Alaska North Slope

### Alaska North Slope: The Current Reality



- Production declining at 6%

- ELF has stimulated additional investment through low tax rates

We're looking at a profile of historical production from 1977 through 2005. The North Slope has produced over 15 billion barrels of oil to date, and while we look back with envy at the days of peak production it is clear that the business today is very different than it was 20 years ago.

To date BP has invested \$24 billion to create the Alaska business we have today. We have paid over \$32 billion of tax to the State of Alaska and \$24 billion of tax to the federal government.

In total we estimate that the North Slope participants have generated \$120 billion in taxes for Alaska & the Federal Government since first production in 1977. In addition, as an industry, we generate more than 34,000 jobs in Alaska every year.

But the harsh reality is that since production peaked in 1988, production has declined at an average 6%.

What this doesn't show is the underlying decline which would have occurred without the tens of billions of dollars industry has invested to stem decline. Natural decline of these fields is around 15%. As an industry we've managed to stem that decline to, on average, 6% over the last ten years by investing between 1 and 1.5 billion dollars a year in the North Slope business.

#### **ELF has worked as intended**

Each of the small wedges on this production profile represents the contribution from one of the North Slope's smaller fields. Many of these fields would not have been developed without ELF. And yes, whilst much but not all of this production pays Production Tax, it all pays property tax, royalty and state income tax and helps keeps TAPS operational and economic.

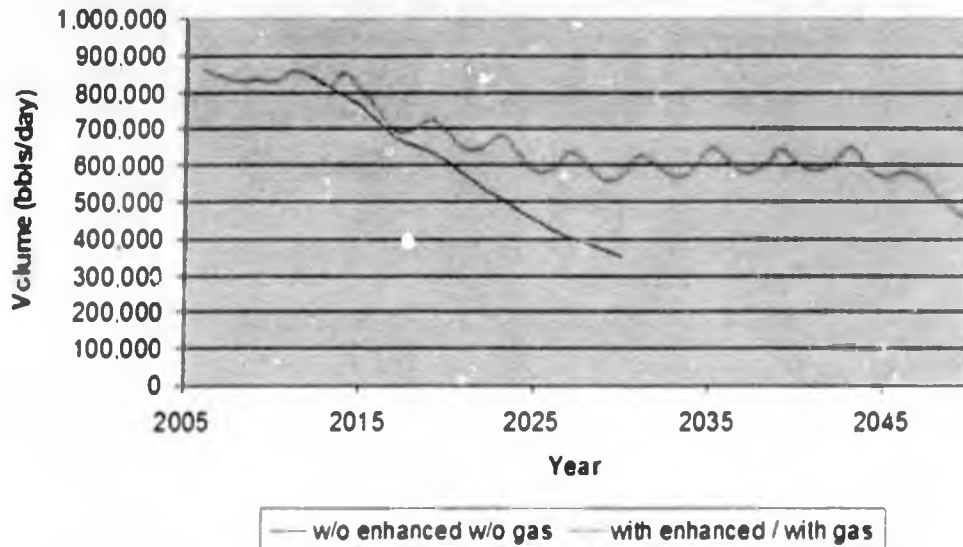
ELF has and continues to encourage investment in these small or less productive fields, and has played a significant role in stemming overall North Slope decline.

However, we recognise that ELF was designed as a surrogate for profitability and while it has been effective it is not perfect in today's price environment. And it is for that reason that we are supportive of adopting the PPT structure proposed by the Administration.

One of the most important issues for this committee to consider is the impact PPT will have on the decline of the Alaska North Slope.



**Figure 1**  
**Volume Scenarios**



Source: DOR Testimony PPT Analysis020106 (DOR) ppt

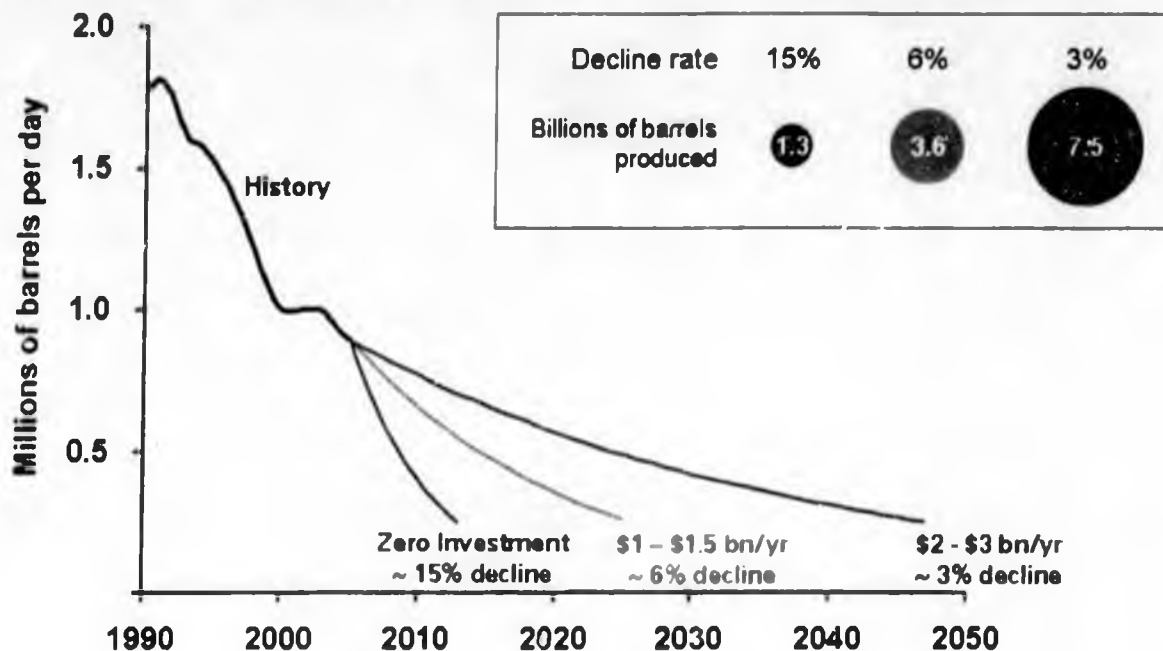
You will recognise the above slide from Roger Marks' presentation last week. It shows two forecasts of future production – the lower blue forecast represents a future without gas, the upper pink line represents a future where the oil business is revitalised by gas.

We agree that the futures with and without Gas look very different. A future without Gas is very much shorter and far less exciting than a future with gas!

But, for Gas to work, it must be built on the foundations of a healthy oil business, a business which must remain healthy for 45 years.

So what will it take to keep the oil business healthy?

## Investment & Decline



We share the challenge of keeping Alaska competitive

The simple answer is to stem decline.

The black line on this chart shows the history of North Slope production. The coloured lines look forward to the future.

With no investment the natural decline of the fields would be the lower red line and with in 10 years the business would be gone.

With the current levels of investment of \$1-1.5 billion / year) (which assumes the current tax regime), history tells us that decline will be around six percent per year. With that trajectory we can expect the business to last around 25 years, but nowhere near long enough to enable gas.

In order to enable gas we must reduce the rate of decline even more. 3% decline would require twice as much capital as is being spent today (\$2 - \$3 bn dollars per year). That is \$20 to \$30 billion dollars over the next decade alone. Alaska must compete to attract these dollars!

We share the challenge of keeping Alaska competitive: the State's part is to maintain stability and keep Alaska attractive to investors; our part is to provide the technology, innovation and investment.

The tax regime you approve will directly impact how attractive Alaska is and what the future decline will be. It is in the interest of all (industry and Alaska) that we focus on growing the pie rather than taking an increasing share of a declining pie.

So where will we find all this oil to stem decline?

The good news for Alaska is that we have a huge resource base!

Alaska has lots of oil and gas!



		Billion barrels equivalent
<b>Produced</b>		<b>15</b>
<b>Known Remaining</b>		<b>17.5</b>
<b>Developed</b>	- Light	3.5
	- Viscous	0.3
<b>Undeveloped</b>	- Light	4
	- Viscous	0.7
	- Heavy	3
	- Gas	6
<b>Yet to Find (Exploration)</b>		<b>5</b>

### Recoverable Resource



Source DOR / USGS / BP

To date we have produced 15 billion barrels, but there are 17.5 billion barrels remaining that we already know about, 3.8 billion barrels of which have been developed to date.

The remaining 14 billion barrels consists of:

- 3.5 billion bbls of light oil remaining in the existing reservoirs
- 1 billion bbls of viscous oil which we have started to produce
- 3 billion bbls of heavy oil lying in shallow formations below the permafrost
- 6 billion bbls of gas which we are working so hard to get to market

The scale of this known resource greatly exceeds that expected from future exploration. Future discoveries are expected to be of the order of 50-150 million barrels. It's not to say you should stop exploring, but you cannot rely on exploration to stem the decline of the North Slope.

While BP isn't exploring in the conventional sense, we are adding barrels. We're not only looking at develop our share of the 17.5 billion barrels, but we're looking to make it even bigger.

To put that in perspective, every time we increase the recovery efficiency by just 1% we access an additional 600 million barrels (400 mmbbls light oil and an additional 200 mmbbls heavy oil)..... Every 1% is equivalent to another Alpine!

It is for this reason we're investing in technology. We're exploring within our existing fields.

One example is that we're spending in excess of \$100 million implementing innovative technology to increase recovery at Endicott. If we're successful at Endicott it could add hundreds of millions of barrels of production across the North Slope. (Another Alpine?)

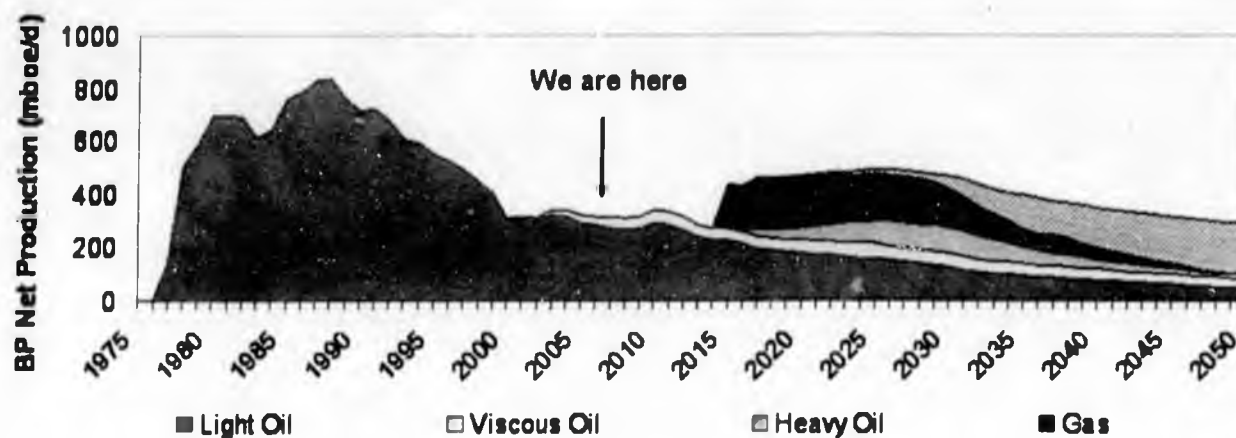
To develop the 14 billion barrels we know about would require well in excess of \$100 billion. And that kind of investment can only come from the Major oil companies of the world a fact supported by Pedro Van Meurs testimony. It thus mystifies us why so much of the testimony given to this Committee by Pedro Van Meurs focussed on the impact of PPT on new entrants when the future of the North Slope is dependant on making Alaska attractive to Major oil companies.

This is the reality of our business and the reality of the North Slope today.

It's the reality we encourage you to look at as you consider House Bill 488 / Senate Bill 305.

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## A 50 year vision



This is the graphic we use when we describe our vision for our business in Alaska.

It shows BP's production both historical and future. A few points we always make when we talk to this are:

- The future will be very different to the past.
- Three businesses built on top of each other all of which must be healthy.
- We face enormous challenges in creating this future
- Attractive and stable fiscal terms are key to making this happen, without it our vision will not come true.

I will now hand over to Ray Hall, who is going to provide a global perspective after which I will describe the impact of PPT on BP's business in Alaska.

### Global Perspective

Refer to Raymond Hall's slides  
[2006-02-28 BP Testimony - Global Perspective.pdf]

## Impact of PPT on BP in Alaska

Much of the analysis presented to this committee has been based on specific cases – (50, 150, 500 mmbbl fields). These are of course academic examples and what I will do is to clarify the impact of implementing PPT on BP's business in Alaska.

I will do this through the lens of Government take.

Government Take



$$\text{Government Take} = \frac{\text{Total Taxes}}{(\text{Total Taxes} + \text{Industry Profit})}$$

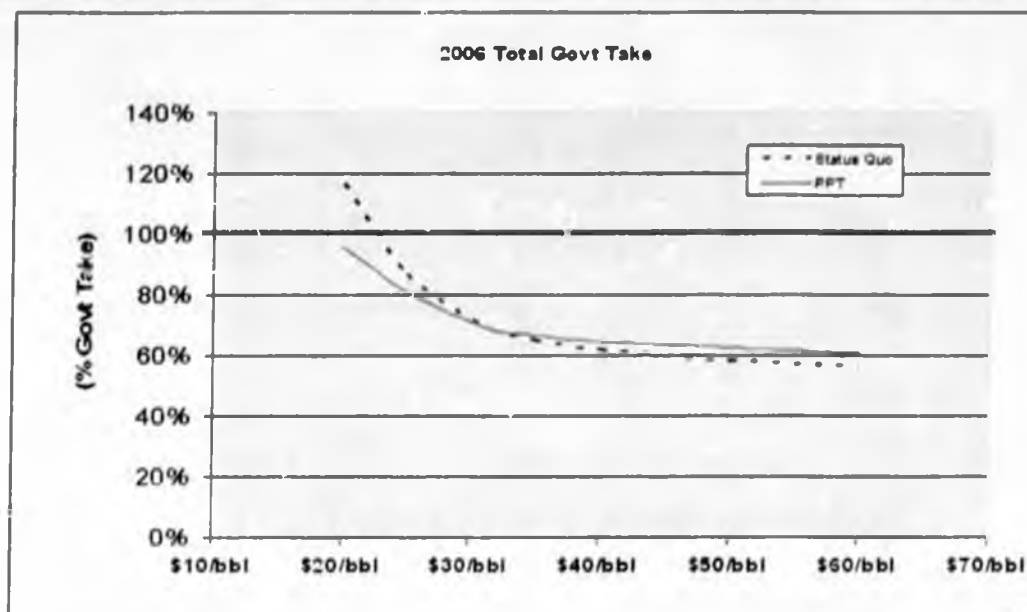
Government Take in Alaska comprises 5 elements:-

- Royalty
  - Production Tax
  - Property Tax
  - Income Tax
  - Federal Income Tax
- } State Taxes
- Federal Taxes

Government take is the percentage of total profit which is taken by government (in this case both State & Federal) with the remaining being the profit which goes to the investor.

Government Take is made up of a total of five elements: State income tax, property tax, royalties, production tax, and Federal income tax. The Investor's take is the investor's profit.

## PPT Impacts on BP Alaska Government Take vs. Price



- **Government Take extremely high at low & medium prices**
- **Investors must make a reasonable return at medium to high prices for Alaska to be attractive**

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This chart shows the total Government take at different oil prices for the current Elf based system and PPT.

That's the real Government take on BP's business in Alaska.

The first point to note is that at low prices we do not make a profit. We make a loss. But regardless we continue to pay Royalty, Property Taxes and State income tax, which results in a government take of greater than 100%.

Under PPT, the Government take is around 70% at the moderately high price of \$30 / bbl. This is very high & especially considering the very high cost of doing business in Alaska.

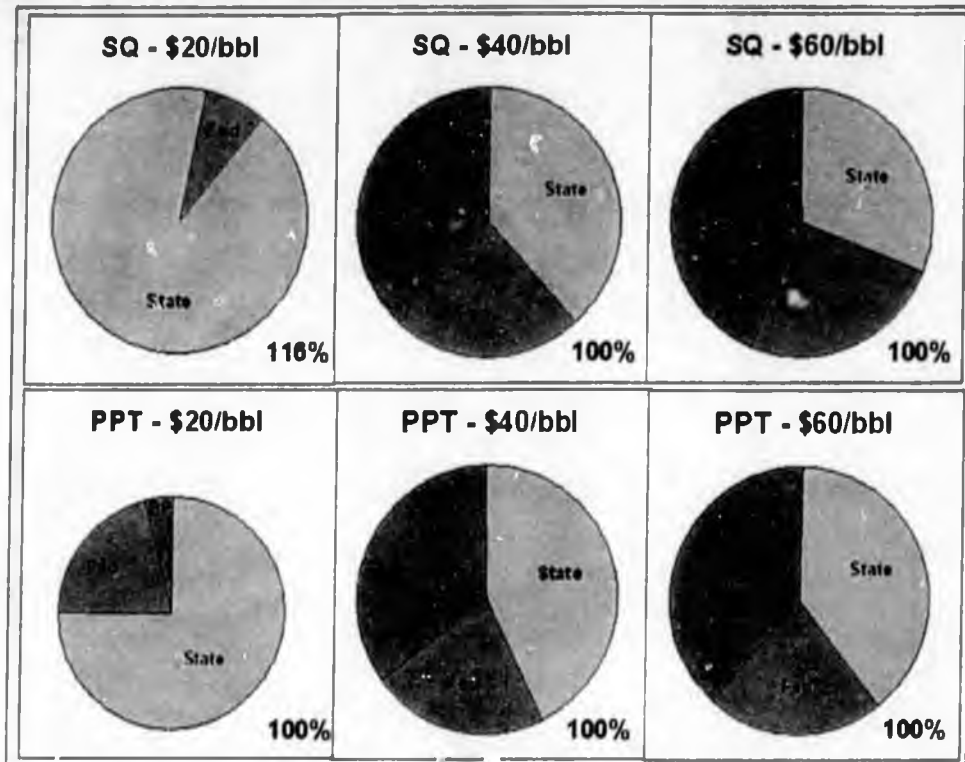
We absolutely must make a good profit in Alaska when prices are high. We make no profit when prices are low. Alaska is a price play and if you take away the upside price incentive then there is no reason for us to be here.

Alaska is a mature business with a challenged resource. In our opinion you should be concerned about overtaxing the industry rather than undertaxing it.

## PPT Impacts Government Take (%)



**Status Quo**



Here we can see the split between State, Federal and BP take under the current regime and PPT at low, medium and high prices.

The left hand pies illustrate the problem for BP at low prices. Under the current system BP makes a loss at \$20 / bbl.

At \$60 / bbl the current system provides a higher % to the industry than to the State, but that is not new news. Alaska's fiscal system was designed to protect the state at low prices and compensate the industry at high prices. That is the nature of a regressive tax regime.

Under PPT, we would make an extremely modest profit at \$20. At \$40 the state gets a considerably higher share than BP. At \$60 the State's and BP's take is balanced.

Introduction of PPT squeezes our profit at higher prices, and let's not forget we make the investments, we take the risks and absolutely we have to make a good profit at high prices for Alaska to be attractive.