

# Record Prices & Unprecedented Challenges: Interesting Times in E&P

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NEWFIELD



BALANCE FOCUS CONTROL

# NAPE 2006 – Record Product Prices



Crude Oil - WTI

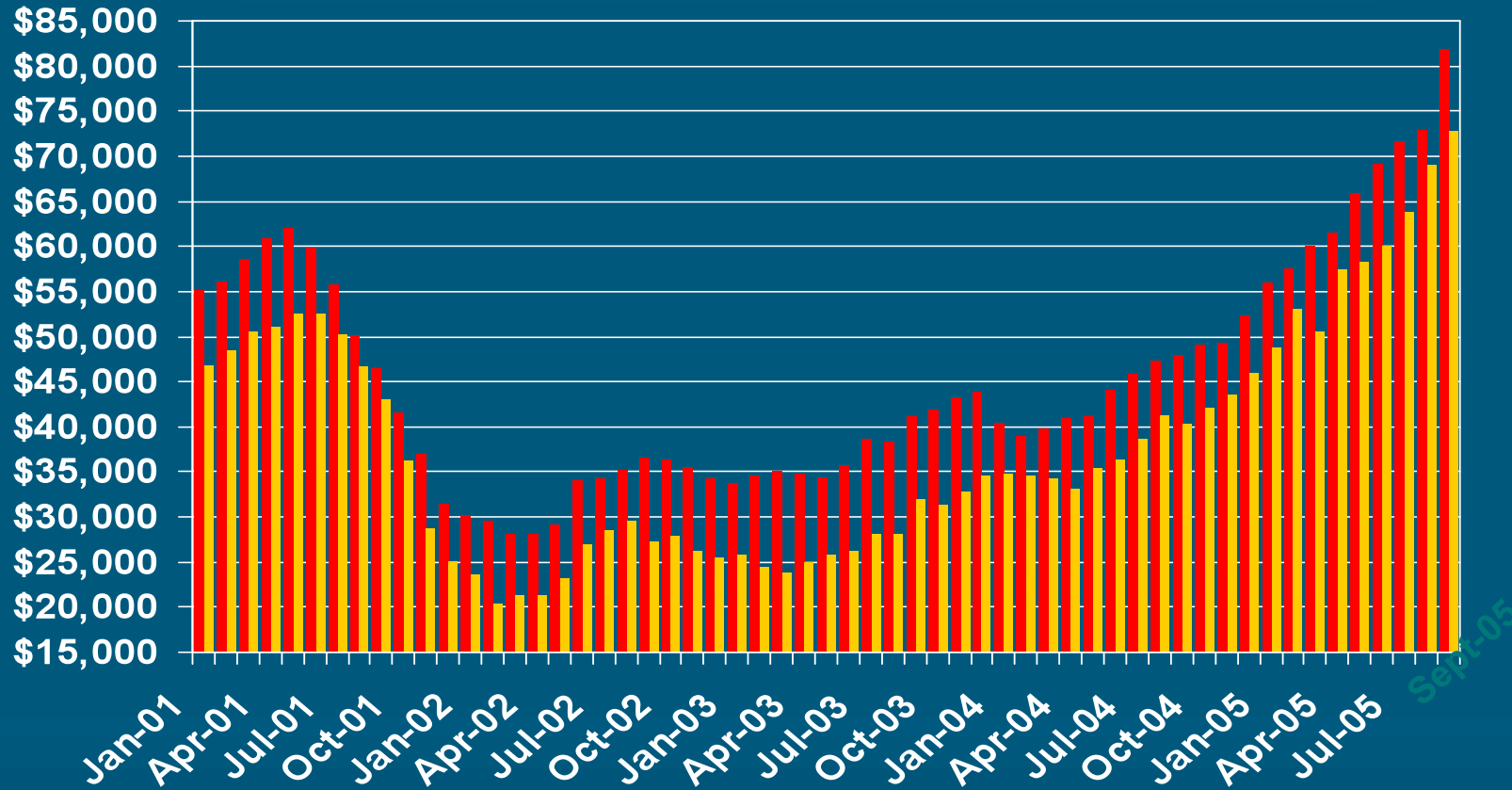


Natural Gas –  
Henry Hub (US)

# NAPE 2006 – Record Service Costs



## GOM Jack-up Dayrate Comparison



■ Rowan  
■ Industry

2001 – 2005 Averages		Sept. Average:	
Rowan	\$45,540	Rowan	\$81,842
Industry	\$37,988	Industry	\$72,735

Source: ODS – Petrodata / Rowan Companies, Inc. – Rowan's numbers included in Industry average

# NAPE 2006 – Record Service Costs



## Worldwide: Jack-up Supply Deficit

- Southeast Asia 4 - 5 rigs
- India 4 - 6 rigs
- West Africa 3 - 5 rigs
- Australia 1 rig
- Mexico 2 rigs
- Mediterranean 2 rigs
- U.S. GOM 6 rigs
- Middle East 5 rigs
- North Sea 5 - 7 rigs
  
- Total Rig Deficit 32-39 Jack-ups
- Newbuilds (2005 - 2008) 40 Jack-ups

## Drilling Services Cost Increases

- Drilling Fluids: +8% per well
- Cement: +27% per well
- Rental Tools: +15%
- Crew & Work Boats: +34% on average
- Rig Diesel: +55%
- Open Hole Logging: No change
- Tubulars: SMLS +60%; ERW +20%; Chrome & 13CR +40%

# NAPE 2006 – Unprecedented Challenges



- **Public Perception**  
*Industry Reputation*
- **People**  
*Aging workforce*  
*Low school enrollment*
- **Prospects**  
*Basin Maturity*  
*Competition*  
*Access Issues*

# NAPE 2006 – Outlining the Challenges



- **Public Perception**

Which of these industries do you think are generally honest and trustworthy

	Feb. 2003	Feb. 2004	Oct. 2005
	%	%	%
Supermarkets	40	42	39
Hospitals	34	35	34
Banks	35	40	34
Computer hardware companies	27	29	27
Computer software companies	22	25	22
Packaged food companies	23	23	21
Airlines	20	22	17
Online retailers	n/a	n/a	16
Electric and gas utilities	n/a	n/a	14
Car manufacturers	14	18	13
Telephone companies	12	13	11
Life insurance companies	11	15	10
Pharmaceutical companies	13	14	9
Health insurance companies	7	9	9
Managed care companies	4	5	5
Tobacco companies	3	4	4
<b>Oil companies</b>	<b>4</b>	<b>4</b>	<b>3</b>

Source: Harris Poll, October 2005

# NAPE 2006 – Outlining the Challenges



- **Consequences of Negative Public Perception**
- **Easy target for politicians and environmentalists**
  - *Increase taxes*
  - *Deny access*
  - *Change contract terms*
- **Difficulty drawing new talent to industry**

# NAPE 2006 – Outlining the Challenges



- **People / Workforce: A Looming Crisis**
- **Shrinking talent pool (1983 – 2002)**
  - *Petroleum engineers: 33,000 - 18,000*
  - *Geologists / Geophysicists: 65,000 - 48,000*
- **Retirements**
  - *More than half of the industry will retire in the next seven to ten years*
- **Service companies and field operators face the same challenges as oil companies**

# NAPE 2006 – Outlining the Challenges



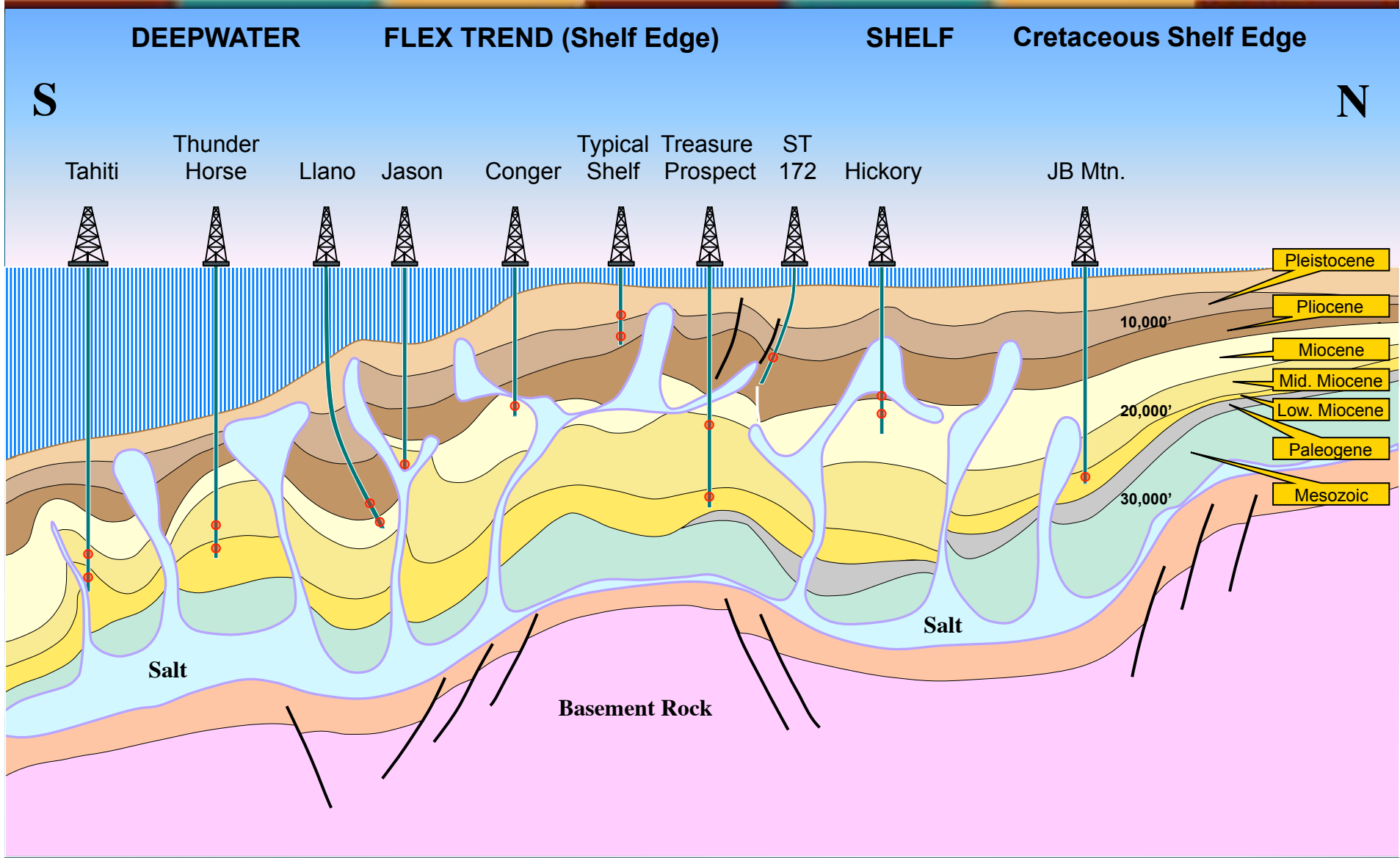
- **Where are the prospects?**
- **More independents are looking to international opportunities for reserve and production growth**
  - *Since 2000, independents have been active in 80 countries outside the US*
  - *International spending by North American independents has increased by 60% since 2000*
- **New countries and areas are open for investment**
  - *Activity has moved from onshore to offshore to deepwater*
  - *Governments offering improved fiscal terms and encouraging activity in many countries*

# NAPE 2006 – Outlining the Challenges



- There are several factors contributing to this increase in international activity, including ...
  - *Maturity of North American basins*
  - *High product prices and resulting cash flow available for investment*
  - *Mergers / supermajors*
    - Fewer “historical” competitors
    - Higher “materiality” thresholds

# NAPE 2006 – Trends in GOM Exploration



# NAPE 2006 – Outlining the Challenges



- There are significant challenges facing independents as they expand their international efforts
  - *Cost and availability of services*
  - *Financial considerations and market expectations*
  - *Industry dynamics*
    - Competition from NOC's
    - Acreage availability
    - Shortage of experienced people

- **Record Prices**
  - *Supply - demand*
  - *Self-correcting markets*
- **Globalization of Natural Gas**
  - *Linkage between crude oil and natural gas*
- **Prices determined by marginal barrel or mcf**
  - *Oil sands production*
  - *Unconventional gas - USA*
- **Service costs**
  - *Will moderate as new equipment is available ...  
and as the marginal prospect does not get tested*

# NAPE 2006 – Addressing the Challenges



- **Changing the public's perception**
- **Need industry-wide consensus and initiative**
  - *Communication*
  - *High tech, challenging & exciting career opportunity*
  - *Critical component of national economy*
- **IPAA Actions**
  - *New Education committees launched*
  - *Working with other industry groups to present clear, consistent message*

# NAPE 2006 – Addressing the Challenges



- **Attracting and retaining people**
- **Increase number of new entrants**
  - *Recruiting at high school level*
  - *Sponsoring college students*
  - *Funding professors & departments*
- **Retain existing professionals beyond retirement**
  - *Experience & knowledge cannot be replicated*
  - *Companies must adopt new flexible policies to keep this generation engaged*

- Where are the prospects?
- Higher prices can change prospect economics
- What are the types of plays that will attract future investments from independents?
  - *Mature basins where major companies are in “harvest mode”*
  - *Deepwater extensions of producing provinces*
  - *Frontier areas*
- Moderate higher risk capital exposure through implementation of new technology

- Factors that countries may consider to stimulate exploration
- Improved access to:
  - *Acreage*
  - *Infrastructure and markets*
  - *Data*
- Regulatory framework
- Appropriate fiscal terms
- Transparency

- **Higher product prices contribute to:**
  - *Record cash flows for E&P companies*
  - *More intense competition for opportunities*
- **Higher service costs and decreasing size of discoveries are:**
  - *Increasing risk capital exposure per EV reserve potential*
  - *Putting pressure on returns and unit finding costs*
- **New efforts are needed to overcome the challenges in today's environment**
- **May you live in interesting times ... and may you prosper in the Year of the Dog**

# NAPE 2006 – Newfield's Corporate History



- **Founded in 1989**
  - *Initial capitalization US\$9 million*
  - *Focus on Pliocene Trend, offshore Louisiana,*
- **Initial Public Offering in 1993**
  - *Enterprise value US\$250 million*
  - *Reserve base 140 bcfe*
- **Onshore US effort started in 1995**
- **International program started in 1997**
- **Current status**
  - *Enterprise value US\$8,000 million*
  - *Reserve base 2,300 bcfe*

# NAPE 2006 – Newfield's Int'l. Focus Areas



## NORTH SEA

- Hold interests in nine licenses
- Commercial development - Grove Field

## CHINA

- Developing 2 Fields - Bohai Bay
- Exploration Acreage - PRMB



## BRAZIL

- Acquired two concessions
- Plan: 3-D and drilling programs in 2006/7

## MALAYSIA

- Developing 4 Fields
- Active Exploration Program
  - *Peninsular Malaysia*
  - *Deepwater Sarawak*

## AUSTRALIA (Timor Sea)

- Managed FPSO Operations
- Sold Business in 2003