

OIL AND GAS PROPERTIES ANALYSIS

Tax Year 2007

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State Tax Commissioner
Department of Revenue

OIL AND GAS

TY 2007

Capitalization Rate Analysis and Results:

In developing a capitalization rate for use in valuing specific income-producing properties consideration is given to the three approaches generally employed in estimating a discount rate. As a matter of practicality, the Bands-of-Investment and Summation Technique approaches are utilized in establishing discount rates for producing oil and gas properties. Data for analysis has been derived in accordance with current Legislative Rule Title 110, Series 1J.

Safe Rate (3-Month Constant Maturity Interest Rates)
 January December 2005 **3.213%**

Risk Rate (Interest differential between Loan Rate and 3-Month Constant Maturity Interest Rates)
Loan Rate* **Risk Rate**
 2005 8.187% 4.974%
 *Prime plus 2%

Equity (Differential between Equity Rates and 3-Month Constant Maturity Interest Rates)
Equity Rate** **Safe Rate**
 2005 [12.5%/(1-.37)]-1.03213 16.628%
 ** *Moody's Handbook on Common Stocks and Value Line Investment Analysis*

Composite Risk Rate Loan and Equity Rates weighted by industry estimated capital structure.
 Equity Rate Debt Rate **Composite Risk**
 2005 10.8084% 1.741% **13.210%** ***
 Note: Debt equity Ratio Debt 35% Equity 65%
 *** Effective severance tax adjustment 0.95

Non Liquidity Rate Interest differential between 3-month Constant Maturity Interest Rates and a 1 year Constant Maturity Interest Rates which reflects a reasonable time necessary to sell active property.
 January December 2005 **1yr T Bill** **90 day T Bill** **Non Liquidity Rate**
 3.619% 3.213% **0.406%**

Management Rate Charges for the management of investment portfolios.
 Fixed Rate (by Rule) **0.500%**

Property Tax Rate Sixty percent (60%) of State average Class III property tax rate.
 2005 60% of 2.24= **1.344%**

Inflation Rate
 January December 2005 **3.400%**

Capitalization Rate

Since the valuation of oil and gas property is predicated on a three year production , the capitalization rate will be considered in a similar manner.

	<u>2005</u>	<u>2004</u>	<u>2003</u>
Inflation Rate	-3.400%	-3.300%	-1.900%
Safe Rate	3.213%	1.395%	1.030%
Composite Risk Rate	13.210%	14.172%	14.702%
Non Liquidity Rate	0.406%	0.432%	0.214%
Management Rate	0.500%	0.500%	0.500%
Property Tax Rate	<u>1.344%</u>	<u>1.356%</u>	<u>1.350%</u>
Total	15.273%	14.615%	15.896%
	<u>50.000%</u>	<u>33.333%</u>	<u>16.667%</u>
	7.636%	4.872%	2.649%
			15.157%

Capitalization Rate Rounded to:

15.25%

MULTIPLIERS FOR 15.25 MID-YEAR LIFE (ANNUALLY)

<u>YEAR</u>		<u>YEAR</u>	
1	0.931493	21	0.054496
2	0.808237	22	0.047285
3	0.701290	23	0.041028
4	0.608495	24	0.035599
5	0.527978	25	0.030889
6	0.458115	26	0.026801
7	0.397497	27	0.023255
8	0.344900	28	0.020178
9	0.299262	29	0.017508
10	0.259564	30	0.015191
11	0.225305	31	0.013181
12	0.195492	32	0.011437
13	0.169624	33	0.009924
14	0.147180	34	0.008611
15	0.127705	35	0.007471
16	0.110807	36	0.006483
17	0.096145	37	0.005625
18	0.083423	38	0.004881
19	0.072384	39	0.004235
20	0.062806	40	0.003674