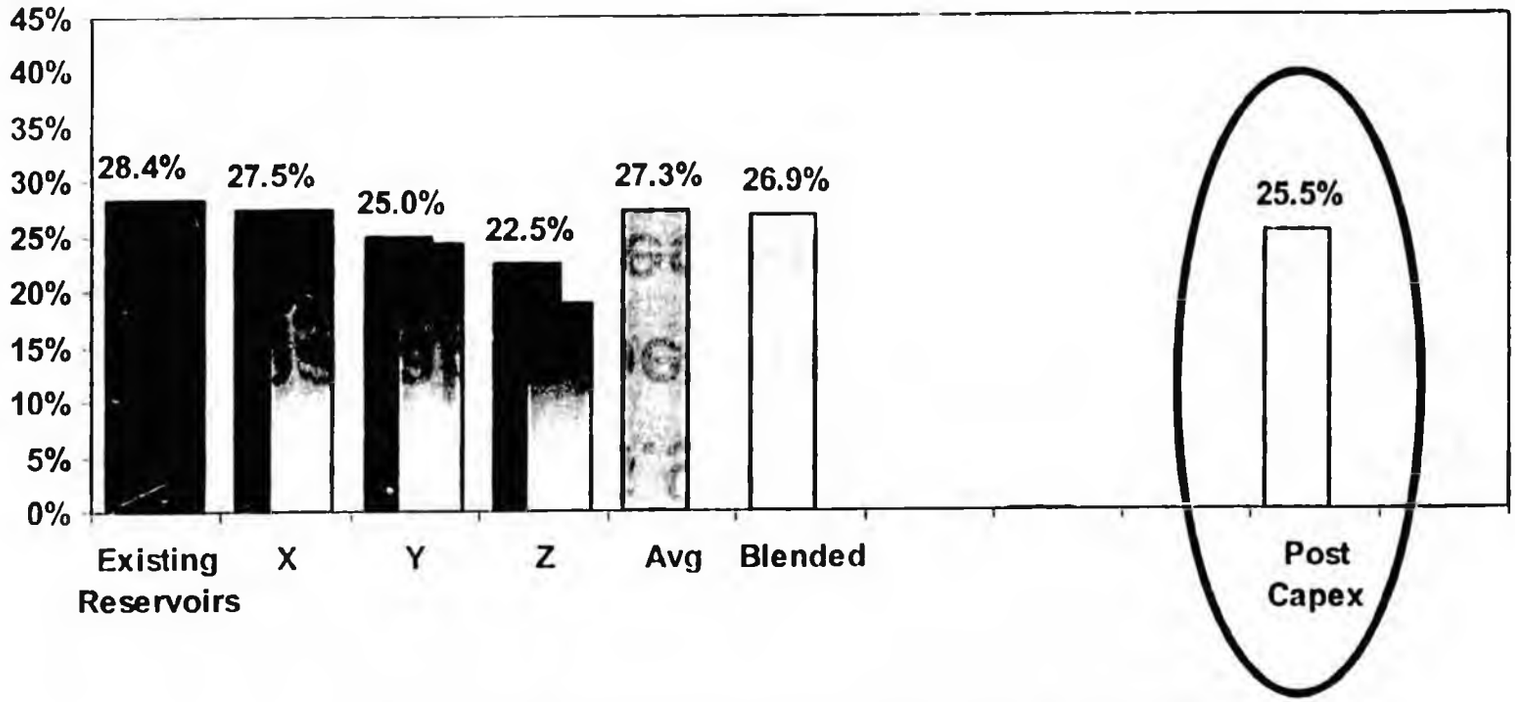
ALASKA LEGISLATURE COMMITTEE FILES 2007-2008 SRES 12715

Assume that 26.9% is the rate that will be payable before further capital investment decisions are made ...

... in this example $800 million

Capital Spending Has An Impact On Rate, Too ....

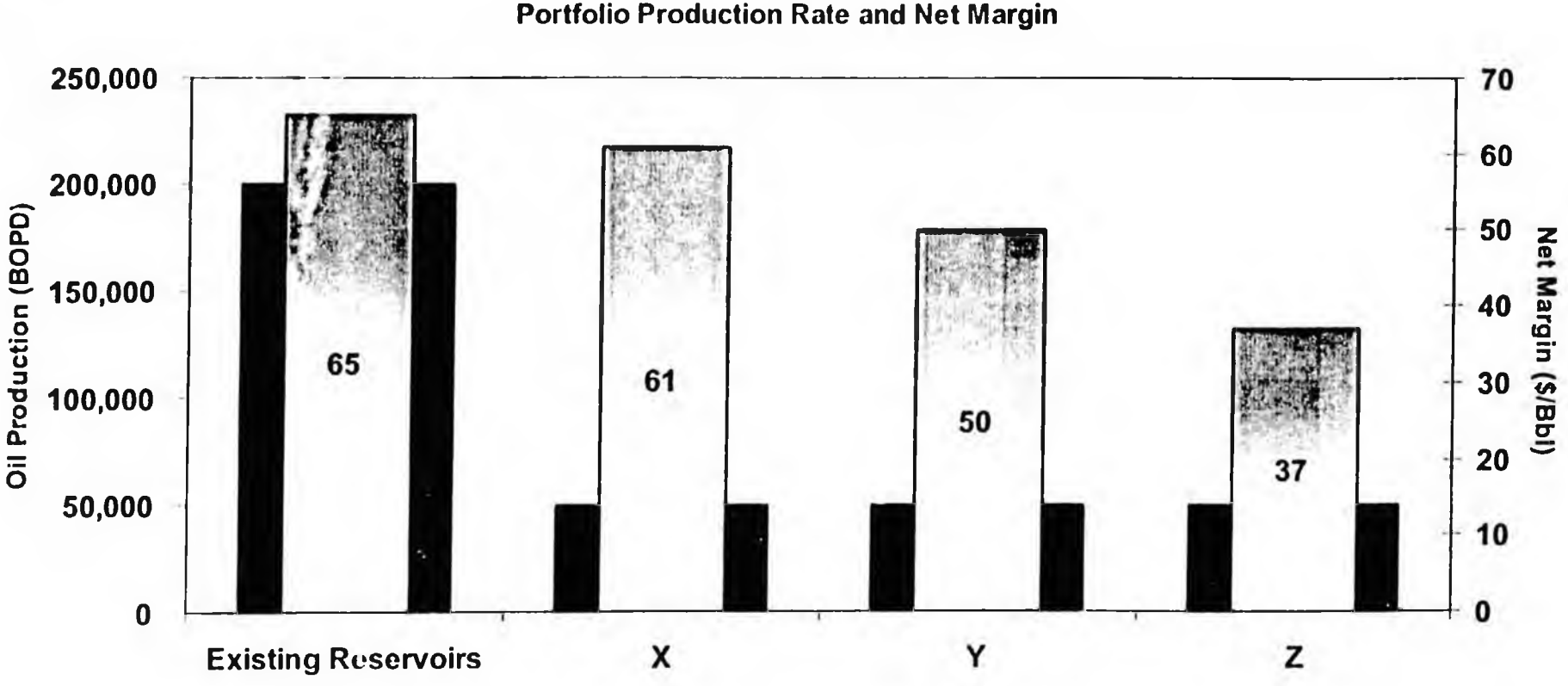
Tax Rate By Field Within A Company - As Affected By Portfolio Blending, Capex And Tax Credit



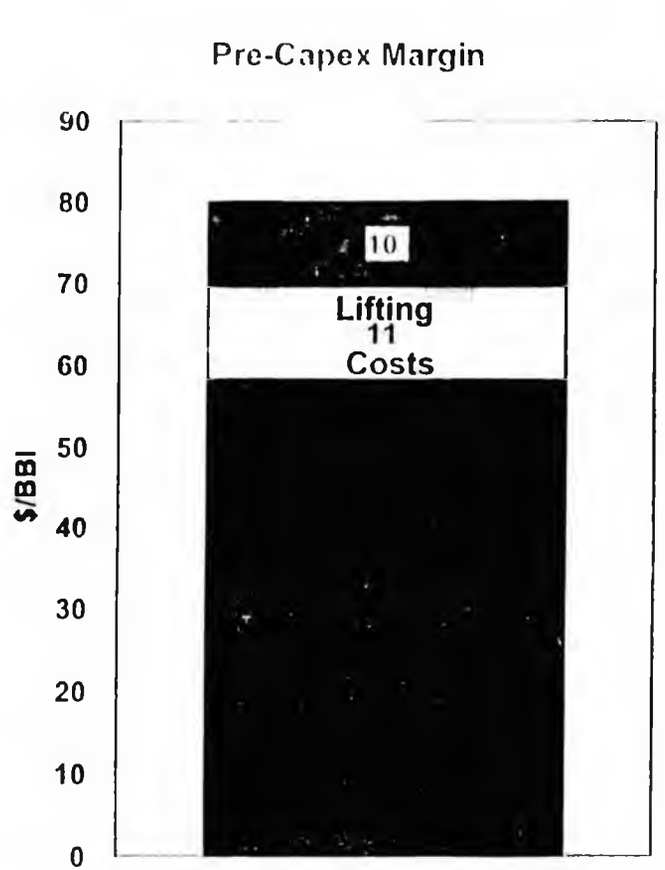
This reduces the rate payable to 25.5%

How ?

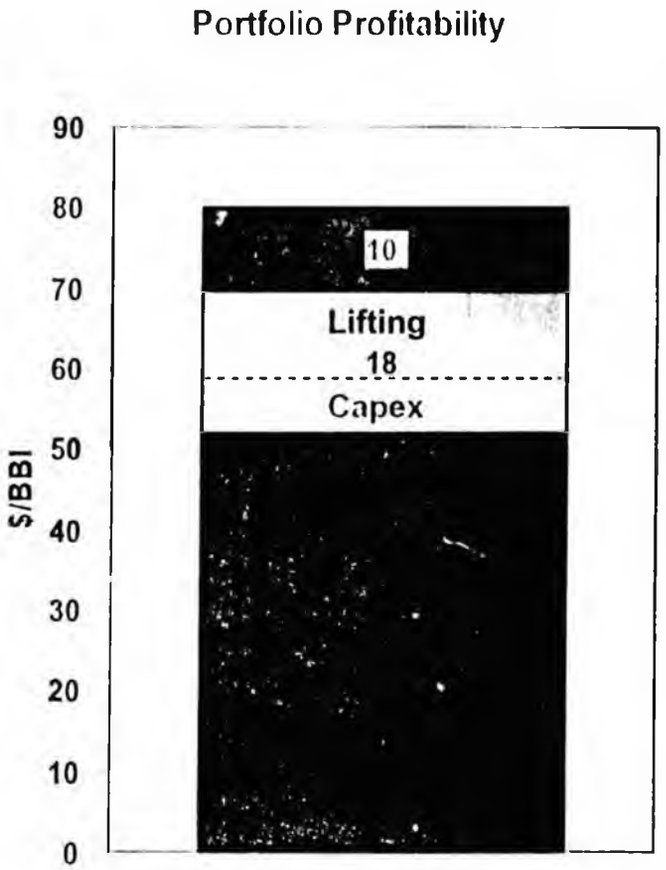
$800 million amounts to $6.26 Per Barrel Based On This Portfolio



The $6.26 Per Barrel Capital Increases "Costs" And Lowers The Tax Rate



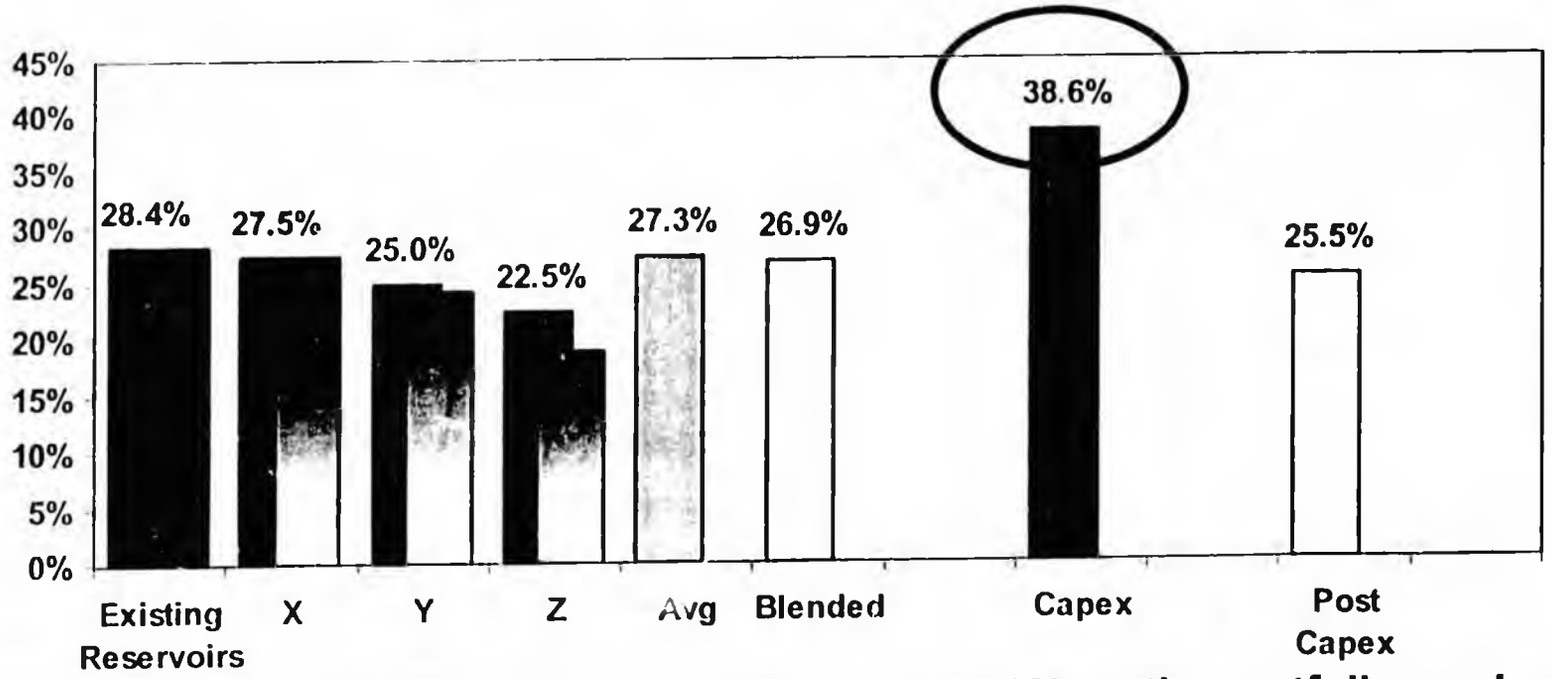
Tax Rate
26.9%



Tax Rate
25.5%

There Is Another Way To Look At This, Though ....

Tax Rate By Field Within A Company - As Affected By Portfolio Blending, Capex And Tax Credit

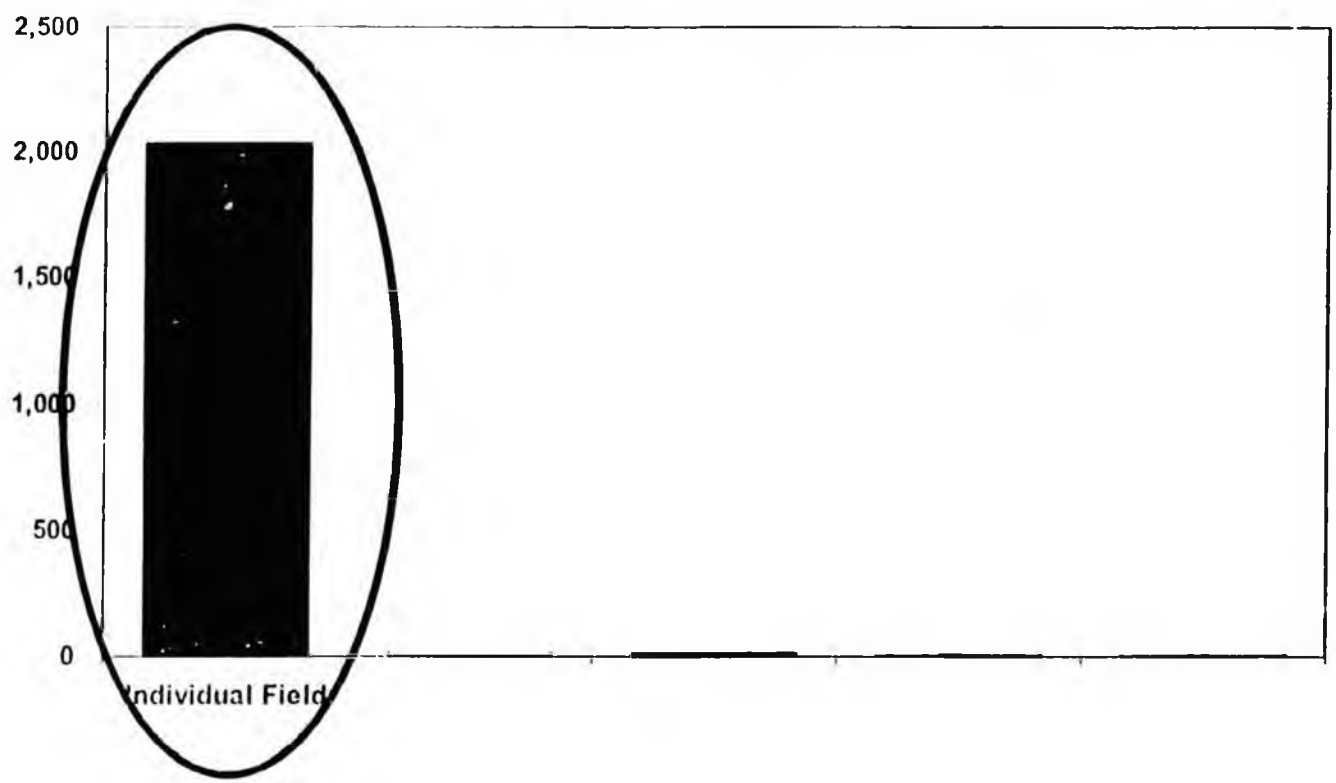


It is the same as still paying the blended rate of 26.9% on the portfolio production (or having an effective rate of 28.4% on Existing Reservoirs .. down to 18.9% on Field Z) and Alaska paying* 38.6% of that $800 million capital

This 38.6% is higher than the Blended tax rate ... and is a function of the capex per barrel and the overall portfolio cost and margin structure

* from PPT only – does not include State and Federal tax effects

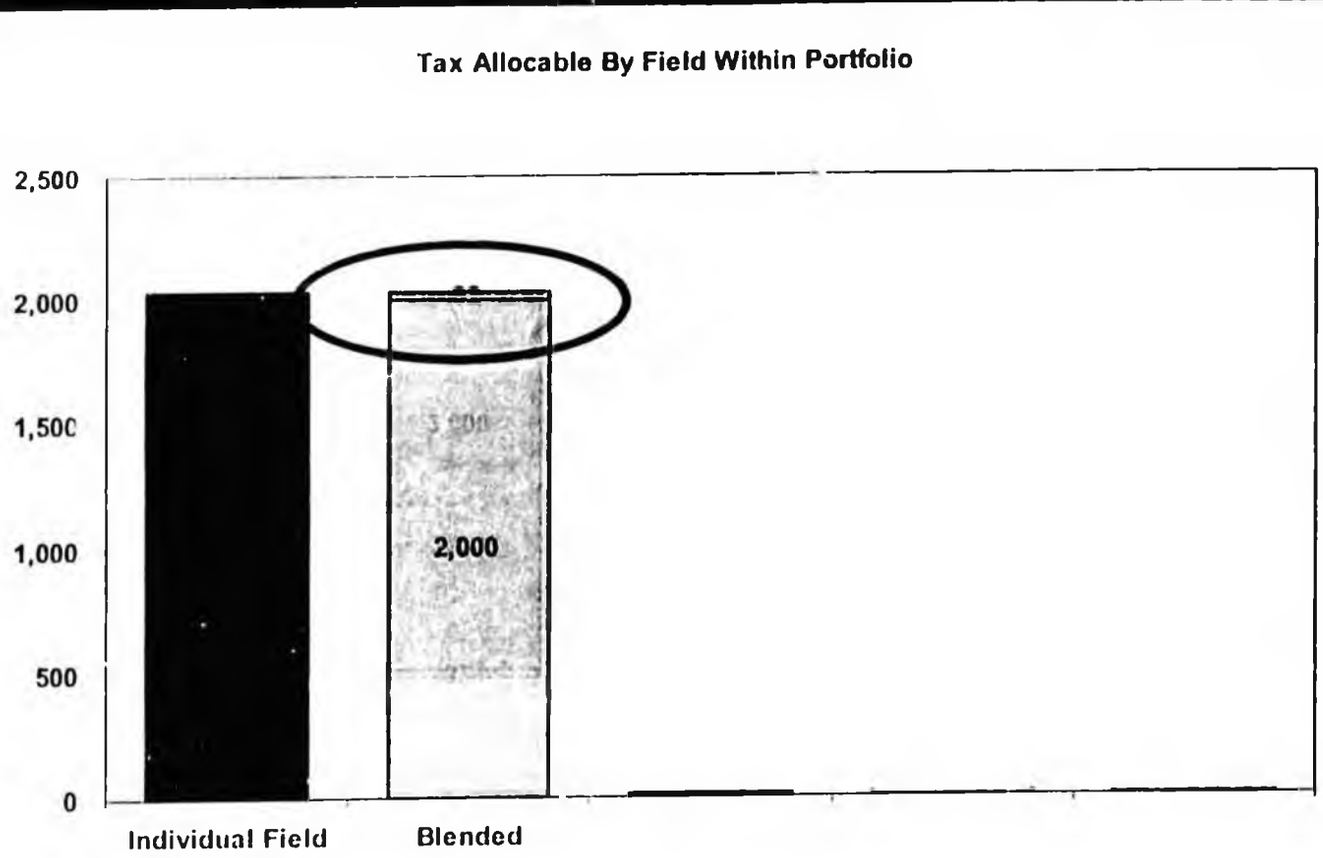
Look At The Tax System Through The Amount Of Tax Payable ...



As individual fields, this portfolio would pay just over $2,032 million in PPT

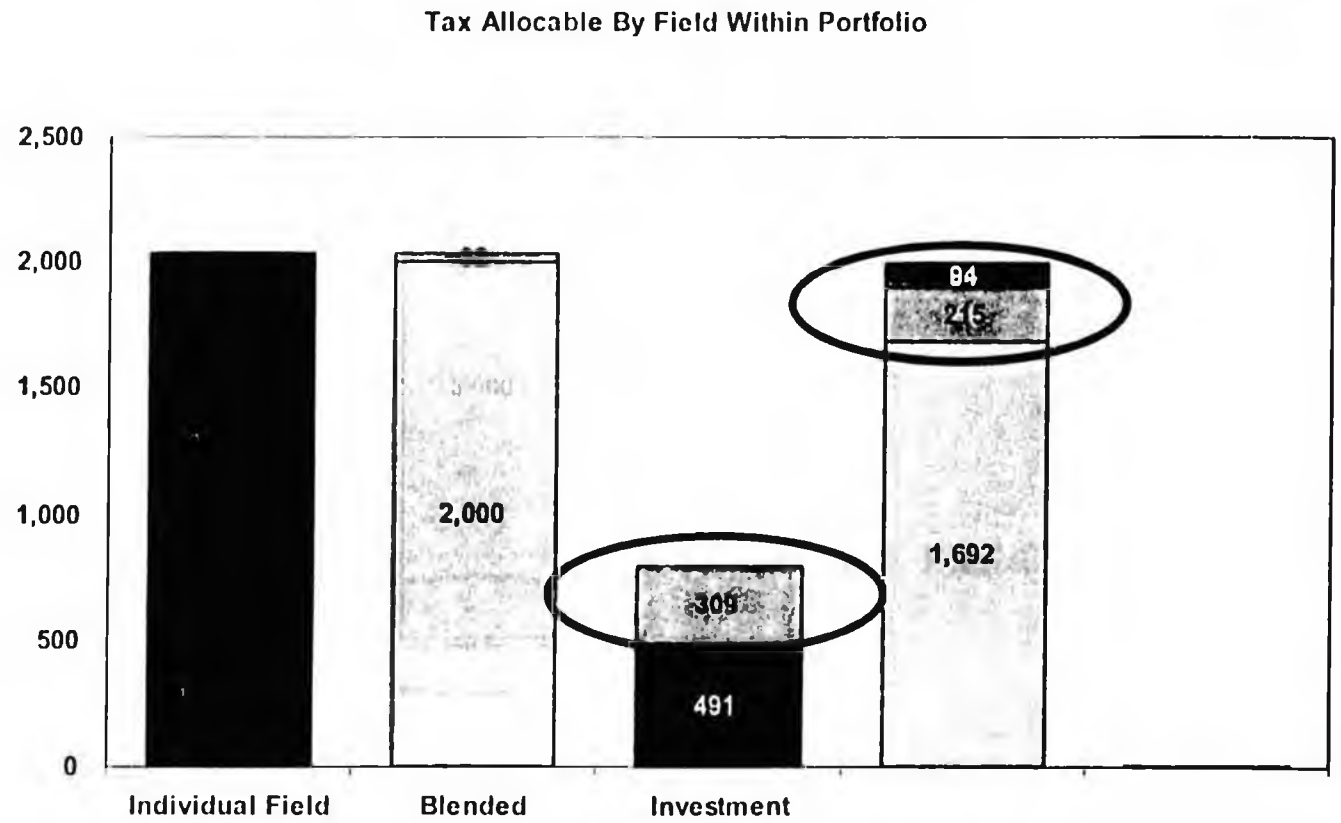
* from PPT only – does not include State and Federal tax effects

Portfolio Effects Lower Total Tax



Putting all fields in one portfolio (company) lowers this to $2Bn …
… a saving of $ 32 million

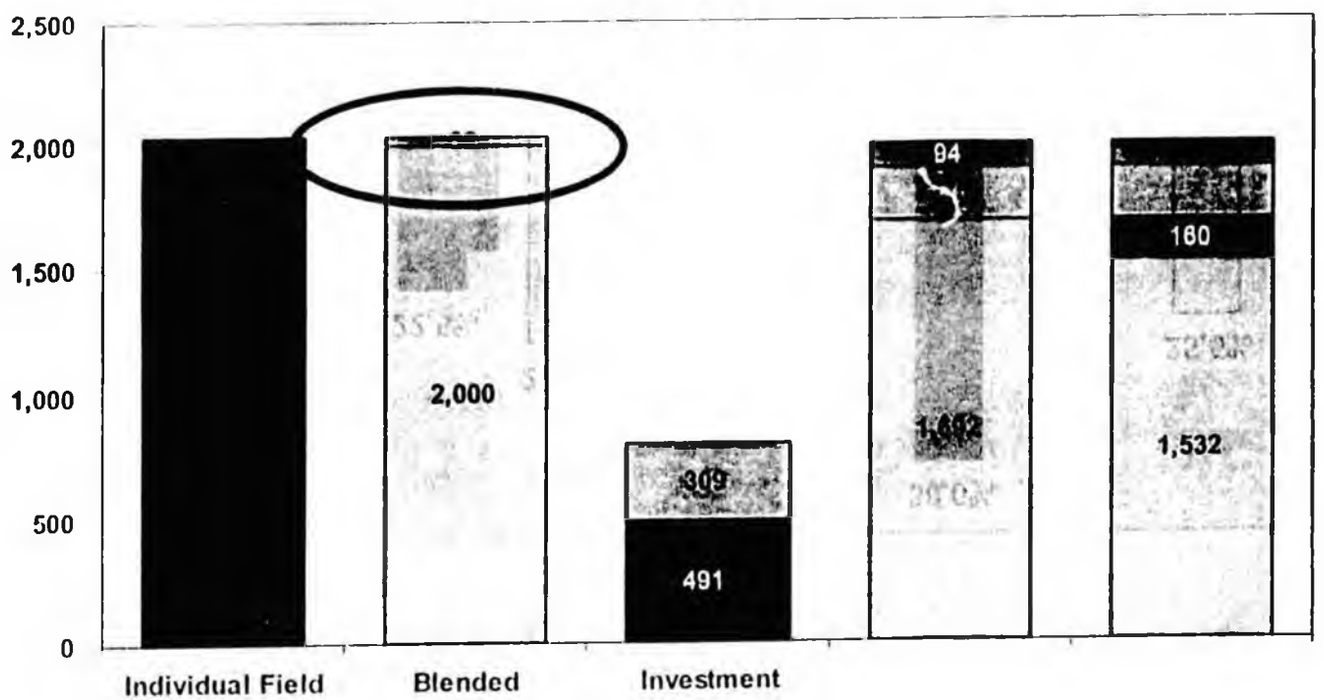
The Big Winner Though Is Capex



In this example the State pays $309 million (38.6%) of the capital (the percentage will vary based on overall portfolio net margin per barrel) The $309 million can be allocated as $215 million from reducing taxable income at 26.9% and $94 million from lowering the rate from 26.9% to 25.5%

But Wait ! That Is Not All ....

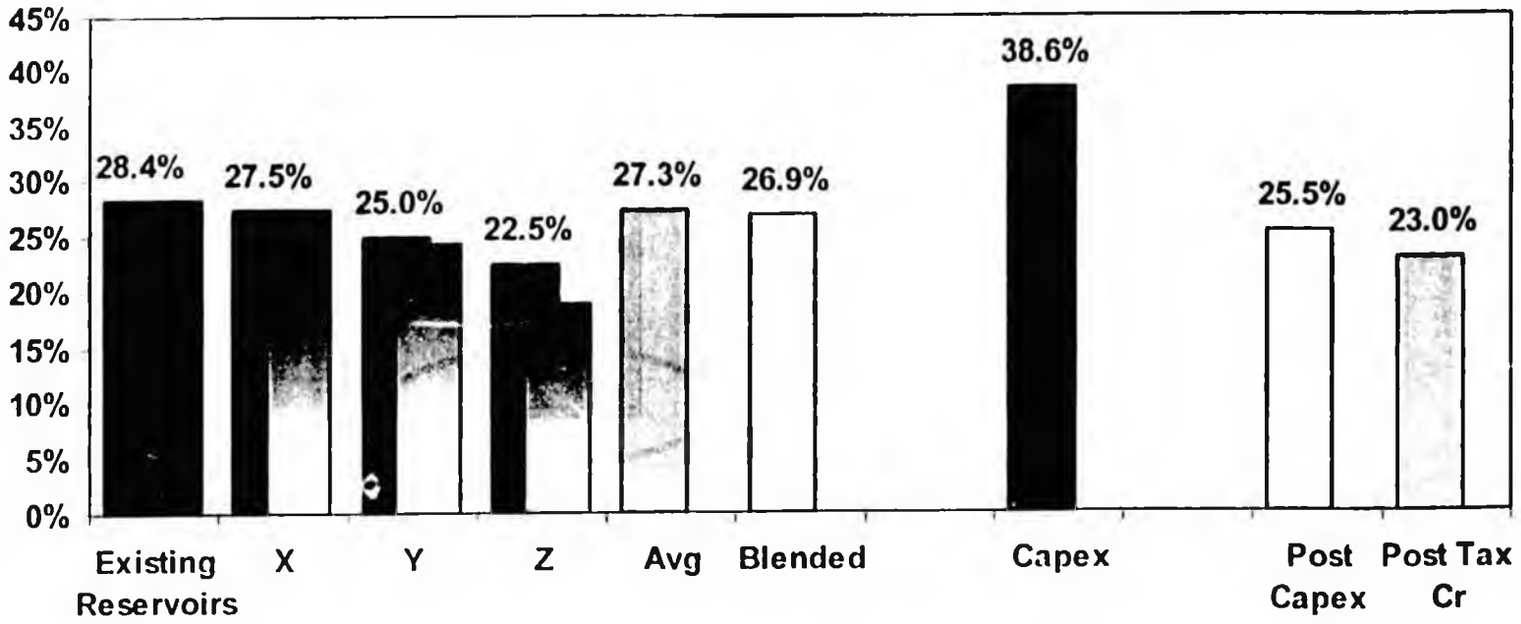
Tax Allocable By Field Within Portfolio



Investment Credits Take a further $160 million (20% of $800 million) from the tax payable

After Investment Credits ...

Tax Rate By Field Within A Company - As Affected By Portfolio Blending, Capex And Tax Credit



... the effective tax rate is lowered further to 23%*

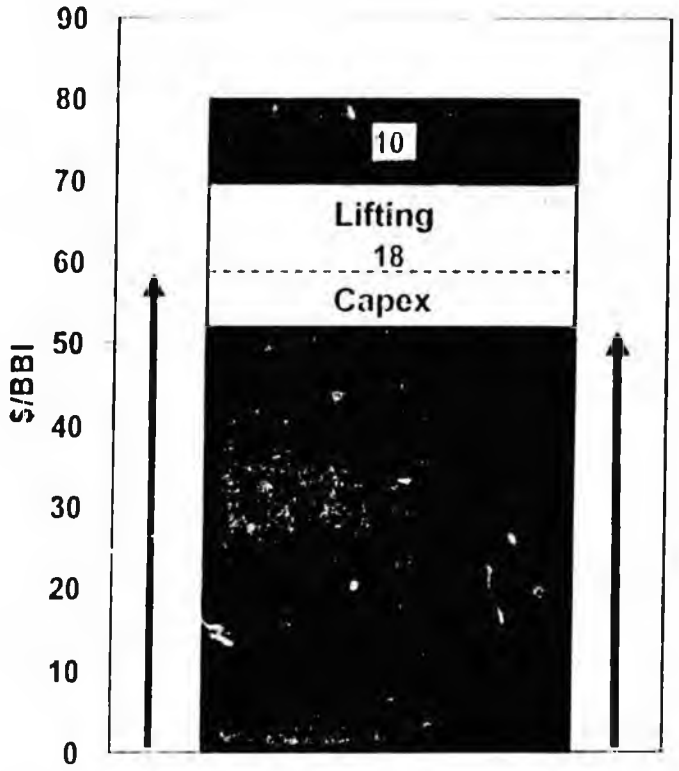
* In this example

PPT Is Really A Tax On Net Cash Flow Per Barrel

... or, a tax on net revenues that are not reinvested ...

Operating Margin Per Barrel

$58



Tax Rate
25.5%

Net Cash Flow Per Barrel (after reinvestment)

$52

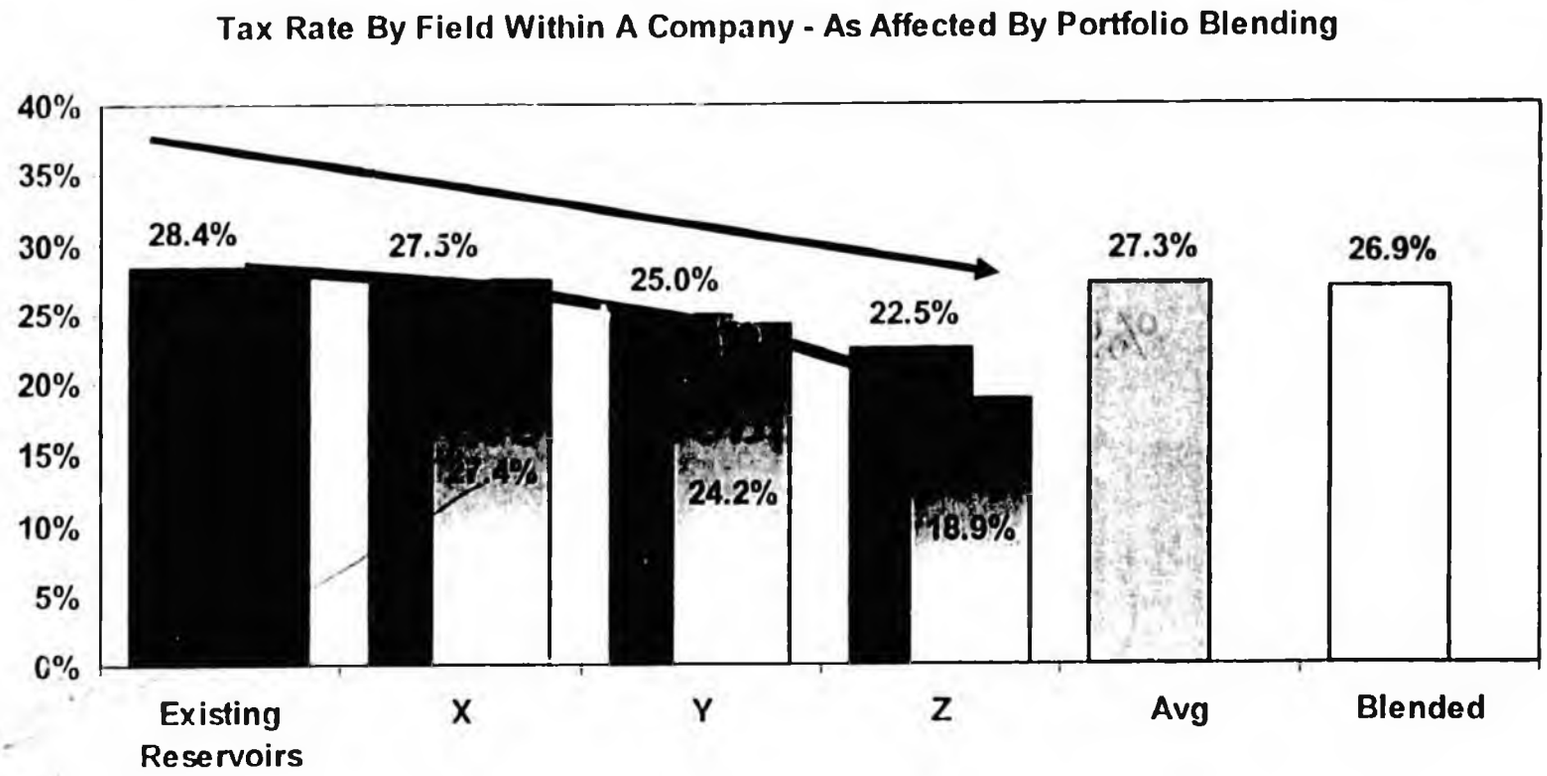
House Oil & Gas Committee

Gross Progressivity Amendment

Progressivity

- **PPT**
  - Tax rate increases 0.25% for every dollar that net cash flow per barrel exceeds $40 (Margin)
- **House O&G Amendment**
  - Maintains the PPT basic rate of 22.5%
  - Adds a tax of 0.225% for every dollar that the gross value at the point of production exceeds $50 (Price)
  - Applied to the gross value at the point of production

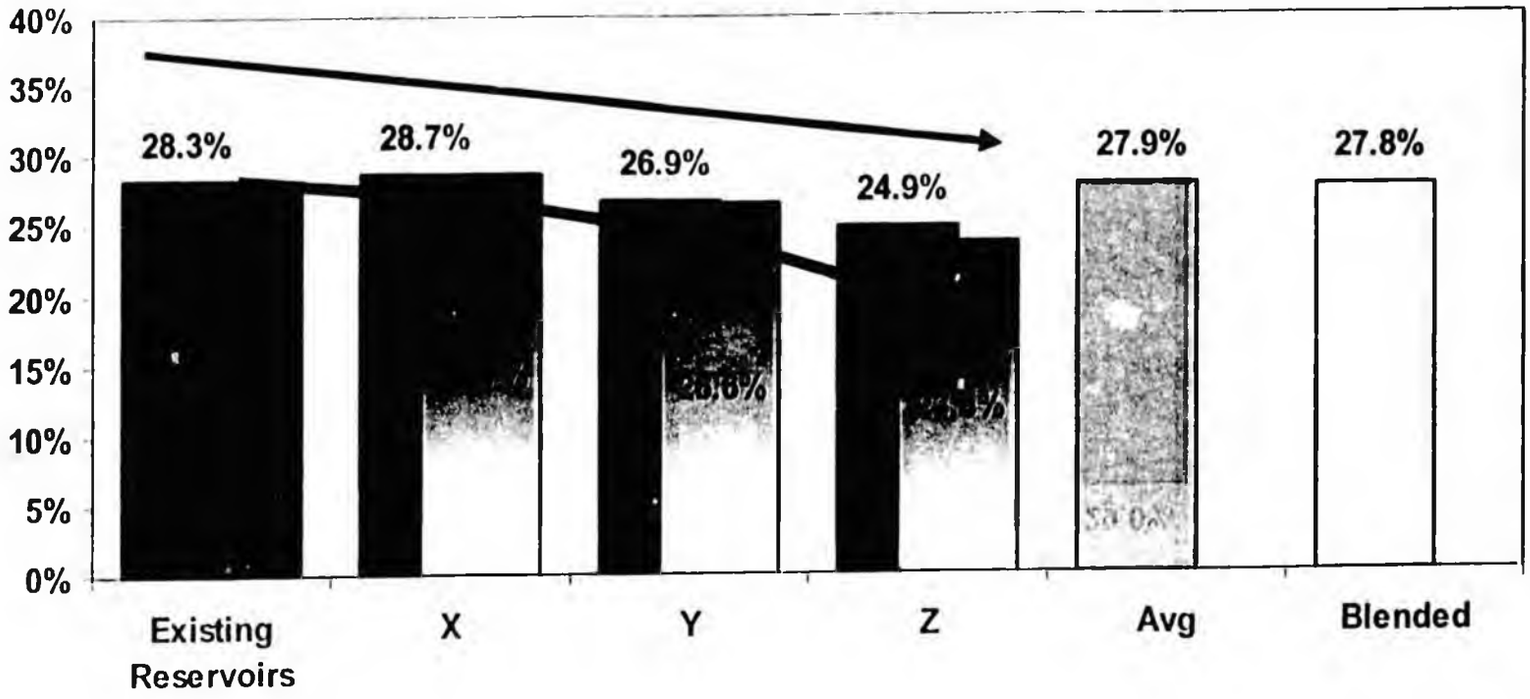
PPT Progressivity



The progressivity can be seen through the lower effective tax rate on lower margin fields

House Oil & Gas Progressivity

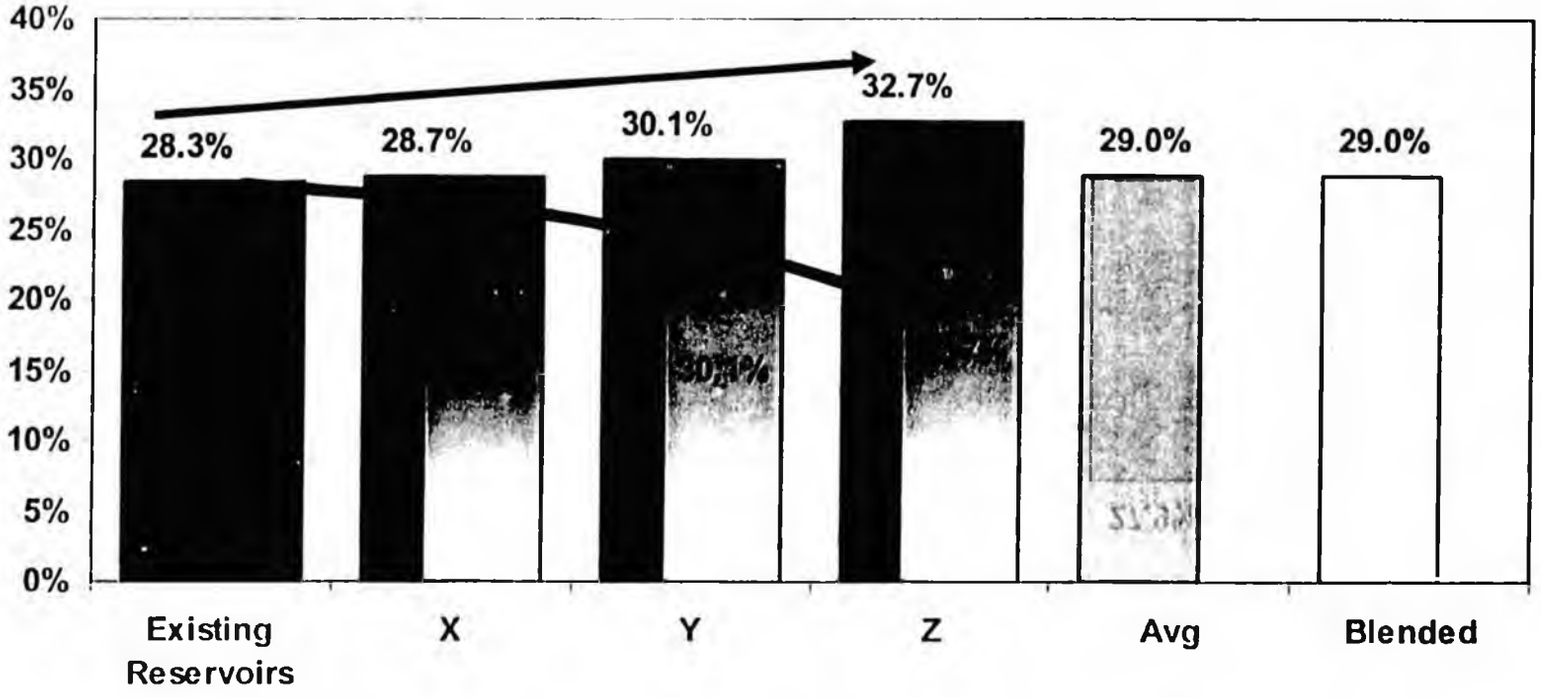
Tax Rate By Field Within A Company - As Affected By Portfolio Blending



The bulk of the increased burden in this case is being borne by the lower margin fields …

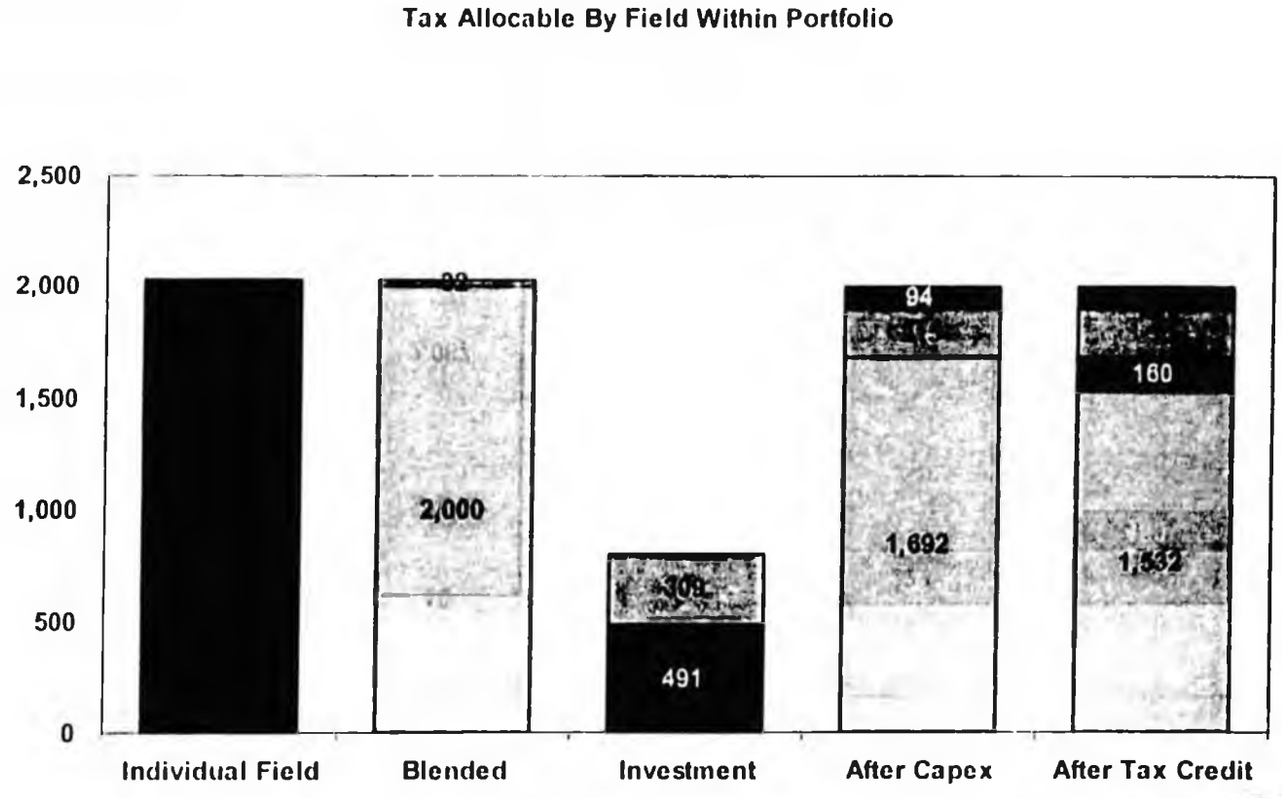
House Oil & Gas Progressivity

Tax Rate By Field Within A Company - As Affected By Portfolio Blending



If all of the lower margin results from higher field operating costs then clear regressivity can be seen as more tax is collected and lower margin fields are actually taxed at a higher effective rate than higher margin fields

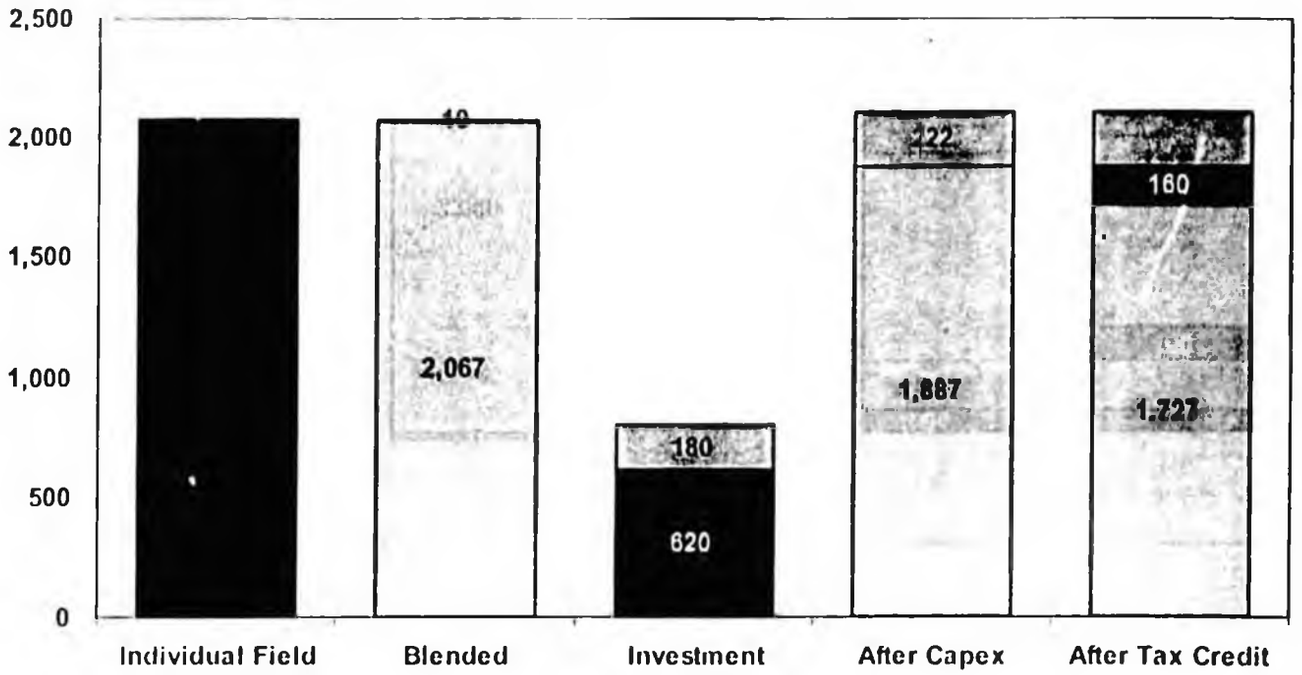
PPT Progressivity



Under PPT progressivity this portfolio would pay $1,532 million at $80 ANS West Coast .....
$2 Bn before the capital investment

House Oil & Gas Progressivity

Tax Allocable By Field Within Portfolio



Under House O&G progressivity this portfolio would pay $1,727 million
-only $67 million before the capital investment
The net cost of the investment rises from $331 million to $460 million*

* Before State and Federal tax impacts

Conclusions

- **A net tax on the margin is a tax on the retained cash flow and not just a tax on simple profitability**
- **Corporate ring fence for production tax allows the effective rate to vary between more, and less, profitable fields**
- **More aggressive net progressivity provides a greater differentiation on the effective rate than simple gross progressivity**
  - Less/lower taxes at low margins
  - More/higher taxes at high margins

Conclusions - Progressivity

- **Progressivity, based on "net", as manifested in the PPT/ACES structure is more responsive to individual field profitability than that in a "gross" structure**

- **Greater progressivity (raising the maximum rate and / or slope) can achieve even greater differentiation**
  - More tax on legacy investments benefits from current higher prices – that will drop back if prices drop back
  - Lower tax rates on higher cost / lower margin new investments

SB

2001

(FILE 29)

VAN MEURS

Proposed revisions to the PPT

October 18, 2007

Presentation to

The Alaska Legislature

PVMeures

Overall Recommendation

I would strongly recommend **not** to make any changes in the PPT law, other than the transparency provisions.

Changing taxes substantially every year creates an image of serious fiscal instability that could damage investor confidence in Alaska.

Overall Recommendation

The current law already provides for a review mechanism by 2011.

The year 2011 is the appropriate time to make such revisions because at that time the first audits will have been completed and final and reliable information would be available.

Current System

Table 5.26. WEST SAK

Undiscounted Government Take (Income only)

WTI US $	WTI Can $	Gas Price Can $	Heavy oil price Can $	COST-7	COST-6	COST-5	COST-4	COST-3	COST-2	COST-1
20	22.73	$1.89	$14.35	[redacted]						60.38%
30	34.09	$2.84	$24.32			60.22%	59.56%	59.31%	59.27%	59.19%
40	45.45	$3.79	$34.28	59.68%	59.60%	59.54%	59.49%	59.45%	59.21%	59.09%
50	56.82	$4.73	$44.25	59.81%	59.81%	59.83%	59.72%	59.62%	59.66%	59.77%
60	68.18	$5.68	$54.22	60.66%	60.66%	60.64%	60.69%	60.83%	60.98%	61.09%
70	79.55	$6.63	$64.18	61.83%	61.87%	62.02%	62.18%	62.34%	62.45%	62.53%
80	90.91	$7.58	$74.15	63.24%	63.39%	63.53%	63.68%	63.80%	63.88%	64.02%
90	102.27	$8.52	$84.11	64.74%	64.88%	65.02%	65.15%	65.24%	65.36%	65.53%
100	113.64	$9.47	$94.08	66.21%	66.35%	66.50%	66.59%	66.70%	66.86%	67.04%

Current System

Table 5.27. WEST SAK

5% Discounted Government Take (Income only)

WTI US $	WTI Can $	Gas Price Can $	Heavy oil price Can $	COST-7	COST-6	COST-5	COST-4	COST-3	COST-2	COST-1
20	22.73	$1.89	$14.35							64.33%
30	34.09	$2.84	$24.32			69.77%	63.56%	61.41%	60.49%	59.82%
40	45.45	$3.79	$34.28	64.13%	62.57%	61.60%	60.94%	60.45%	59.75%	59.31%
50	56.82	$4.73	$44.25	61.80%	61.32%	60.95%	60.44%	60.00%	59.82%	59.76%
60	68.18	$5.68	$54.22	61.83%	61.48%	61.15%	60.96%	60.95%	60.96%	60.91%
70	79.55	$6.63	$64.18	62.50%	62.28%	62.29%	62.31%	62.35%	62.32%	62.25%
80	90.91	$7.58	$74.15	63.65%	63.66%	63.68%	63.71%	63.70%	63.63%	63.66%
90	102.27	$8.52	$84.11	65.01%	65.02%	65.05%	65.06%	65.02%	65.03%	65.12%
100	113.64	$9.47	$94.08	66.35%	66.38%	66.43%	66.39%	66.39%	66.47%	66.58%

Current System

The current system is designed to be sensitive to costs and thereby make the investment in heavy oil developments attractive.

The current system was is also designed to be price progressive.

Current System

The PPT credits encourage investments by new investors in new oil and gas exploration and development and to encourage re-investment by existing companies. The PPT is therefore a consolidated system.

The main goal is to reduce the decline of oil production.

Transparency

The transparency provisions related to cost projections, publication of data, short term audits and an exempt class for auditors seem good provisions.

They should be strongly supported.

These changes can be implemented now.

PPT amendments

In case the Alaska Legislature decides that it wants to change the PPT anyway, I would advise basing such amendments on my earlier recommendations contained in the reports of:

-- February 14, 2006

-- March 5, 2006 and

-- May 1, 2006

PPT Amendments

In my February 14, 2006 report I recommended a 25% PPT rate.

Since, this recommendation was made government takes have increased in the US GOM and Ireland and several developing countries. Alberta will also increase government take as a result of the royalty review.

I therefore reconfirm this recommendation

PPT Amendments

In my February 14, 2006 report I did **not** recommend the so-called clawback provision. Internally, I advised strongly against this provision. It does not make sense to reward a company for past investments.

Therefore deleting the Transitional Investment Expenditures credits is a good step.

PPT Amendments

In my March 5, 2006 report (which was written after the 20/20 concept had been decided by the Governor) I recommended:

- A price progressive Basic Production Tax based on the gross value of production **in addition to** the PPT.
- The price progressive Basic Production Tax would be deductible from the PPT.

PPT Amendments

The price progressive Basic Production Tax was based on the following formula:

BPT rate = (WTI - 50) x 0.25%

At the current price of $ 84 per barrel WTI this would be equal to 8.5% on the gross value of oil at the production point.

PPT Amendments

I believe that price progressive features based on the gross value of the production are more effective than features based on net.

I recently recommended a similar severance tax to the Alberta royalty review panel and this recommendation was accepted. The Alberta Government is now considering these recommendations.

PPT Amendments

The current progressive feature in the PPT law based on the net value is an ineffective mechanism. It is highly unpredictable and subject to cost verification difficulties. Bringing the price down from $40 to $ 30 is a relatively weak measure. I do not recommend this.

PPT Amendments

I therefore reconfirm my recommendation for a price progressive feature based on gross in addition to the 25% PPT Rate.

However, such a feature would need to have a modifier in the formula in order to soften the impact on heavy oils.

PPT Amendments

The May 1, 2006 report recommended the Gross Revenue Exclusion ("GRE") for pipeline gas (not for condensates and liquids) of 64% of the gross value of the prior to the application of the PPT for gas other than from Cook Inlet.

Gas that needs to be transported over long distances has very different economics than oil.

PPT Amendments

Most jurisdictions that need to export gas over large distances have a government take that is lower for gas than for oil. If Alaska wants to compete with a gas project internationally, it has to start with a reasonable fiscal system for gas.

I therefore reconfirm my GRE recommendations.

Failure to forecast cost increases

Much discussion took place about the so-called failure to forecast cost increases. In this respect I like to emphasize that I provided the Legislature ample and precise warning about cost increases. The following three slides are repeat slides of my presentations in 2006.

May 10, 2006 slide: Alaska Gas Project

Cost overrun risks

The economic evaluations are based on a $ 21 billion project as originally presented.

However, cost have already escalated significantly, in particular steel prices and regional escalation in Alberta.

May 10 slide: Alaska Gas Project

Huge risks

The combination of gas price risk and cost overrun risk creates a possibility that the project may not be built over the next decade even with a stranded gas contract.

June 15 slide: Risk Assessment: Summary

In summary the view of EconOne is:

50% cost overrun – very low probability
FIF low gas price – very low probability
Project uneconomic – very low probability

My view is:

50% cost overrun – very likely
FIF low gas price - fair probability
Project uneconomic – fair probability

Failure to forecast cost increases

Despite the fact that I predicted strong cost increases generally and internationally, there was no evidence in early 2006 of strong local inflationary pressures on the North Slope (as compared to Alberta, for instance).

Failure to forecast cost increases

Therefore, I believe that it is imperative to carry out sound audits prior to reaching any conclusions on whether costs were significantly under estimated or not.

It might very well be that companies over-declared their costs for their first PPT declarations and that after proper audits the revenues to Alaska will be revised upward.