

## Key Features

- Analytic capabilities include and extend well beyond company level research. Prism generates results (including forecasts and comparative benchmarks of key results) by country, play, basin, and a very wide range of asset types and characteristics
- Designed to drill-down into the data on a wide range of meaningful categories of information
- Vital A&D screening and portfolio management resources
- Comparative analytics
- Powerful tool for generating insight into company strategy
- Results, analysis and detail that is not provided by any other supplier in the industry

18 June 2009

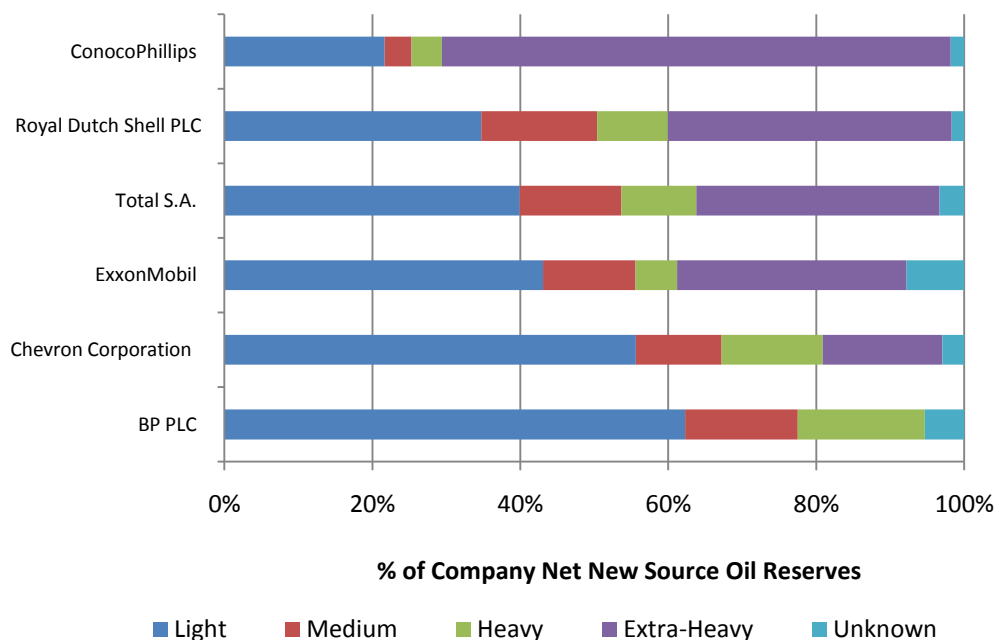
# PRISM: Defining Features of the Future Oil & Gas Industry

Prism is an online analytic system. It is designed to provide detailed analytic results for the global oil and gas industry and insights into future drivers of performance and strategy. The focus is on the full spectrum of factors affecting the volume, costs, and value of oil and gas operations worldwide.

Each future issue of On Point will present selected results from Prism. These results will provide current information on what we believe are the critical factors defining the future of the world oil and gas industry and of the leading industry competitors. They will also illustrate the analytic power and scope of Prism.

This month's focus is a comparison of the shifting quality characteristics in the production base of selected large global competitors:

The Quality of Net New Source Oil Reserves, Six Large Global Competitors



The role of light and medium oil in BP's project portfolio reflects very large near to medium-term net volumes from deepwater projects in the Gulf of Mexico and Angola plus continuing development of the Azeri assets.

For more information or to schedule a live demonstration of Prism please contact us at 913-451-9539.

Gordon Energy Solutions is an energy consulting firm specializing in competitor analysis, strategic decisions, political risk analysis, and global issues concerning the international, integrated oil & gas industry. We anticipate future opportunities and challenges confronting our clients and assist in exploiting those opportunities.

By integrating the corporate and financial dimensions of strategy and performance with detailed project level analytics, we maintain a unique approach to your business. GES provides value to our clients through our forward-looking, critical analysis and unique perspective.

The cornerstone of our firm is supplying Research Services on Demand, enabling GES to deliver the analysis you want, when it's needed. Our services are uniquely tailored to fit your company's needs and reflect our role as a source of independent research and analysis.

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## Frontier Licensing Continues

In a number of recent issues of On Point we have commented on three important forces at work in the industry today. These are (1) new business development programs in frontier areas, (2) the opportunities that the current financial crisis create in selected areas (most notably North American unconventional onshore gas but also demonstrations of the potential power of sovereign wealth capital as a tool for entry), and (3) directions of change in industry costs. In recent weeks there has been continuing evidence that each of these forces are at work in company decisions.

Despite current conditions in the industry and the global economy, a number of companies are building their frontier acreage positions. Key areas of activity in recent weeks include: deepwater Indonesia, the Egyptian Mediterranean offshore, the deepwater Black Sea, and Norway's Barents Sea and Norwegian Sea. In these areas, the logic of acreage building is reinforced by the interaction of industry economics with country specific political and economic factors that are likely to force pragmatism in public policy.

## Indonesia

In late April Indonesia awarded 11 new blocks including:

- Kumawa and Cendrawasih to Marathon and ExxonMobil, respectively
  - Kumawa covers an area of 1.24 million acres in water depths ranging from 2,400 to 4,000 feet; Marathon holds a 49% working interest in partnership with Komodo Energy (a subsidiary of Block Gold Energy). The Kumawa block award adds to Marathon's current interests in Pasangkayu (between Sulawesi and Kalimantan) and Bone Bay located south of Pasangkayu
  - Cendrawasih entails a US\$40 million exploration commitment over a three year period; ExxonMobil won the block in partnership with Biak Petroleum

- South Sesulu: offshore Kalimantan to Hess; Hess committed to spend US\$26 million to explore the block over a three year period

Other companies winning blocks in the round are Niko Resources, Australia Worldwide Exploration, and a number of other independents.

## Mediterranean Offshore (Egypt)

BP won two adjacent offshore blocks in the EGAS 2008 International Bid Round. These include:

- Block 2 (North Tineh Offshore)
  - 593,000 acres in water depths up to 3,200 feet
  - BP holds a 100% interest in Block 2
  - Work obligations include three exploration wells over a six year period
- Block 3 (North Damietta Offshore)
  - 395,000 acres
  - BP, Shell and Petronas are partners in the block with equal working interests
  - Work obligations include four exploration wells over a six year period

In a somewhat surprising move, Total also won a 90% working interest in Block 4 (East El Burullus Offshore). The company partnered with ENEL (10%). Block 4 is a 622,000 acre block in water depths ranging from 328 to 5,200 feet. Finally, BG won Block 1 (North Gamasa Offshore Block).

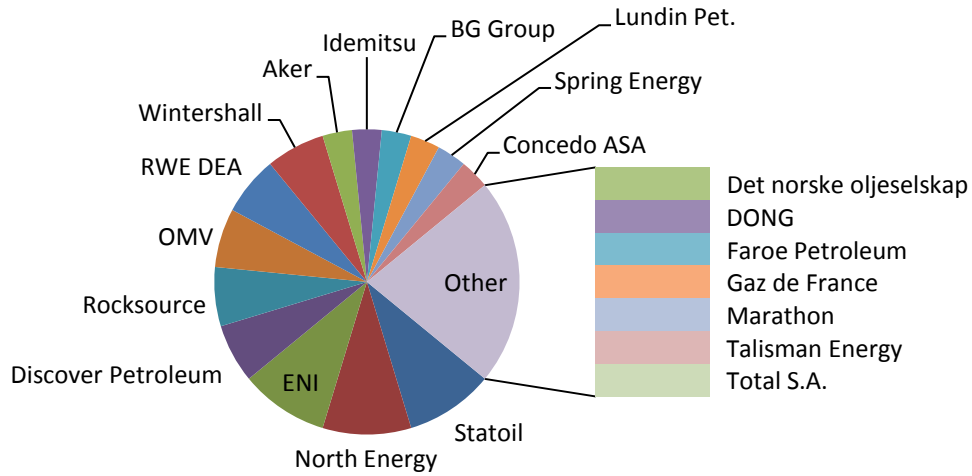
## ExxonMobil Farm In to Black Sea Acreage

The Turkish government has approved the previously announced TPAO/ExxonMobil agreement which allows ExxonMobil to farm into two deepwater Black Sea blocks. This deal, combined with a recent agreement for Romanian acreage gives ExxonMobil a very significant position in this untested deepwater play. From a strategic perspective ExxonMobil's moves are reminiscent, on a smaller scale, of its successful Angolan deepwater land accumulation program.

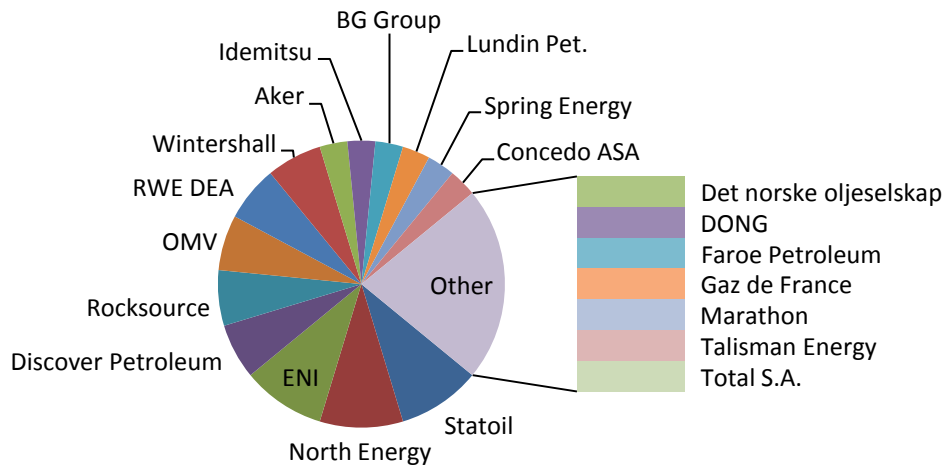
**Barents Norwegian Seas**

In its latest round Norway awarded blocks in the Norwegian Sea and the Barents Sea. As shown in Figure 1, a wide range of companies won blocks although companies differed greatly in their focus areas.

**Figure 1: Barents Sea Blocks Won in Norway's 20th Licensing Round**



**Figure 2: Norwegian Sea Blocks Won in Norway's 20th Licensing Round**



## Unconventional North American Gas Plays

### ENI Enters US Onshore Shale Gas Play

Following BP and Statoil's lead, ENI has joined the group of global competitors that have acquired a position in a US shale gas play by striking a deal with a land rich independent producer. In a US\$280 million deal with Quicksilver Resources, ENI receives a 27.5% interest in part of Quicksilver's Fort Worth Basin acreage (estimated 13,000 net acres). ENI estimates proved and probable net reserves of 40 Mmboe (23 Mmboe proved) and projects net production from the deal will average 4 Mboe/d in 2009, rising to 11 Mboe/d by 2011. Current plans call for drilling 300 wells by 2013 at an additional gross capital cost of US\$764 million. ENI will also have the right to a 27.5% working interest participation in future land acquisition programs by Quicksilver in the Area of Interest.

Table 1 evaluates the economics of the deal using the GES model for the Barnett Shale.

Our analysis estimates that ENI paid handsomely for these reserves: US\$7.00 per boe proved and probable reserves to acquire its position and will expend an additional US\$4.98 per boe to develop the resources it has acquired. Based on our cash flow models the deal will require a mid-cycle gas price considerably above US\$6.50/mcf to break even at a 10% discount rate.

However, as we noted in our discussion of the previous BP and Statoil deals, the potential value of this transaction extends beyond the economics of the deal from a stand alone perspective. The significance of the deal is greatly enhanced by (1) the options it offers to ENI in any future efforts to build on the initial assets and (2) the experience ENI stands to gain in unconventional gas exploitation. As we have also previously noted, the moves BP, Statoil and ENI have made into the North American unconventional gas sector mark an important shift in strategic attitudes within the global peer group of companies concerning the potential role of North American upstream operations.

Table 1: The Economics of the ENI/Quicksilver Deal

	Acquisition Price \$mm	Contingent Payment \$mm	Future Development Cost \$mm	All In Costs \$mm
<b>Net Reserves mmboe</b>	<b>\$280.0</b>		<b>\$199.4</b>	<b>\$479.4</b>
<b>Proved</b>	<b>83.6</b>			
<b>Proved &amp; Probable</b>	<b>145.5</b>			
<b>ENI Share</b>	<b>27.5%</b>			
<b>Proved mmboe</b>	<b>23.0</b>			
<b>Proved &amp; Probable mmboe</b>	<b>40.0</b>			
<b><i>\$/boe Proved</i></b>	<b>\$12.17</b>	<b>\$0.00</b>	<b>\$8.67</b>	<b>\$20.84</b>
<b><i>\$/boe Proved &amp; Probable</i></b>	<b>\$7.00</b>	<b>\$0.00</b>	<b>\$4.98</b>	<b>\$11.98</b>

### In other US Shale Gas news:

- Denbury Resources has agreed to sell 60% of its Barnett Shale assets to privately held Talon Oil & Gas LLC. Denbury will use the proceeds to pay down its bank debt. Based on Denbury's estimated Barnett shale reserves at 12/31/2008, Talon will acquire 45.8 Mmboe (US\$5.90 per Mcfe proved reserves).
- EnCana and Shell are looking to farm down as much as half of their positions in 133,000 acres in the Haynesville Shale (Natchitoches and Sabine Parishes in northern Louisiana)
- KKR has bought into East Resources Marcellus Shale play in a deal involving convertible debt. Also, Morgan Stanley has invested in Triana Energy Investments, also in the Marcellus Shale

### Brazil

Two important stories out of Brazil merit note.

The first highlights the potential for using capital as a tool for building acreage in Brazil. As part of a US\$10 billion finance agreement between Petrobras and the China Development Bank, Sinopec has been offered two offshore blocks. While it is not clear at this time which blocks will go to Sinopec, Petrobras was reported to have indicated that they are not in the pre-salt play.

A second item of note is the report that ANP has denied the Petrobras request for an extension of the license term on five blocks in the Santos Basin (BM-S-21, BM-S-10, BM-S-11, BM-S-9 and BM-S-8). The company had requested four year extensions due to equipment delays.

### Total and Wintershall Extend Block C 137 (Al Jurf) Concession in Libya

It has been reported that Total and Wintershall have reached agreement with Libya's NOC to extend the term of the offshore C 137 license. The signature bonus was reported to be US\$500 million with Total and Wintershall reducing their combined working interest to 27% from 50% previously. Based on this ratio the company working interests will fall to 20.25% and 6.75% for Total and Wintershall, respectively.

### TransCanada to Hold 100% of the Keystone Pipeline

In a US\$750 million deal (US\$550 million in cash plus assumption of US\$200 million in debt) ConocoPhillips has sold its interest in the Keystone Pipeline venture. This 1.1 million barrel per day pipeline will cost an estimated US\$12 billion and will ship Canadian crude to the US Midwest, Cushing, and ultimately to Port Arthur, Texas.

While it is not entirely clear why ConocoPhillips chose to exit the project, two likely factors merit comment. First, the company's early participation in the plan was an important source of support for the project and dovetailed nicely with ConocoPhillips' very large bet on oil sands. There is now much less need for ConocoPhillips' participation. Second, by exiting the project, capital investment demands on ConocoPhillips are dramatically reduced.

Elsewhere, ExxonMobil has agreed to support TransCanada's Alaskan gas pipeline proposal. The agreement targets successful completion of open season by July 2010.

## Cost Watch

The preliminary May drilling cost estimate is down 9.8% compared to 2008, following a 4.9% drop in April. This is the fourth successive month that drilling costs in 2009 have been below their levels in the same month of 2008 and the rate of decline is now at or near levels in the last half of 2007. Deflationary pressures appear to be spreading with the O&G Support Activities sector down by 6.1% and 7.1% in April and May compared to the same months in 2008 (the first material absolute declines in Support Activities costs over the time period shown below). Composite costs of drilling and equipping onshore wells in the United States have fallen on a year to year basis in April and May. Oil field machinery costs continue to be rigid downward although the underlying inflation rate is declining.

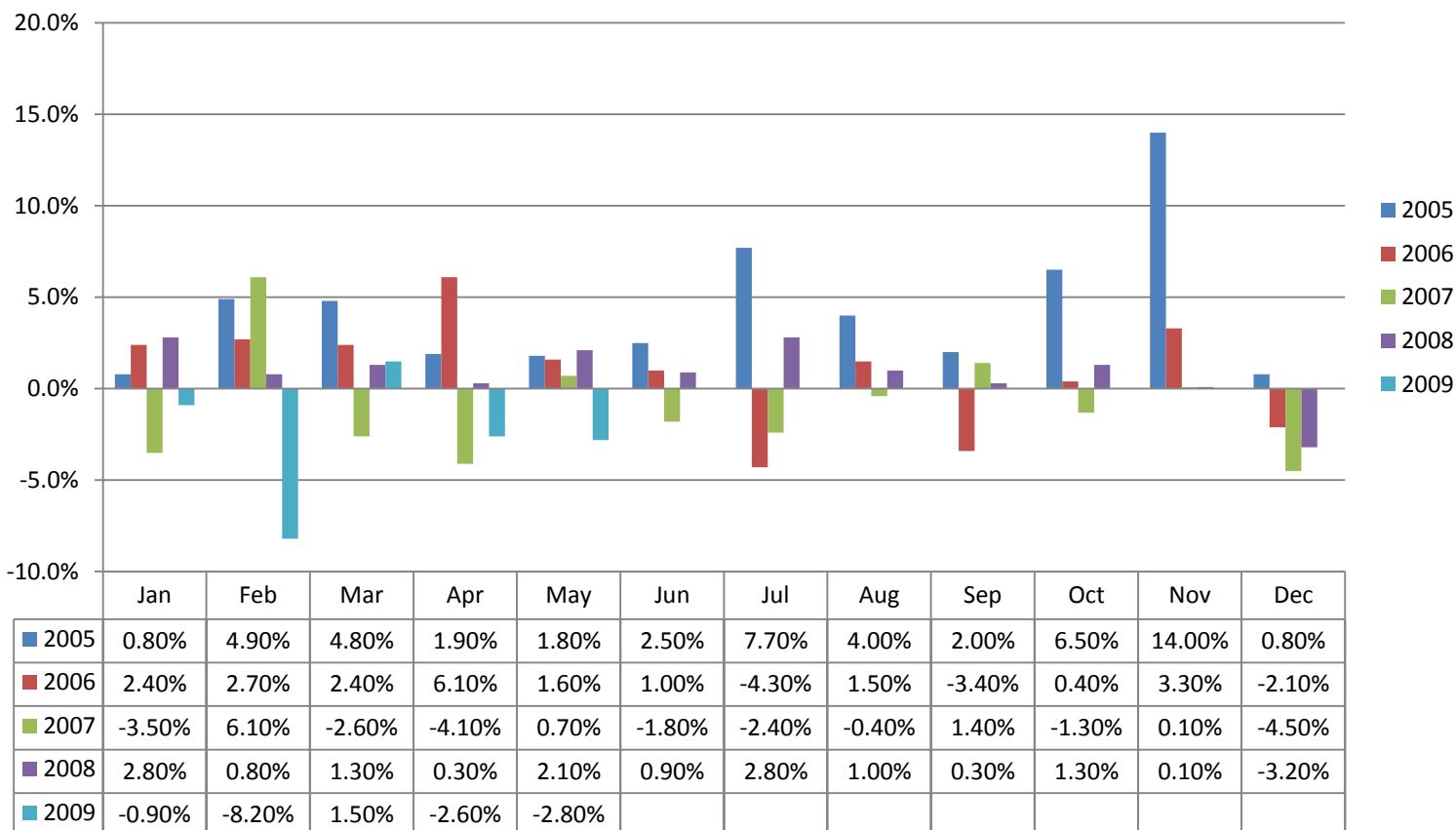
### Annualized Cost Inflation Rates

Cost Component	2006/2005	2007/2006	2008/2007	YTD 2009/2008
<b>Drilling Cost</b>	37.8%	-4.6%	1.7%	-2.52%
<b>O&amp;G Support Activities</b>	13.1%	3.6%	1.4%	2.41%
<b>Oil Field Machinery</b>	8.7%	7.0%	7.8%	5.04%
<b>Rotary Drilling Machinery</b>	11.5%	8.9%	5.0%	2.60%

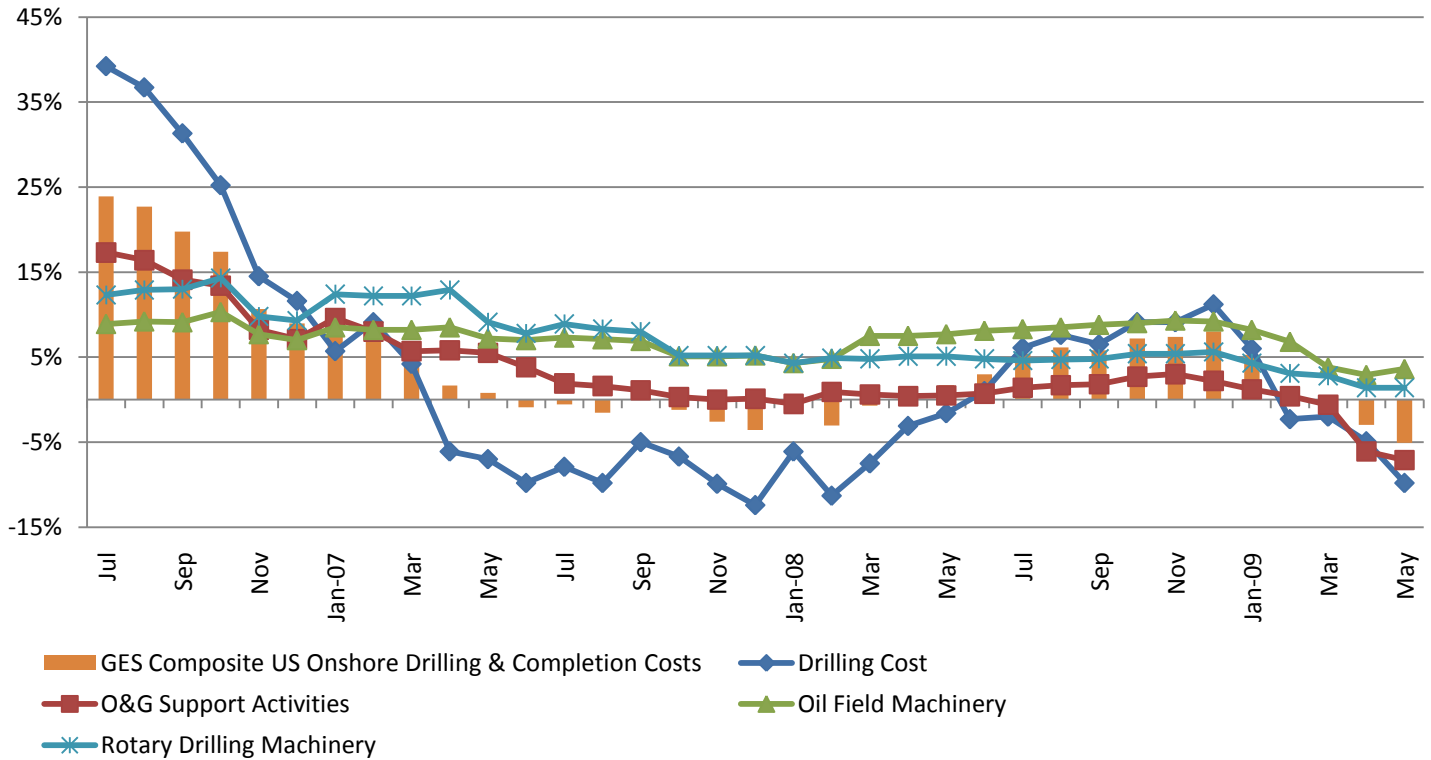
Note: 2009 Year-to-Date inflation estimates subject to revision

For the first five months of 2009 drilling costs have shown strong month to month percentage declines in all but March. On a year to date basis, 2009 drilling costs are down 2.5% compared to 2008. There are also signs of weakening in the cost of oil and gas support activities as well as oil field machinery.

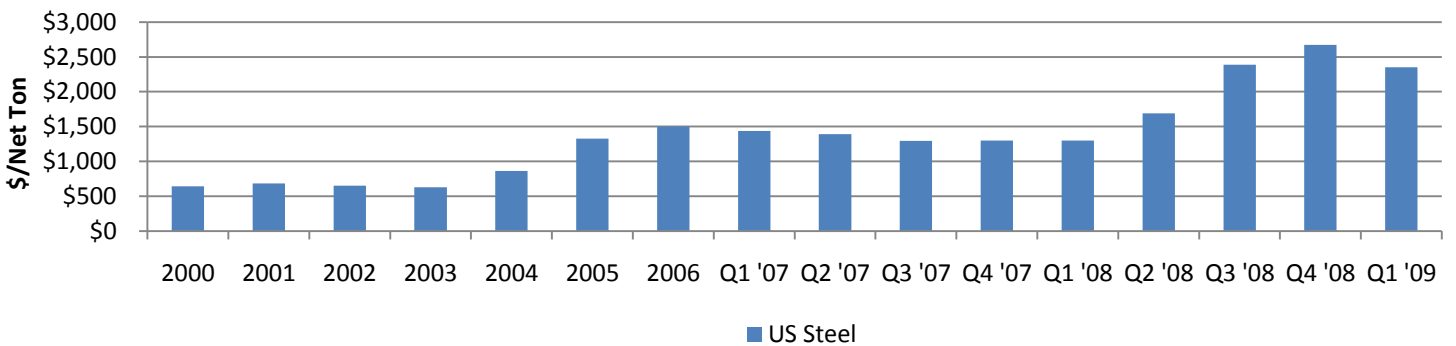
### US Producer Price Index: Monthly Percentage Change in the Cost of Drilling Oil & Gas Wells



Monthly Year over Year Inflation of Selected Industry Costs



Tubular Steel Products Price



Reflecting the severity of the macro-economic recession, the primary metals manufacturing cost index was down almost 18% in March, 26% in April and 31% in May compared to 2008. Nevertheless, tubular steel prices as reported by US Steel are down only 12% compared to 4<sup>th</sup> quarter 2008.