Combined Oil and Gas Progressivity in Alaska's Production Tax II

Dan E. Dickinson, CPA

Joint Hearing
Senate Resources Committee
Senate Finance Committee
Alaska State Legislature

March 26, 2009

Feb 2 Model Screen Shot - $135 oil and $6 gas - Tax Falls

	Oil Only		Incremental Gas		Combined	
Daily Vol	0.350	mmbbls/day	4.2	bcf/day		
days per year	365		365			
Annual Volume	127.8	mmbbls/yr	1533	bcf/yr		
Convert to boe	1		6			
Annual Barrel Equivalents	127.8	boe/yr	255.5	boe/yr	383.3	boe/yr
ANS WC Price/ Henry Hub Price	$ 135.00		$ 6.00			
Adj to Alberta			(0.75)			
Transportation to Market	(6.00)		(2.75)			
Gross Value at Point of Production	129.00		2.50			
Value times Volume	$ 16,480		$ 3,833			
Non Royalty %	87.5%		87.5%			
Taxable Wellhead	$ 14,420		$ 3,353			
US Costs (millions $)	3,300		-			
Taxable Value or PTV (millions $)	$ 11,120		3,353		$ 14,473	
Non Royalty Fraction	87.5%		87.5%		87.5%	
Taxable volumes boe	111.8		223.6		335.3	
Prog Base (taxable value/volume)	$ 99.48		$ 15.00		$ 43.16	
Less $30	30.00		30.00		30.00	
Starting Point	$ 69.48		$ -		$ 13.16	
Prog rate (.4% or .1% per dollar)	25.70%		0.00%		5.26%	
base rate	25.00%		25.00%		25.00%	
Total Rate	50.70%		25.00%		30.26%	
	Stand Alone Oil		Stand Alone Gas		Combined	
Total Tax (Tax Rate * PTV)	**$ 5,637**		**838.4**		**$ 4,380**	

Sum of stand alone oil & gas **6,475.84**

Gain (loss) in production tax from using current law vs stand alone **(2,095.7)**

Gain (loss) in production tax from adding gas stream under current law: **(1,257.3)**

3.26.2009

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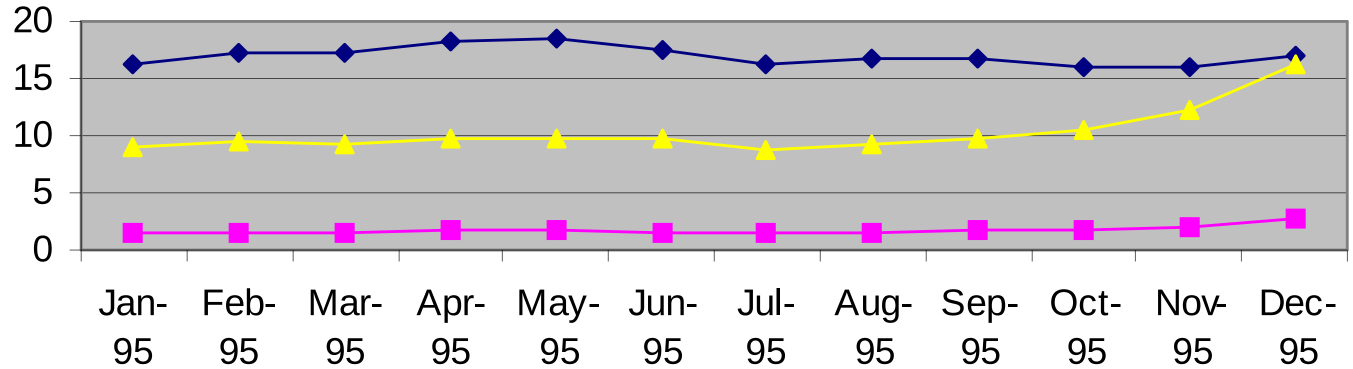
Ruggerio and Dickinson Agree I

- Dan Dickinson's testimony before LB&A on January 12, 2009 and Senate Finance February 2, 2009
- Rich Ruggerio's testimony before Senate Finance on February 2, 2009, March 11, 2009
- Rich and I agree
  - Could happen that production tax revenues fall, not rise if 4.3 bcf a day of gas added to a 700,000 bbl a day stream of oil at certain set up prices
  - I illustrated the volume effect – Rich focused on the effect of smaller oil volumes generally require great price disparity
  - I focused on price spike such as the 2008 spike; Rich confirmed that that kind of relationship between oil and gas prices only occurred in roughly 7 months out of prior 14 years: rare but not impossible
    - Price above 92.5+25=117.5 in only 3 months – but special rules

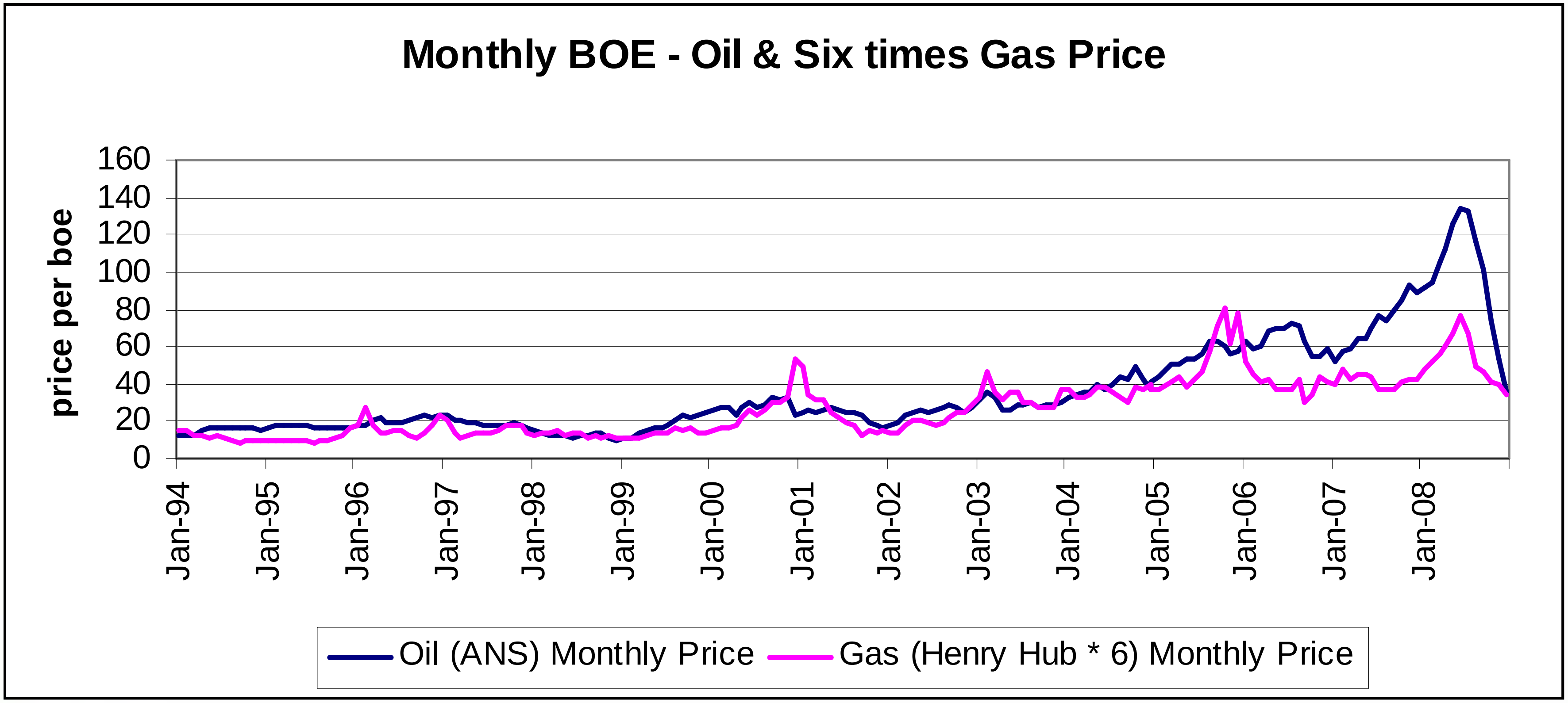
Oil Valued way above 6:1 gas btu parity: 1995



	Jan-95	Feb-95	Mar-95	Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95
Oil (ANS)	16.16	17.14	17.31	18.36	18.43	17.43	16.23	16.72	16.65	15.96	15.88	16.94
Gas (Henry Hub)	1.52	1.59	1.54	1.63	1.64	1.62	1.44	1.56	1.64	1.77	2.04	2.71
Gas ((Henry Hub * 6)	9.12	9.54	9.24	9.78	9.84	9.72	8.64	9.36	9.84	10.62	12.24	16.26

Source: Oil prices from DOR website, Gas prices from St Louis Federal Reserve website

Oil versus Gas 6:1 thermal parity



Source: Oil prices from DOR website, Gas prices from St Louis Federal Reserve website

Ruggerio and Dickinson Agree II

- Rich and I agree
- Single month or year snapshots only tell part of the story. Full cycle economics also important
  - Progressivity example better illustrated with monthly snapshot

Monthly Progressivity Example

	Oil Only		Incremental Gas		Combined	
Daily Vol	0.350	mmbbls/day	4.2	bcf/day		
days per year	30		30			
Annual Volume	10.5	mmbbls/mo	126	bcf/mcf		
Convert to boe	1		6			
Annual Barrel Equivalents	10.5	boe/mo	21.0	boe/mo	31.5	boe/mo
ANS WC Price/ Henry Hub Price	$ 135.00		$ 6.00			
Adj to Alberta			(0.75)			
Transportation to Market	(6.00)		(2.75)			
Gross Value at Point of Production	129.00		2.50			
Value times Volume	$ 1,355		$ 315.0			
Non Royalty %	87.5%		87.5%			
Taxable Wellhead	$ 1,185		$ 276			
US Costs (millions $)	275		-			
Taxable Value or PTV (millions $)	$ 910		276		$ 1,186	
Non Royalty Fraction	87.5%		87.5%		87.5%	
Taxable volumes boe	9.2		18.4		27.6	
Prog Base (taxable value/volume)	$ 99.07		$ 15.00		$ 43.02	
Less $30	30.00		30.00		30.00	
Starting Point	$ 69.07		$ -		$ 13.02	
Prog rate (.4% or .1% per dollar)	25.66%		0.00%		5.21%	
base rate	25.00%		25.00%		25.00%	
Total Rate	50.66%		25.00%		30.21%	
	Stand Alone Oil		Stand Alone Gas		Combined	
Total Tax (Tax Rate * PTV)	**$ 461**		**68.9**		**$ 358**	

Sum of stand alone oil & gas **529.98**

Gain (loss) in production tax from using current law vs stand alone **(171.8)**

Gain (loss) in production tax from adding gas stream under current law: **(102.8)**

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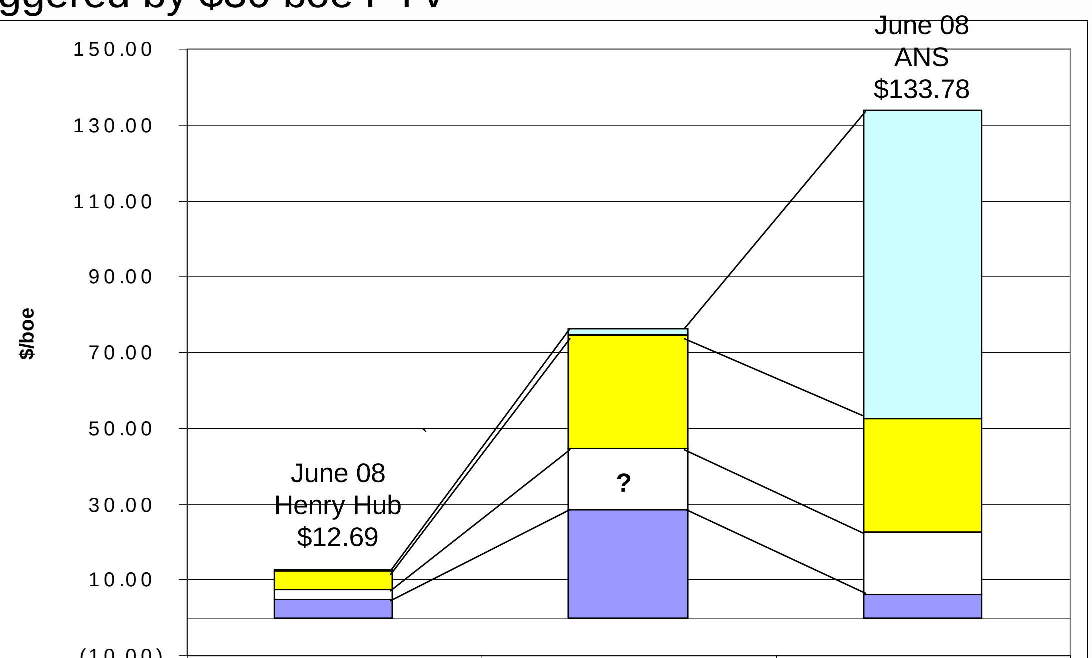
Ruggerio and Dickinson Agree III

- Rich and I agree
  - In material presented by Administration and Gaffney & Cline in 2007-2008 when focus was primarily on current oil production.
  - Under current law taxpayer can lower taxes on production from mature high “cash flow” projects by investing in beginning of other “low cash” projects
  - Works same way for ownership of
    - heavy oil deposits and 40 degree API Prudhoe Bay crude
    - High value oil and generally lower value gas
- Where Rich and I disagree – Further investigation of distinct gas tax warranted?

Looking Forward: Combined Progressivity Tax (CPT)

Gas exported from state and oil taxed at same rate – both part of combined progressivity calculation.

- Prices swings in one can effect tax on the other
- Gas converted to oil on Btu basis (roughly 6:1)
- Progressivity triggered by $30 boe PTV



	1 mcf	1 Boe Gas	Oil
Subject to progressivity June 2008	0.25	1.50	81.25
$30 no Progressivity zone	5.00	30.00	30.00
Upstream Costs ?	2.71	16.26	16.26
Downstream costs	4.73	28.38	6.27

Sources: Oil data from Spring 2008 RSB, Upstream Gas Cost is oil data on boe basis, Gas Downstream cost is Black & Veatch Estimate from Appendix G Alaska Gasline Determination, Oil price from DOR website, Gas Price from St Louis Fed Reserve website

Potential Dimensions of a Distinct Gas Tax

- If main issue is cross subsidy between oil and gas - may only need look at distinct oil and gas progressivity rather than (CPT) combined progressivity
  - Distinct mechanisms for oil and gas taxes would require allocation of costs between oil and gas. Like the 6:1 ratio embedded in current law, a simplifying compromise with side complications, though not impossible
- If main issue is difference in cost structure, may need to look at break points, “progressivity trigger” and rates in GPT (gas progressivity).
- If main issue is competitiveness in government-take as that fits into cost structure, may need to look at other aspects of gas tax.

Looking Forward: TransCanada's AGIA application suggestion:

- "TransCanada would rely on the State of Alaska to take all feasible actions exclusively within its authority as a sovereign power to ensure a favorable economic environment for potential Shippers on the Project. Those actions include:
  - engaging with the ANS producers to reach agreement on a commercially reasonable and predictable upstream fiscal regime that balances the needs of the state and the ANS producers;
  - and encouraging robust exploration for and development of new natural gas resources and the commitment of such resources to the Project."

3.26.2009

Source: TransCanada, Application for License, Alaska Gasline Inducement Act (November 30, 2007) page 2.5-52

Looking Forward: ConocoPhillips' Proposal

- ConocoPhillips' Proposal (ConocoPhillips current owner with BP of Denali Project)

  "The predominant lessee risk that should be the focus of discussion with the State is the risk of unclear, unpredictable State taxes and royalties. In order to enable shippers to make long term shipping commitments, prospective shippers need clearly defined natural gas fiscal terms and an understanding of the period during which these terms will apply. Addressing these issues remains a critical component necessary to develop ANS natural gas resources and make this Project a reality."

Source: ConocoPhillips, ANS Natural Gas Pipeline Proposal to the State of Alaska, (November 30, 2007) section IV page 5

Thank You

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