

NATURAL GAS LEASES



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Certified Minerals Manager

TOPICS



- Basic Rent & Royalty
- Recent Pricing Examples
- Spacing Units
- Gas Industry Practices

TYPES OF INCOME (Royalty Interest)

- Rents
- Royalties
- Signing Bonus
- Advance Royalties
- Shut-In Royalties
- Delay Rentals
- Seismic Fee
- Anti-flipping Fee
- Easements
- Damage Payments
- Well Rig Location (spud) Fee

3

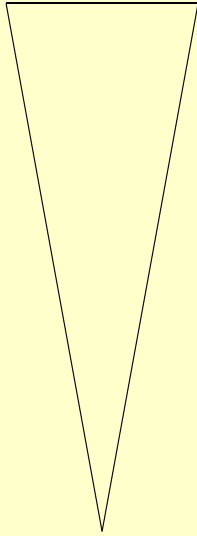
BASIC RENT & ROYALTY



4

Fee Simple

Surface



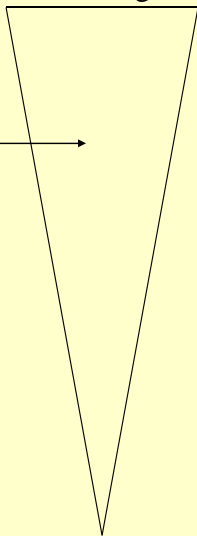
5

Upon Signing the Lease

Surface Rights

Mineral Rights →

The Lease
Itself



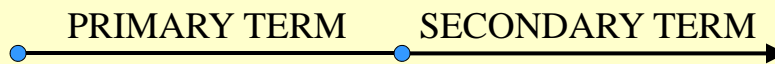
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RENT

\$\$\$\$ per acre for a period
of time (during PRIMARY
TERM)

7

“STANDARD LEASE”



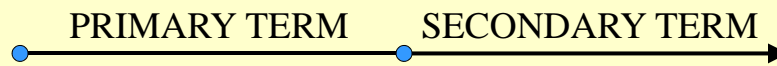
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ROYALTIES

A percentage of the value
of the gas removed from
the property (during
SECONDARY TERM)

“STANDARD LEASE”



11

ROYALTIES

(the REAL money)

12

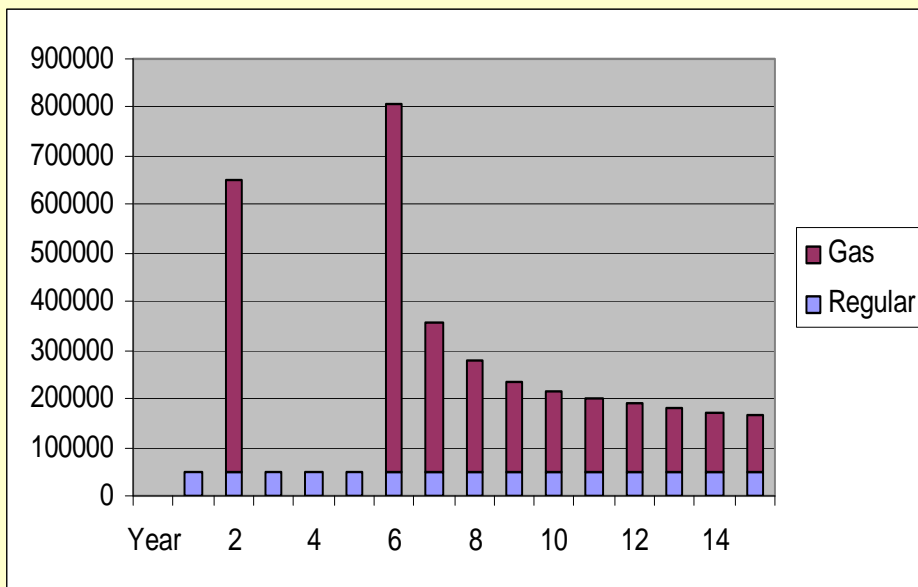
The OFFER

“I’ll offer you \$6,000 per acre as a “lease bonus” and a 20% royalty on your gas. As you can see, I have the check already filled out and it’s right here on the table in front of you.”

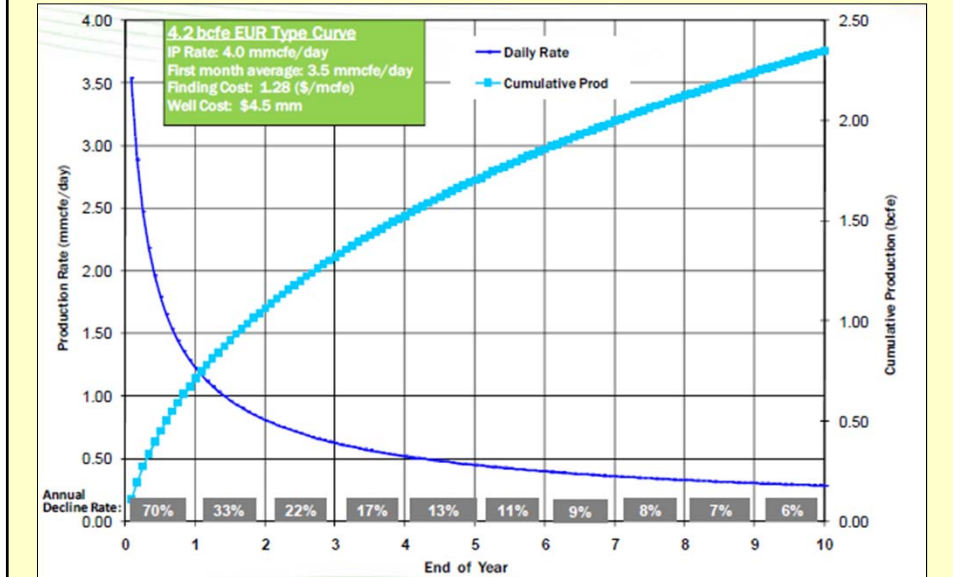
“All you have to do is sign right here.....”

13

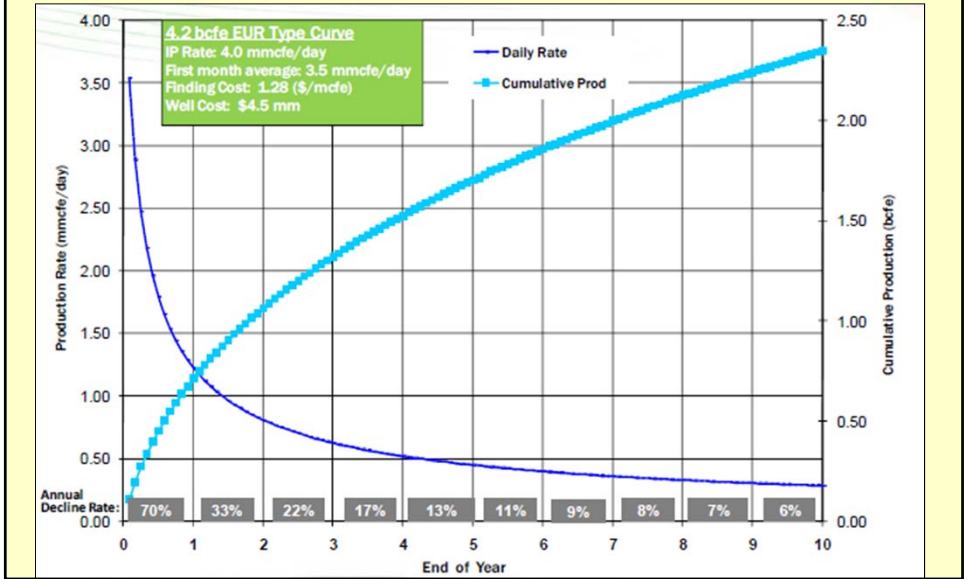
Projected Income (example)



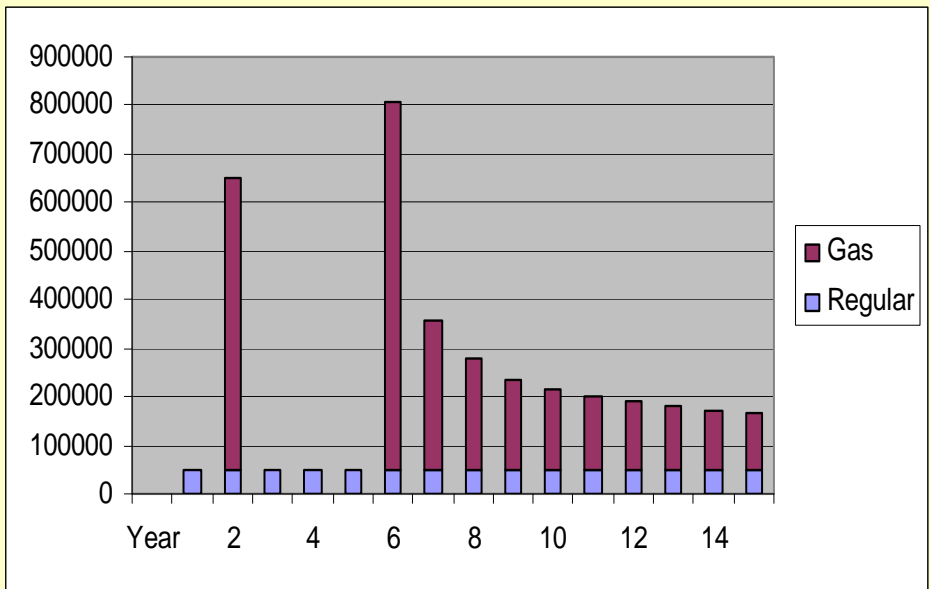
Marcellus Shale Horizontal Well Production Profile
 (Chesapeake 2009 Institutional Investor & Analyst Meeting
 10/14/09 New York, NY)



Marcellus Shale Horizontal Well Production Profile
 (Chesapeake 2009 Institutional Investor & Analyst Meeting
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Projected Income (example)





RECENT PRICING EXAMPLES



20

(overheard at a family reunion)

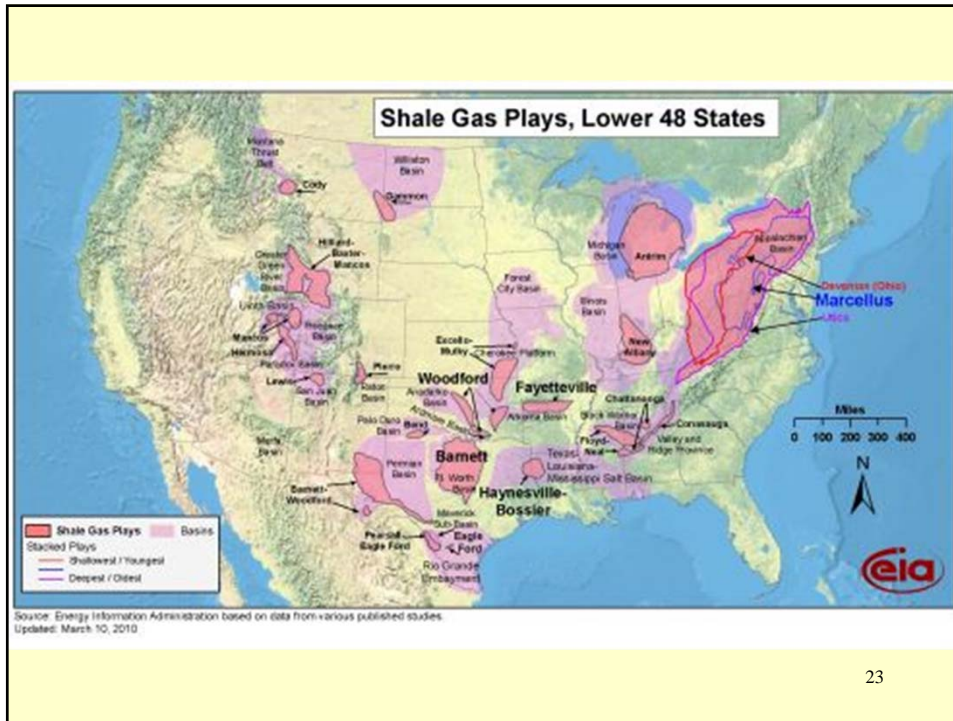
“I visited a guy in
Pennsylvania. He only got
\$50 an acre, but now he’s
getting \$87,000 a month !!!
He says he feels like Jed
Clampett !!”

21

State of Utah

- Utah has a strong, active environmentalist movement – Federal lands no longer being leased there
- State gets flat 1/6th (16.67%) royalty
- Standard lease – only bid is for “bonus”
- Minimum bid is \$2 per acre

22



23

Always **ZERO** Deductions !!!

FORMATION/STATE	BONUS	RATE	TERM
Eagle Ford/TX	850	25	3
Eagle Ford/TX	1500	25	3
Eagle Ford/TX	8000	25	3
Haynesville/LA	6000-13000	25	3
Haynesville/TX	175-5200	25	3
Woodford/OK	200-2500	18.75-20	3
Marcellus/WV	1000	18.75	3
Marcellus/PA(Lycoming)	1000	18.75	3&2
Marcellus/PA(Potter)	1500	15	5
Marcellus/PA(Potter)	1000	12.5	1
Marcellus/PA(Susquehanna)	6000	20	5
Marcellus/PA(Tioga)	NO OFFERS !!!		24



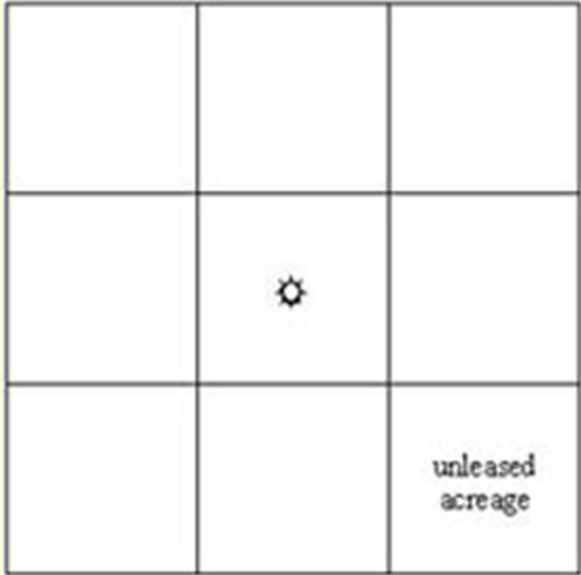
SPACING UNITS

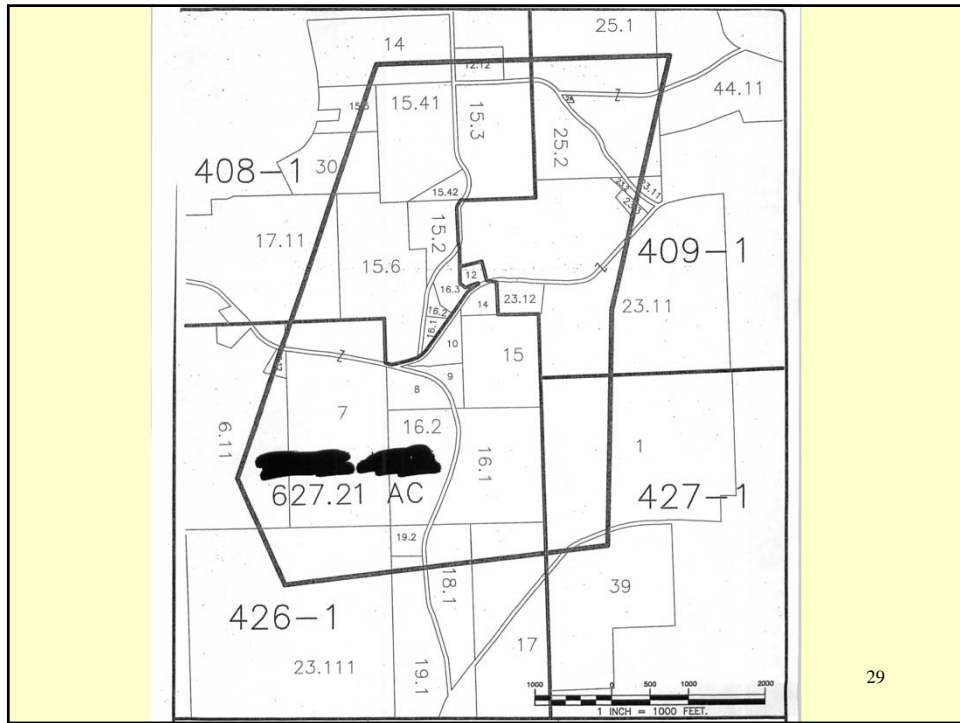


26



SPACING UNIT





GAS INDUSTRY PRACTICES



31

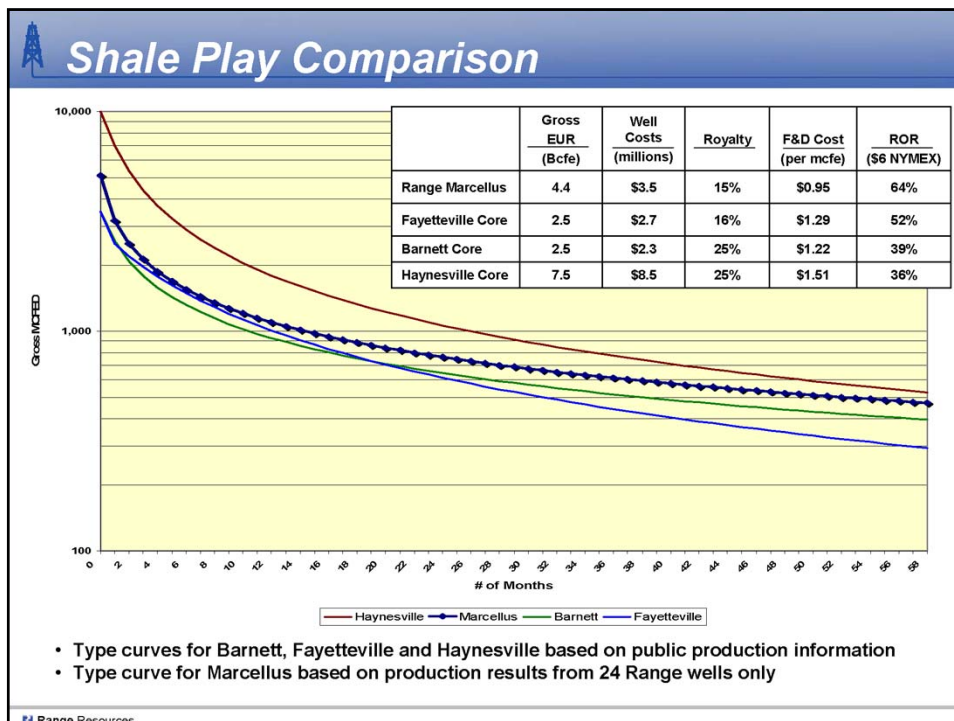
WHY THEY WILL
DRILL HERE...

32

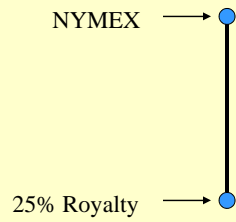
PRICING FACTORS

- Multiple factors
- The Economy
- Wall Street willingness/ability to finance
- Infrastructure (gathering lines)
- The “culture of those people”
- Everybody trying to sell all at once
- 25% + royalties common for proven fields

33



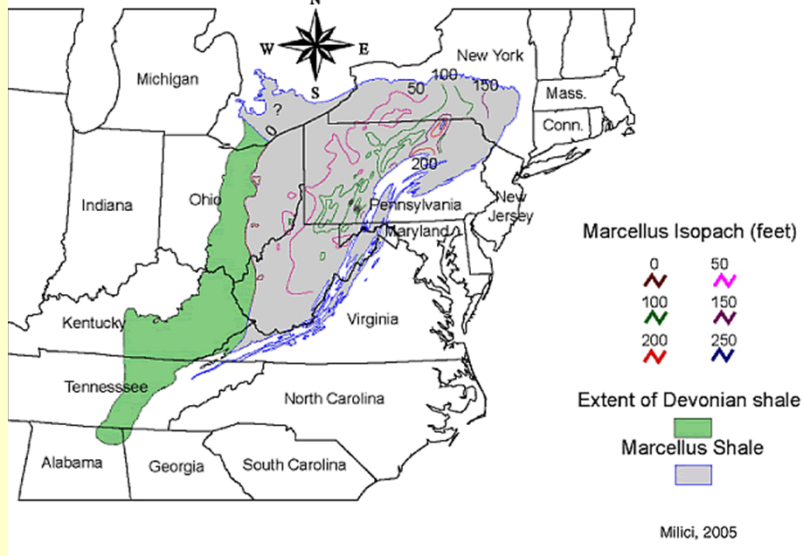
GAS COMPANY MARGINS



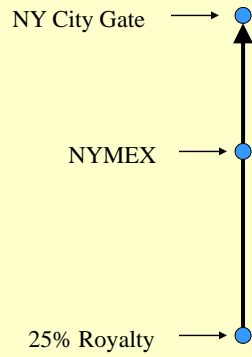
35

Marcellus Formation Map

Distribution of Marcellus Shale in Appalachian Basin

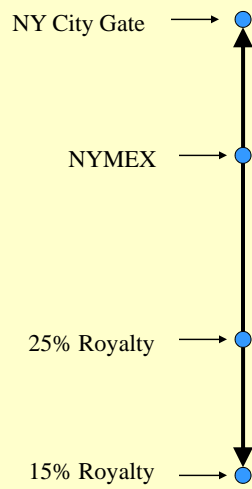


GAS COMPANY MARGINS



37

GAS COMPANY MARGINS

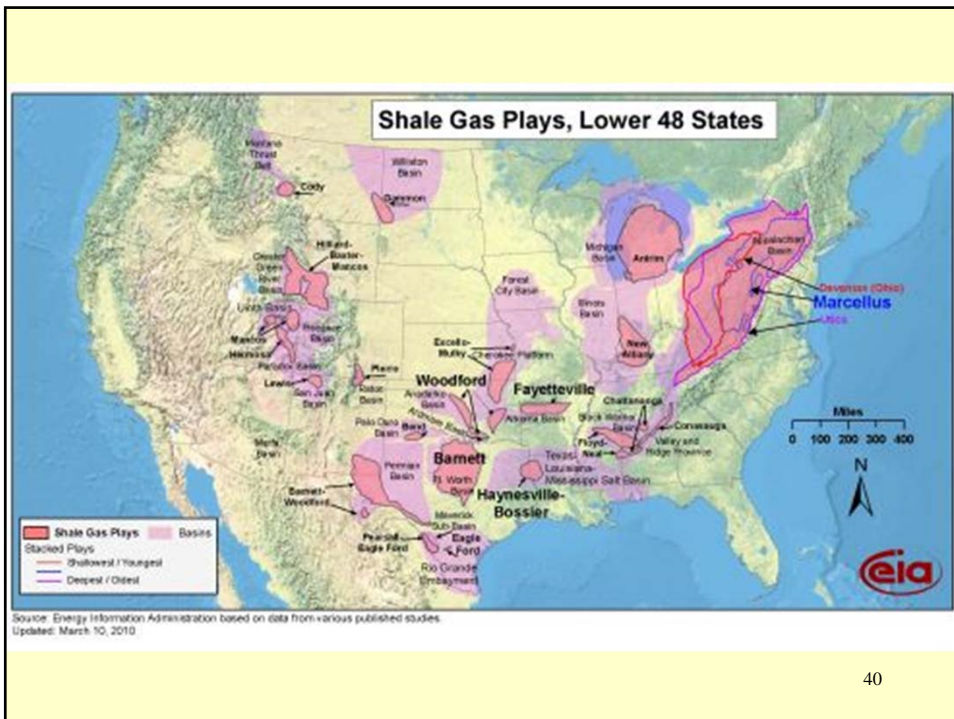


38

Break-Even Points per million BTU per Ross Smith Energy Group, an industry research firm in Calgary

- \$5.18 – Barnett
- \$4.49 – Haynesville
- \$3.88 – Eagle Ford
- \$3.74 – Marcellus

39



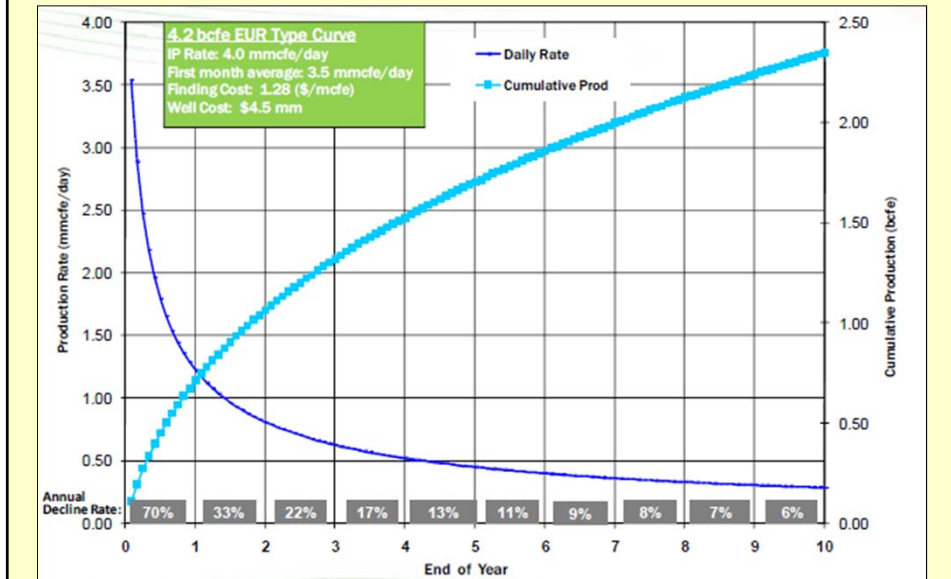
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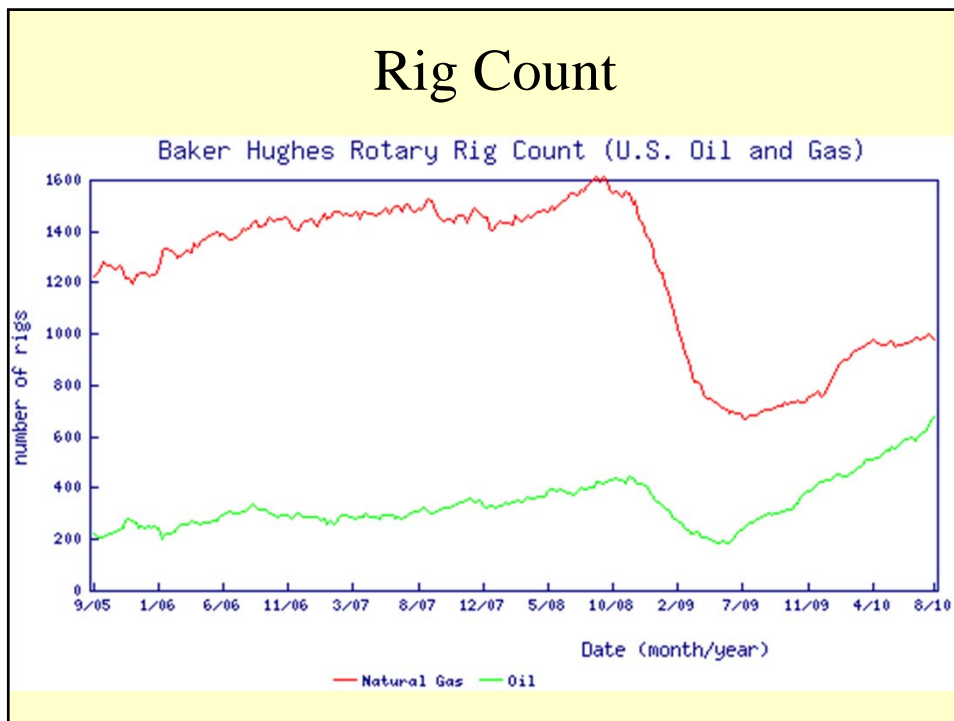
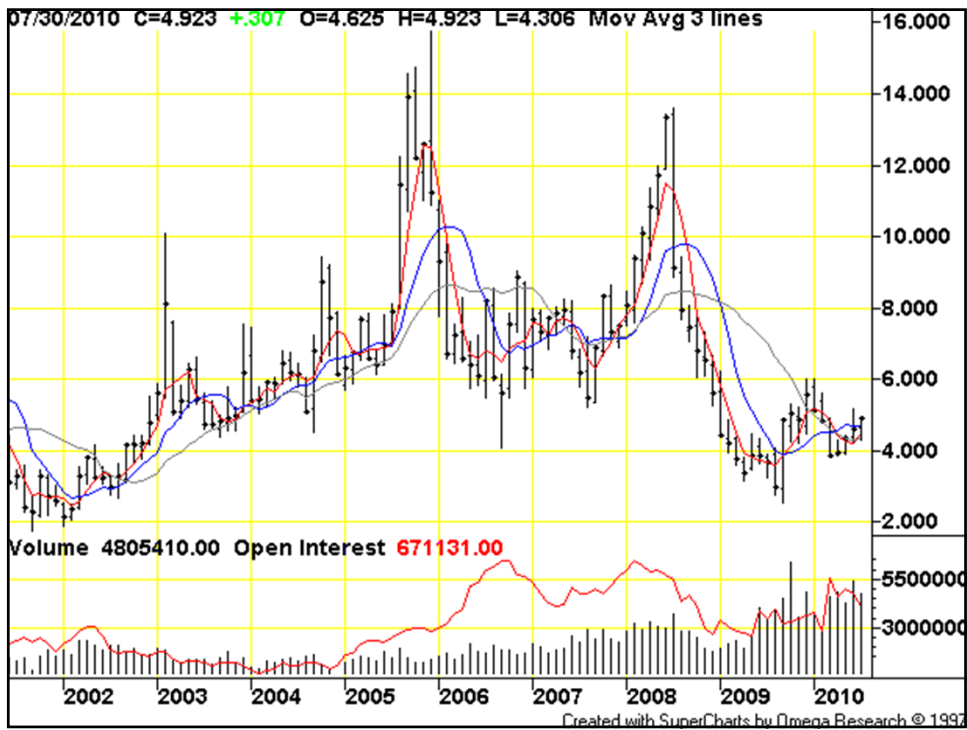
41



Marcellus Shale Horizontal Well Production Profile
 (Chesapeake 2009 Institutional Investor & Analyst Meeting
 10/14/09 New York, NY)



WHY WOULD YOU WANT TO
 SELL THE BULK OF THE
 LARGEST FINANCIAL ASSET
 OF YOUR LIFE AT THE
 LOWEST POSSIBLE PRICE??



Gas Industry “Business Models”

- Flip the Lease
- Hold by Production / Use as collateral
- Work for a living (actual drilling)

47

- DEC
- EPA
- HBP

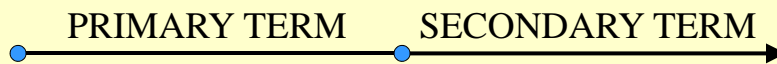
48

HBP (Held By Production)

Chesapeake
(Haynesville example)

49

“STANDARD LEASE”



50

GETTING INTO SECONDARY

Companies already leased are doing everything possible to retain acreage under secondary – sometimes using questionable practices

51

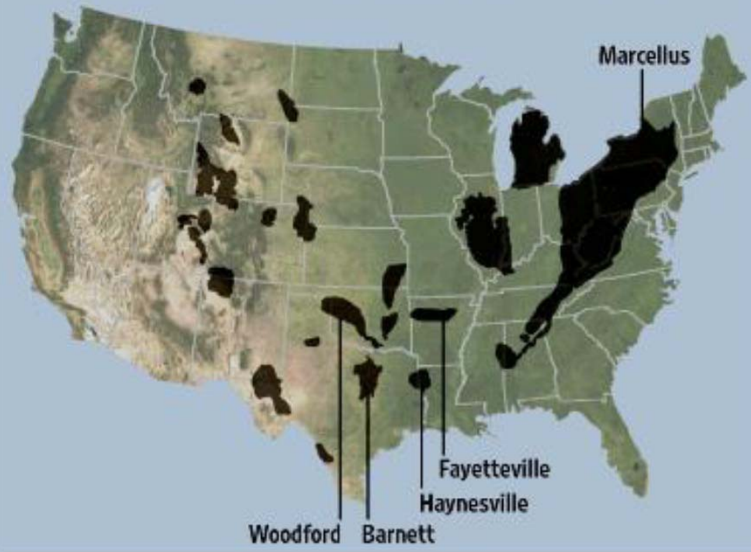
FORCE MAJEURE

a/k/a “farce majeure”

52

Squeezing Gas From a Stone

Location of shale fields believed to contain large natural-gas reserves.



Period	Group	Unit	Lithology	
Devonian	Upper	Genesee	Genesee Shale	☼
			Tully Limestone	☼
	Middle	Hamilton	Marcellus Shale	☼
			Onondaga Lst Oriskany Sst	☼
	Lower	Heldeberg	Manlius Lst Rondout Dol Akron Dol	☼
			☼	
Silurian	Upper	Salina	Bertie Shale	☼
			Syracuse Salt Vernon Dol	☼
			Lockport Dol	☼
	Lower	Clinton	Rochester Sh Irondequoit Lst	☼
			Sodus Shale	☼
			Medina	Grimpsy Sst
Ordovician	Upper	Trenton/ Black River	Queenston Sst Lorraine Sst Ulica Shale	☼
			Trenton Lst Black River Lst	☼
	Lower	Beeman- town	Tribes Hill Lst Theresa Sst Little Falls Dol	☼
Cambrian	Upper		Potsdam Sst	☼
Precambrian Basement				

54

PUGH CLAUSE (horizontal)

Unit Size
65.757 acres

Held by Production
854.17 acres

Questions

- Who determines the unit?
- Does the lease include a "Pugh Clause"?
- Why is the unit rectangular?
- Does it conform to the area drained by the well bore as well as that covered by the frac?
- Will offset wells be drilled and when?

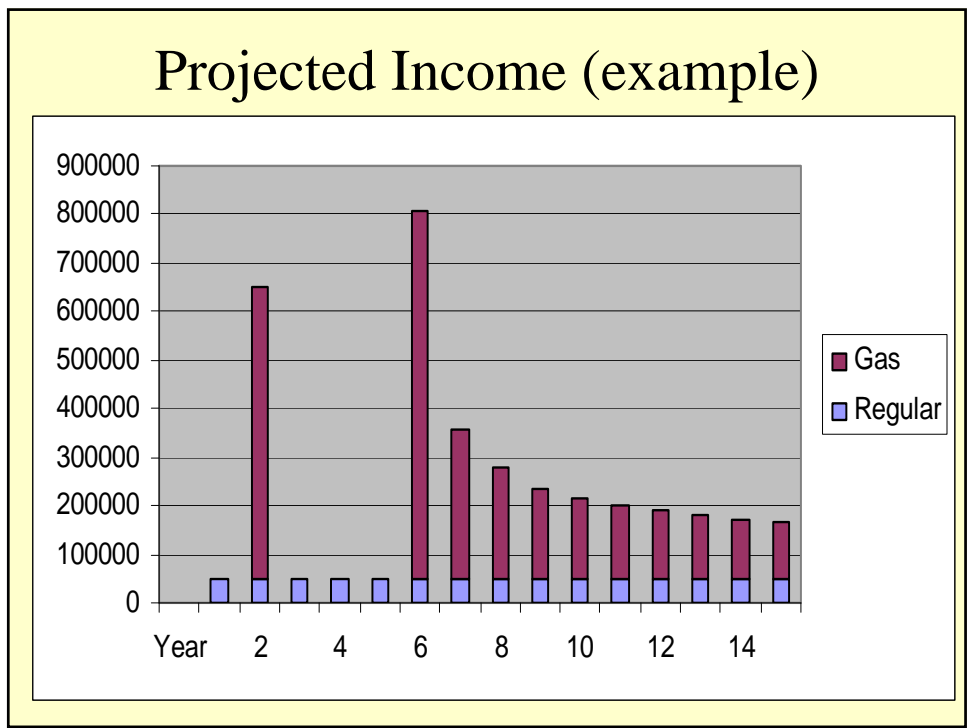
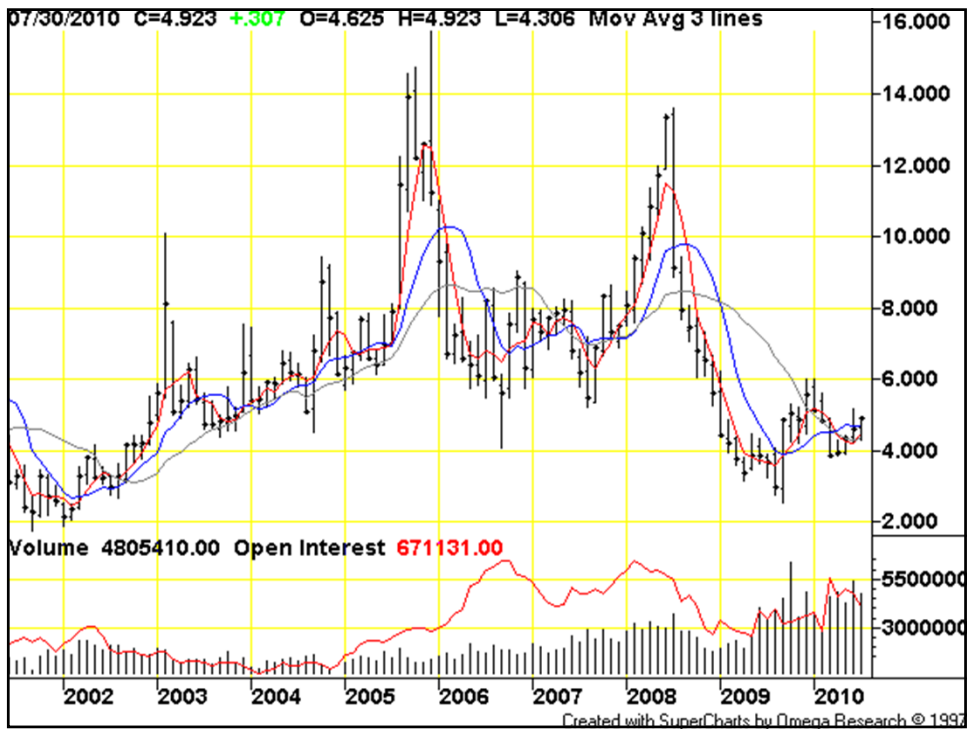


55

Cabot / Chesapeake (Pennsylvania)

Now drilling only TWO wells per
pad, instead of six or eight

56



ACTUAL STORY

- \$2500/acre x 200 acres = \$500,000
- Spent \$100,000 on “toys” (pickup truck, bass boat, snowmobiles, etc.)
- Invested remaining \$400,000 in late summer 2008
- Lost 50% in the stock market
- \$200,000 remaining
- Tax on the \$500,000 was \$200,000

59

“A natural gas lease is a very complex business transaction masquerading as a lottery ticket.”

- Chris Denton, Esq.

60



“College later? Candy now?
College later? Or, candy now?” 61



THANK YOU !!!



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