

MUSINGS FROM THE OIL PATCH

April 3, 2007

Allen Brooks
Managing Director

Note: *Musings from the Oil Patch* reflects an eclectic collection of stories and analyses dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating oilfield service companies. The newsletter currently anticipates a semi-monthly publishing schedule, but periodically the event and news flow may dictate a more frequent schedule. As always, I welcome your comments and observations. Allen Brooks

Oilfield Consolidation Moves Forward

U.S. Steel agreed to buy the leading U.S. oilfield country tubular goods provider, Lone Star Technologies, in the third deal in this business in the past year

Last Thursday, U.S. Steel (X-NYSE) agreed to buy the leading U.S. oilfield country tubular goods provider, Lone Star Technologies (LSS-NYSE), for \$2.1 billion. U.S. Steel will offer \$67.50 per share for Lone Star Technologies, a 39% premium over the price the shares closed trading the day prior to the announcement. This transaction marks the third in the oil country tubulars business in the past year, as Tenaris (TS-NYSE) previously bought Maverick Tube Corp. and IPSCO (IPS-NYSE) purchased NS Group. This most recent M&A deal follows, by slightly over a week, the announcement by Hercules Offshore (HERO-NASDAQ) that it was buying the leading Gulf of Mexico offshore jackup drilling contractor, Todco (THE-NYSE), for \$2.3 billion. In this deal, Hercules offered a 28% premium over the closing price of Todco. This deal came not long after the acquisition agreement between Tenaris and Hydril (HYDL-NASDAQ) for over \$2 billion was announced. That purchase price was a 17% premium to the prior day's closing price, but a 30% premium to the average price over the prior 30-day period. Tenaris' purchase will significantly expand its business scope both in the United States and the oilfield service industry.

Growing optimism about the length of the current oil and gas business cycle makes buyers more willing to meet the higher valuation expectations of acquisition targets

So what's going on here? It seems to us that there are several trends at work. First is the growing optimism about the length of the current oil and gas business cycle that makes buyers more willing to meet the higher valuation expectations of acquisition targets. These high purchase valuations reflect the conviction of the buyer that the stream of future earnings they are acquiring will not only continue at the current rate into the future, but most likely will accelerate.

Do these transactions mean the sellers are less optimistic? Not

The determining factor in this weighing exercise is the assessment of the risk of failing to achieve the hypothetical future value

necessarily. The management and boards of directors of public companies must always weigh the value of their current share price against the potential for a higher price at some time in the future. They make their determination based on expectations for future earnings and estimates of what investors may be willing to pay for that stream of earnings. When presented with a purchase offer that provides more upside value to the existing share price than they believe will accrue to shareholders by remaining independent and executing the company's business plan, then the directors must seriously weigh the offer. The determining factor in this weighing exercise is the assessment of the risk of failing to achieve the hypothetical future value. May industry conditions change or could competition erode a company's market position or competitive advantage that would seriously undermine the earnings projections? Is it possible the U.S. stock market could fall into a bear market in which all stock valuations retreat, dashing the possibility of a higher future valuation for the company's stock? These are serious questions that must be addressed during the deliberations over an offer. At the end of the day for many directors, that over-worked phrase, "a bird in the hand is worth two in the bush" becomes the safest decision.

As the competition with strategic buyers intensifies, private equity buyers are becoming bolder in their bidding

A second force at work in the market is the huge amount of private equity money available that is seeking attractive long-term investments. Private equity investors have often been willing to pay top dollar in bidding competition with industry competitors, but they are now beginning to find that they are being beaten out by strategic industry buyers who see the business opportunity and the impact the acquisition could have on the combined company's future, as opposed to financial gains that might come from sophisticated balance sheet engineering. As the competition with strategic buyers intensifies, private equity buyers are becoming bolder in their bidding. Since the volume of money in the hands of, and available to, private equity investors has exploded, the size of corporate buyouts has increased dramatically. Surprisingly, despite the strong earnings and stock market performance of oilfield service companies, most companies remain bite-size transactions for both strategic and private equity buyers.

Investors are less than forgiving of companies in instances where earnings growth momentum is slowing

A third force at work is the disparity in the recent performance and outlooks for various oilfield markets that is creating valuation challenges for some companies. The recent earnings warnings by Halliburton Companies (HAL-NYSE) and Nabors Industries (NBR-NYSE) reflect shortfalls from prior earnings guidance and Wall Street analyst expectations due almost entirely to lower North American drilling and completion activity. The slow down in the North American oilfield market has contributed to reduced activity, lower rig fleet utilization rates, softer pricing and compressed profit margins. None of these reductions or contractions suggests a disastrous business environment. Far from it! However, investors are less than forgiving of companies in instances where earnings growth momentum is slowing. On the positive side, Halliburton and Nabors are able to shift surplus North American equipment to

Aging oilfield service company managements are probably more inclined to sell their businesses today when presented with a reasonably attractive offer than to risk riding the down-slope of the business cycle

international markets – and probably make more money as a result. That flexibility is an attraction for both private equity investors and strategic buyers.

A fourth force could come into play should the current softness in the North American oilfield market grow. Aging oilfield service company managements are probably more inclined to sell their businesses today when presented with a reasonably attractive offer than to risk riding the down-slope of the business cycle. Managers in their late 50s and early 60s are unwilling to risk riding out another 5-7 year period of declining or stable activity before experiencing a recovery. A consolidating industry outlook is a distinct possibility. As a result, investors are beginning to scan the oilfield service industry landscape looking for investment opportunities. They are looking for companies that have certain financial characteristics that would be attractive to private equity and strategic buyers.

One area receiving increasing investor attention is the offshore contract drilling industry. Investors performing stock market screens of companies seeking miss-priced securities based on various balance sheet ratios and earnings growth measures are finding oilfield service companies popping up more often. A recent newsletter analysis of the divergent attractiveness trend between technology companies and offshore drillers highlighted the latter and dissed the former. Their starting point was looking at noted corporate raider Carl Icahn's investment in Motorola (MOT-NYSE) and wondering why he finds that more attractive than going after an offshore driller such as GlobalSantaFe (GSF-NYSE).

The analysis begins with the explanation of the strategy of private equity investors, which is to optimize a target company's capital structure – determine the appropriate mix of debt and equity for the business. Through the judicious use of significant debt, shareholder equity can be leveraged providing enhanced shareholder returns over the next few years.

Cell phone manufacturing capacity is currently overbuilt, yet it still receives significant new capital investment, which may be good for customers, but is bad for producers

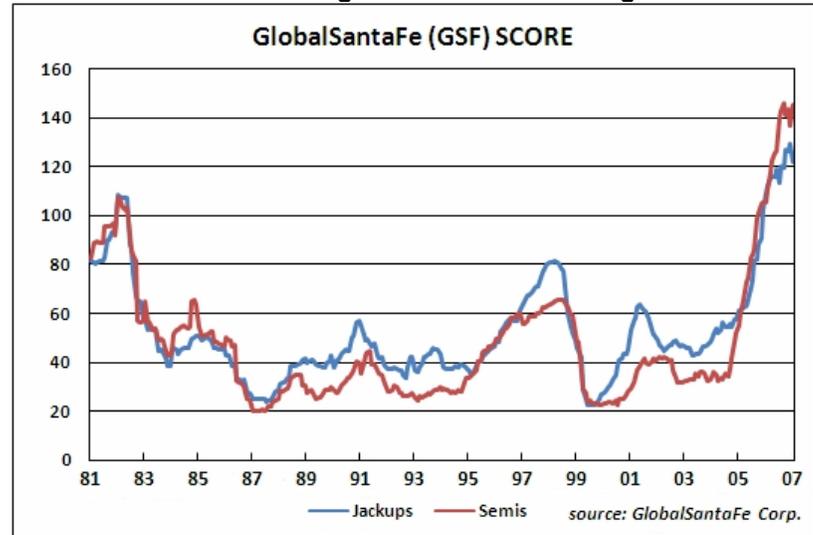
The analyst writing the report suggests that the recent cell phone boom has left Motorola with significant surplus cash that Mr. Icahn believes the company does not need. Therefore, he has been pressuring Motorola to disburse this excess cash to shareholders through stock buybacks. The problem the analyst sees is that cell phone manufacturing capacity is currently overbuilt, yet it still receives significant new capital investment, which may be good for customers, but is bad for producers. While technology companies are not considered to be "capital intensive," the issue of technological obsolescence more than offsets this plus. As a result, it is possible that Mr. Icahn's strategy may reward shareholders in 2007, but put the company (and shareholders) in a weakened position in the future.

In contrast, the offshore drilling industry emerged from a prolonged recession not too many years ago. The growing offshore exploration and development efforts have led to full employment of rigs at rising

When the SCORE index is at 100, dayrates equal “the sum of daily cash operating costs plus approximately \$700 per day per million dollars invested”

day rates and lengthening contract terms. In fact, the current industry environment is the best it has been since GlobalSantaFe began measuring the industry’s health in the 1980s. The company publishes this health measure – SCORE - every month. It relates the current health of rig day rates to rates earned during the 1981 peak in the offshore drilling cycle. When the SCORE index is at 100, dayrates equal “the sum of daily cash operating costs plus approximately \$700 per day per million dollars invested.”

Exhibit 1. Offshore Drilling Market At All-time High



Source: GlobalSantaFe

Given the bright outlook for offshore drilling, the industry has embarked on building new rigs that oil companies are contracting at very high dayrates for long periods of time. In most cases, these contracts will fully pay out the cost of constructing the rigs. Moreover, at the end of the contract term, the rig will remain a valuable asset.

Because many of GlobalSantaFe’s existing rig contracts do not extend beyond 2009, the projected earnings stream reflects a decline in the years following the 2008 peak

The analyst provides his estimate of the earnings and cash flow for GlobalSantaFe (Exhibit 2), using its current results and the information the company discloses about the future contractual status of the fleet. Because many of the company’s existing rig contracts do not extend beyond 2009, the projected earnings stream reflects a decline in the years following the 2008 peak. The company has a heavy schedule of capital expenditures projected out to 2010, which results in a decline in free cash flow in 2009 and 2010 after peaking at \$1.7 billion in 2008. Now it is likely that the cash flow will be higher in those out years as rig contracts are extended and new rigs arrive.

The analysis, however, uses the projected free cash flow to pay down all debt GlobalSantaFe has at the present time, plus support the dividend and buy back shares. Based on the dividend and the cash spent on buybacks, the yield on the stock price, then priced at

\$62, was calculated. The estimated future annual yields in this calculation range between 6% and 13%.

Exhibit 2. Why Private Equity Should Like Offshore Drillers (US \$ millions)

GlobalSantaFe Corp.							
Cash Flow History and Model							
source: 10-K filings	2004	2005	2006	2007e	2008e	2009e	2010e
Cash flows from operating activities:							
Net income	144	423	1,006	1,700	2,100	1,512	1,300
Depreciation	261	275	305	490	620	540	500
Other	(120)	(12)	(55)				
Changes in working capital	(60)	(96)	(271)	(490)	(496)	(216)	(200)
Net cash flows from operating activities	225	591	985	1,700	2,224	1,836	1,600
Cash flows from investing activities:							
Capital expenditures	(406)	(411)	(547)	(588)	(558)	(702)	(750)
Proceeds from insurance, property	415	30	143				
Net proceeds from securities, other	5	(66)	263				
Net cash flow (used in) investing	14	(448)	(140)	(588)	(558)	(702)	(750)
Free Cash Flow	(181)	180	439	1,112	1,666	1,134	850
Cash flows from financing activities:							
Dividend payments	(47)	(108)	(218)	(220)	(220)	(220)	(220)
Net borrowing	(332)	(300)	75	(275)			
Payments for ordinary shares repurchased	0	(1,777)	(1,069)	(617)	(1,446)	(914)	(630)
Proceeds from issuance of ordinary shares	44	2,008	144				
Other	(9)	(10)	(4)				
Net cash flow used in financing activities	(344)	(188)	(1,071)	(1,112)	(1,666)	(1,134)	(850)
<i>million shares repurchased</i>		(9)	14	9	17	10	6
***note: Shares Outstanding at Yearend (mill)	236	245	230	221	204	194	189
Total debt	905	551	624				
Cash and marketable securities	809	837	349				
Net debt	96	(287)	275	0	0	0	0
Dividend + cash spent on buybacks per share	\$0.20	\$7.70	\$5.58	\$3.79	\$8.17	\$5.83	\$4.51
Dividend + "buyback" yield on \$62 stock price	0.3%	12.4%	9.0%	6.1%	13.2%	9.4%	7.3%

Source: agorafinancial.com

“Free cash flows will be so high that most of them must buy back hefty amounts of stock, raise dividends, or expand their rigs fleet quickly to avoid having too much cash pile up on their balance sheets”

The key point to this analysis, and it is applied to all the contract drillers, is that; “Free cash flows will be so high that most of them must buy back hefty amounts of stock, raise dividends, or expand their rigs fleet quickly to avoid having too much cash pile up on their balance sheets.” Given this conclusion, the analyst postulates that it puts GlobalSantaFe and all other contract drillers in the “cross hairs of private equity funds, aggressive peer acquirers, and activist investors like Carl Icahn.”

There is a certain amount of truth to this conclusion, but the one fundamental consideration ignored is the potential for rig contracts to be broken when, and if, the health of the oil market changes and E&P companies no longer want or need the rigs. Yes, everyone will tell you that these long-term contracts are rock-solid. But those of us who have been through the industry depression know that “rock-solid” contracts were broken in the 1980s recession, or settled for token payments. That chance always exists. The issue becomes, what is the likelihood of this scenario developing?

Our best guess is that we are on the cusp of a significant ramping up of M&A activity in the oilfield service industry. The offshore drillers will be a fertile hunting ground, especially with changing

Welcome to 2007 – a year of transformation for the oilfield service industry!

managements at Ensco International (ESV-NYSE), Noble Drilling (NE-NYSE) and Pride International (PDE-NYSE). The additional information available from the newly-issued company annual reports and shareholder proxies improves the odds for successful deals. Fear of an industry slowdown could motivate previously reluctant sellers. Welcome to 2007 – a year of transformation for the oilfield service industry!

The MIT Energy Study and Global Warming

Fossil fuels will remain the most important source of primary energy for decades to come

In mid March, a panel of faculty members at the Massachusetts Institute of Technology (MIT) issued a report, based on three years of study, in which they looked at the role of fossil fuels in the 21st century. The panel was led by two distinguished scientists – John Deutch (chemical engineering) and Ernest Moniz (theoretical physics). Both scientists served as officials in the Clinton Administration.

The panel's report said that fossil fuels will remain the most important source of primary energy for decades to come – both for developed countries such as the United States, and developing countries such as China and India. Fossil fuels supply 80% of the world's energy, with oil supplying 35%, coal, 25%, and natural gas, 20%. Nuclear power supplies 6.5% of the world's energy; with hydro, 2.2%; and biomass, 11%. Solar, wind and geothermal sources, all together, supply only 0.4%.

Fossil fuels will provide 90% of the world's increase in energy supplies through 2040

The report opined that coal would grow in importance as an energy fuel. "Coal use will increase under any foreseeable scenario," the report says, "because it is cheap and abundant." Coal delivers usable energy for \$1-\$2 per million BTU's compared with \$6-\$12 for oil and natural gas. Alternative energies all cost more, plus coal exists in vast quantities all over the world.

Another study, conducted by Natural Resources Canada, says that fossil fuels will provide 90% of the world's increase in energy supplies through 2040. So it looks like the world will be consuming growing amounts of fossil fuels despite the best efforts and intentions of environmentalists, politicians and average concerned citizens. The MIT study made the point that while alternative energy experiments are intrinsically interesting, in the larger scheme of things, most of them aren't important. The simple fact is that we are not going to get from here to 2107 on solar power, wind power, corn power, or nuclear power. Professors Deutch and Moniz make this point clear and it is a point that probably should be made over and over again. It would be nice if Al Gore would acknowledge it, but then he has become the Elmer Gantry of environmentalism.

China's definition of alternative energy is oil and natural gas

China is a major culprit in this effort to alter the mix of fuels that power the world. At the present time, 45% of all the train cars in China transport coal. China's definition of alternative energy is oil and natural gas. The country increases its coal-fired electricity every

year by an amount equal to the entire production of Great Britain. The MIT report says that China and India will account for 70% of the incremental demand for coal in the entire world, and for virtually all the increase in greenhouse gas emissions in the world. Recent projections show China passing the United States as the greatest polluter in the world.

With a population of 1.1 billion people and a fertility rate of 2.73, it is likely that India will surpass China in population (1.3 billion people, but with a fertility rate of 1.73, well below replacement level). Unless things change, India is likely to surpass China in both coal consumption and greenhouse gas emissions. So what is the solution for global warming?

The MIT study recommends a carbon tax in the United States

The MIT study recommends a carbon tax in the United States. Specifically, the report proposes either a go-slow tax (a penalty of \$7 a ton of CO₂, beginning in 2010), or a go-fast tax (a penalty of \$25 a ton, beginning in 2025). Interestingly, Professors Deutch and Moniz proposed an even more radical carbon tax in 2004. Then, they said that it was nuclear power that needed help from a hefty taxpayer subsidy to compete with coal. They calculated that the cost of new nuclear power was 6.7 cents per kilowatt, compared to 4.2 cents for a new coal-fired power plant. With a \$50 per ton carbon tax, they estimated that the cost of a coal-fired plant would only rise to 5.4 cents per kilowatt.

Since there would still be an almost 25% spread between the cost of these two fuels even after the carbon tax, the professors suggested that governments would need to “top up” the carbon tax with direct subsidies to the nuclear industry. So even with a carbon tax two times as high as the recent MIT study recommends, there would still be the need to do more to promote nuclear power.

The No. 1 conclusion of the MIT study suggests: “It is critical that the federal government not fall into the trap of picking a technological winner”

Times and technologies change. Opinions change. Options change. As the No. 1 conclusion of the MIT study suggests: “It is critical that the federal government not fall into the trap of picking a technological winner.” It seems that President Bush has accepted this conclusion, at least as reflected by his push for a broad range of alternative energies, improved automobile efficiency and funding for more promising, but still technologically costly new fuels. Unfortunately, politicians have not embraced the MIT conclusion, because favored constituents/voters represent supposed instant solutions to a highly complex global issue. With the short attention span of politicians and voters, instant solutions are the preferred remedy.

Canada Budget Favors Green Over Black

On March 19, Canada’s Minister of Finance James Flaherty presented the minority government’s second budget since it has been in power. The budget had numerous tax measures favoring families, but it also reflected an environmental orientation at the

One negative energy provision of the proposed budget is the phase out of the accelerated capital cost allowance (CCA) that has allowed oil sands developers to write off investment costs since it was enacted in 1996

expense of traditional energy development assistance. As for individuals and families, there was a new child tax credit, an increase in the spouse credit and changes to the registered education savings plan rules to provide more flexibility and an increase in the age limit from 69 to 71 for maturing registered retirement savings plans. The latter point brings Canada's personal retirement plan, the equivalent of the IRA investment plans in the United States that require the owner to begin mandatory withdrawals in the year following the year the person turns 70 ½, closer into alignment.

One negative energy provision of the proposed budget is the phase out of the accelerated capital cost allowance (CCA) that has allowed oil sands developers to write off investment costs since it was enacted in 1996. The date for ending this tax credit is 2015. The government will extend the accelerated CCA for energy-efficient equipment in order to promote investment in technologies such as carbon capture and storage. The early ending of the CCA for oil sands projects was based on the belief that world oil prices have risen to a level that now makes this tax incentive unnecessary. The oil sands producers have raised concerns that ending the accelerated CCA, given the new emissions legislation and higher capital costs due to the labor and materials shortages in the Ft. McMurray area, plus the provincial royalty review and possible hike, could strain the profitability of the oil sands projects.

The rebate will apply to automobiles with a combined city and highway consumption rating of 6.5 liters or less per 100 kilometers of travel, or approximately 36 miles per gallon (mpg)

A major new initiative under the government's budget is a series of incentives designed to encourage the purchase of fuel-efficient vehicles. According to the plan, purchasers and lessors of new vehicles that meet specified city and highway fuel-efficiency ratings will receive a maximum rebate of \$2,000. While the list of vehicles eligible for the rebate will be established by Transport Canada, the rebate will apply to automobiles with a combined city and highway consumption rating of 6.5 liters or less per 100 kilometers of travel, or approximately 36 miles per gallon (mpg). The incentives will also apply to minivans, sport utility vehicles and other light trucks with a consumption rating of 8.3 liters or less per 100 kilometers, or approximately 28 mpg.

There will be neutral tax treatment of average fuel-efficiency vehicles. However, there will be a new Green Levy on manufacturers and importers of new vehicles that have a weighted average fuel consumption of 13 liters or more per 100 kilometers, or approximately 18 mpg. The levy will range between C\$1,000 and C\$4,000, depending on the vehicle's consumption level. There will be an exemption for pickup trucks, which are not subject to the levy.

It heavily favors a very few vehicle models while punishing others that are virtually as fuel-efficient but fail to reach regulatory threshold

The Canadian automobile industry is extremely concerned about the tax proposal because it heavily favors a very few vehicle models while punishing others that are virtually as fuel-efficient but fail to reach regulatory threshold, often by a very minor amount. For example, a chart in the business section of *The Globe and Mail*, based on fuel efficiency ratings supplied by Natural Resources

Canadian citizens now have a tax-driven incentive to purchase fewer Canadian manufactured vehicles

Canada, shows that a Toyota Yaris, at 6.4 liters per 100 kilometers (36.7 mpg) would receive a C\$1,000 rebate while the hybrid Toyota Prius would receive the full C\$2,000 rebate. On the other hand, a Honda Fit at 6.6 liters per 100 kilometers (35.6 mpg), a Hyundai Accent at 6.9 liters per 100 kilometers (34.1 mpg), a Nissan Versa at 7.2 liters per 100 kilometers (32.6 mpg) and a Chevrolet Aveo at 7.55 liters per 100 kilometers (31.1 mpg) would not receive any rebate. One can question whether purchases of any vehicle that achieves above 30 mpg should be encouraged or not, but the tax scheme that fails an automobile for missing its arbitrary fuel-efficient threshold by 0.4 mpg would appear to be too strict.

One of *The Globe and Mail* business columnists criticized the new “gas guzzler” tax because it fails on two fundamental issues. First, it is lousy industrial policy because most of the fuel-efficient cars that will achieve the government’s threshold are manufactured outside of Canada. Therefore, Canadian citizens now have a tax-driven incentive to purchase fewer Canadian manufactured vehicles. Second, the tax incentive may actually inhibit efforts to clean up Canada’s air quality. A car built before 1988 will produce 37 times the amount of smog-related pollutants of a new car, according to the Canadian Vehicle Manufacturers Association. If all the old clunkers could be removed from the roads, the quality of the air would rise considerably. The problem is that this process is slowed by the structure of the rebate and gas guzzler tax scheme.

The taxes on new inefficient vehicles have slowed fleet turnover rates

Europe has embarked on a similar tax program designed to stimulate the sale of fuel-efficient vehicles and discourage the purchase of inefficient vehicles. The taxes on new inefficient vehicles have slowed fleet turnover rates. As a result, European per capita emissions from transportation have climbed faster than Canadian rates even though European cars are generally more fuel efficient than North American cars.

Lastly, another major failing of Mr. Flaherty’s clean-car tax initiatives is that it does very little to encourage the development and production of clean cars or cleaner fuels, such as ultra-clean diesel in Canada. While most of the development work done by North American car manufacturers is conducted in the United States, some of it is performed in Canada. In particular, General Motors (GM-NYSE) is working on fuel cells and other related power sources at its Oshawa, Ontario site. The current Finance Minister understands the bang-for-the-buck potential of accelerated write-offs on machinery and equipment. Clearly, the allowance to write off all of their capital costs before paying income taxes has contributed to the accelerated development of the numerous oil sands projects since this tax incentive was implemented in 1996. So why not put in place a more aggressive tax write-off scheme that would benefit Canada’s automobile industry and possibly put the country in the forefront of “green car” development?

Uranium Reserves Could Prove Nuclear Choke Point

As the debate over global warming and how best to solve the problem simmers, the nuclear option begins to look more and more appealing. As we wrote in the last issue of *Musings From the Oil Patch*, the EU has attempted to provide its members with greater flexibility in using nuclear power to help meet the region's ambitious emissions reduction goals. In the United States, there are several utilities that are moving forward with permitting plans hoping to be among the first to receive permission to build a new nuclear power plant. Of course there are some financial incentives in being among the first, but that is not the prime motivating factor. And in the developing world, Russia, China and India are all stepping up their nuclear power plant plans.

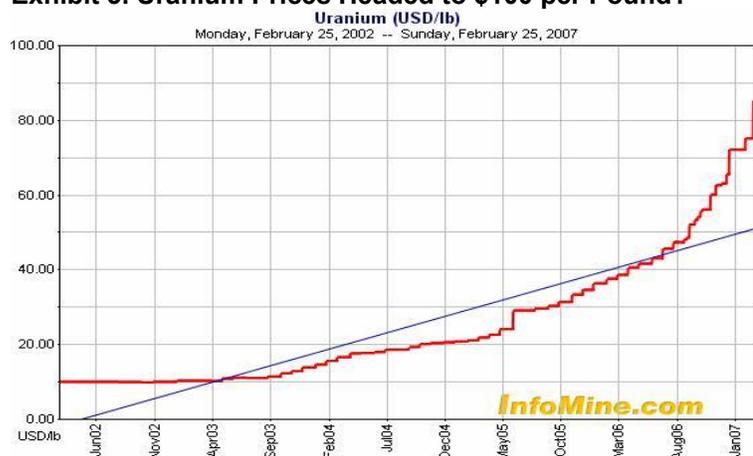
The need is evident for additional nuclear plants to produce abundant electric power at low cost and in an environmentally-friendly manner

As part of almost all future energy scenarios, the need for additional nuclear plants to produce abundant electric power at low cost and in an environmentally-friendly manner is prevalent. As an example of the contribution that nuclear power can provide, reflect on the following information from the World Nuclear Association Symposium in 2001:

- 1 kilogram of firewood equals about 1 kilowatt of electricity;
- 1 kilogram of coal or oil equals roughly 3 or 4 kilowatts of electricity;
- But 1 kilogram of natural uranium equals nearly 50,000 kilowatts of electricity.

Increasingly there is the potential for this emissions solution for global warming to suffer from a lack of available nuclear fuel. As demonstrated by the information in Exhibit 3, between September

Exhibit 3. Uranium Prices Headed to \$100 per Pound?



Source: agorafinancial.com, InfoMine.com

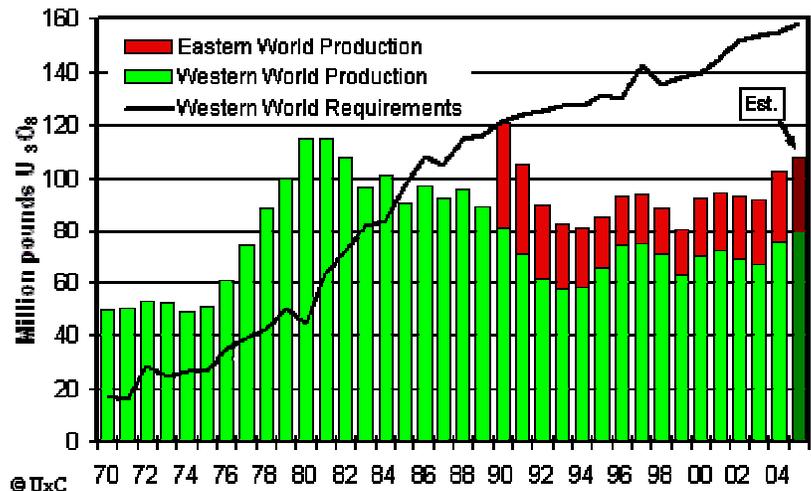
2003 and December 2004, uranium prices doubled from \$10 per pound to \$20. Over the following six months prices increased by

Like oil and gas and most other commodities, the long period of under-investment in uranium resource development has led to a supply/demand imbalance

50% to \$30 per pound, but then prices began to climb at an escalating rate climaxing with an asymptotic move that began in October 2006 taking uranium prices to a level of about \$85 per pound. Last week, the price of uranium oxide jumped another \$6 per pound hitting \$91. The gray line in the graph in Exhibit 3, shows the slope of the price rise between August 2003 and August 2006.

What has driven prices so high so fast? Basically, like oil and gas and most other commodities, the long period of under-investment in uranium resource development has led to a supply/demand imbalance. The world's roughly 440 active nuclear reactors need over 150 million pounds of uranium a year, but current global production is running at about 100 million pounds. The shortfall is met from the stockpile of uranium collected from disassembled nuclear weapons, but that volume is shrinking.

Exhibit 4. Uranium Production Falls Short of Needs



Source: UXC.com

Adding to the supply problem is the impact of the natural disaster that occurred at Cameco Ltd.'s (CCJ-NYSE) Cigar Lake mine in Saskatchewan, Canada. Cigar Lake is the world's largest undeveloped high-grade uranium mine and originally was scheduled to come into production during 2008. The mine was programmed to climb to peak production of 18 million pounds a year by 2010, which would have equaled 17% of global uranium production.

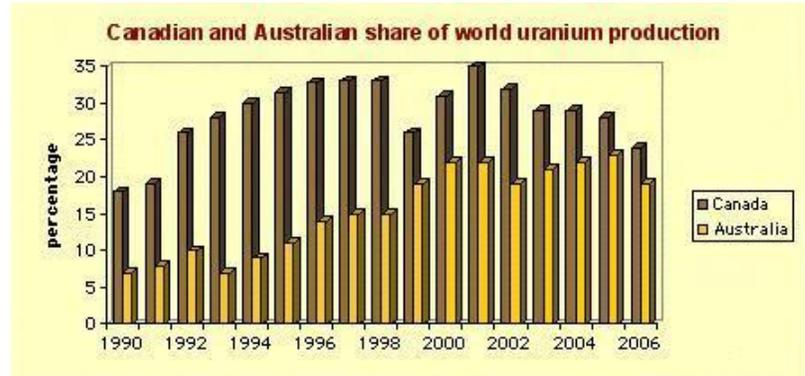
Besides the time delay, the cost to develop the mine has escalated to C\$508 million from the original estimate of C\$330 million

The mine was flooded in April and again in October of last year. The mine shaft was located some 400 feet below ground. The freak flooding followed an earlier rockfall that has virtually destroyed the existing mine shaft forcing Cameco to delay the mine's development until at least 2010. Besides the time delay, the cost to develop the mine has escalated to C\$508 million from the original estimate of C\$330 million. In addition, Cameco has spent C\$46 million in remediation costs.

Recent media reports have highlighted how high uranium prices are stimulating exploration for new ore deposits around the world

The world's major sources of uranium are located primarily in Canada and Australia, which combined account for about 45% of the world's production. At the present time there are some production problems at the Ranger mine owned by an Australian-listed subsidiary of Rio Tinto (RTP-NYSE). These problems, combined with the Cigar Lake situation, are helping to support the high uranium ore prices. Recent media reports have highlighted how high uranium prices are stimulating exploration for new ore deposits around the world, with the major focus in Canada, Australia and the United States.

Exhibit 5. Canada and Australia Are 45% of Global Production



Source: agorafinancial.com

Analysts are now calling for uranium prices to hit \$100 per pound in the near future

Much of the future Australian production, however, might never come onto the world market. China has recently agreed to purchase 2,500 metric tons of uranium a year to fuel their nuclear power program. But this contract represents less than one-third of China's current uranium needs. Moreover, India, which is planning on ramping up its nuclear program, is also eyeing Australia's uranium reserves. Until new supplies are developed, the pressure driving uranium prices higher will intensify. Analysts are now calling for uranium prices to hit \$100 per pound in the near future. We wonder about that forecast since the last fuel headed to the century price mark was crude oil last year and it has yet to get there.

Halliburton CEO: Looking at Other Stock Markets?

We noticed a comment from Mr. Lesar that Halliburton was considering possibly listing its shares on another stock exchange somewhere outside of the U.S.

When Halliburton Companies (HAL-NYSE) CEO Dave Lesar announced he was shifting corporate headquarters and his office from Houston, Texas to Dubai, a furor arose as people looked for sinister motives. We wrote about our thoughts on the move in the last issue of *Musings From the Oil Patch*. But we also noticed a comment from Mr. Lesar that the company was considering possibly listing its shares on another stock exchange somewhere outside of the United States. A recent article about the performance of foreign stock exchanges got us thinking about Halliburton's actions and the possibility that other oilfield companies might abandon the United States – both as a headquarters and capital markets location.

The U.S. market was ranked 42nd in the one-year period, 51st in the three-year period and 52nd in the five-year period

The financial article was making the point that the strong performance of world stock markets over the past one-, three- and five-year periods ending in 2006 should make investors consider whether to invest more of their assets outside of the U.S. market. The author was couching his advice in terms of why internationally-focused investment managers were being held to a domestic measurement standard such as the Standard & Poor's 500 Index.

In the article, the author presented the top 10 performing international stock markets out of 52 markets for the three measurement periods (one, three and five years) and the ranking of the U.S. market's performance. The U.S. market was ranked 42nd in the one-year period, 51st in the three-year period and 52nd in the five-year period. His question was why investors would accept and reward international money managers who could beat the S&P 500 Index, but woefully trail the performance of true international stock markets.

The U.S. market still lagged all of the top ten international markets

As we looked at the performance tables, we had a problem with the data since the article talked about the S&P 500 Index as the primary measure that investment managers target for their performance bogey, but the figures in the performance tables for the USA market were in no way comparable to the actual performance of the S&P 500 Index over the three periods, as reported by S&P on its web site. We became suspicious of the USA data when we noticed that the three-year and five-year performance was exactly the same figure – a possibility, but highly unlikely. Therefore, we have added the S&P 500 Index performance to the tables. Interestingly, the U.S. market, based on the performance of that index, still lagged all of the top ten international markets.

As the American oilfield service industry is increasingly becoming an international oilfield service business, moving headquarters, incorporations and even stock listings outside of the U.S. may become more the norm

We know that there are a number of international investment fund managers who invest in these geographically diverse markets. They have the infrastructure and contacts to establish relationships with local brokers in these international markets. But for the average American investor, his ability, and desire, to trade stocks in Poland or Peru or Pakistan is pretty limited. However, as the world begins to appreciate that the American oilfield service industry is increasingly becoming an international oilfield service business, moving headquarters, incorporations and even stock listings outside of the U.S. may become more the norm rather than the exception.

While it is sad to contemplate this eventuality, it reflects the reality of today. The U.S. is a mature hydrocarbon province for most part. Yes, there is an exciting and challenging new frontier offshore in the deep waters of the Gulf of Mexico, but more and more of the new technologies being developed by the oilfield service industry are designed to deal with non-conventional hydrocarbon resources onshore and finding and exploiting economically small deposits of oil and gas.

Developing the technologies for all these E&P theaters still provide financial opportunities for the oilfield service companies. But the

If international investors reward those oilfield service companies that are aggressively exploiting the foreign markets with higher stock valuations, then considering foreign stock market listings will be mandated

reality is that the global oil and gas business is rapidly shifting outside of North America, as operators search for larger deposits of hydrocarbon resources. To better service their international clients and compete more effectively against internationally-based competitors, more and more assets and staff will be shifted outside of the United States, and even outside of North America. If international investors reward those oilfield service companies that are aggressively exploiting the foreign markets with higher stock valuations, then considering foreign stock market listings will be mandated. Maybe before too long, U.S. investors will be learning more about some of these foreign stock markets and seeking to make money by arbitraging price discrepancies between the U.S. and foreign stock markets.

Exhibit 6. World Stock Markets Outperform U.S.

Rank	Market	1yr
1	PERU	76.582%
2	MOROCCO	54.440%
3	PHILIPPINES	49.275%
4	CHINA	46.072%
5	MALAYSIA	42.069%
6	SINGAPORE	41.964%
7	POLAND	36.125%
8	SPAIN	33.498%
9	INDONESIA	30.995%
10	CHILE	30.980%
42	USA	8.912%
	S&P 500	13.620%

Rank	Market	3yr
1	EGYPT	82.602%
2	COLOMBIA	57.230%
3	CZECH REPUBLIC	46.730%
4	BRAZIL	46.258%
5	PERU	42.481%
6	ARGENTINA	40.920%
7	POLAND	40.194%
8	MEXICO	38.493%
9	AUSTRALIA	38.351%
10	INDONESIA	37.933%
51	USA	9.817%
	S&P 500	27.550%

Rank	Market	5yr
1	EGYPT	67.798%
2	COLOMBIA	60.419%
3	CZECH REPUBLIC	52.360%
4	PERU	43.601%
5	ARGENTINA	39.835%
6	INDONESIA	39.659%
7	AUSTRIA	38.531%
8	PAKISTAN	38.068%
9	HUNGARY	35.949%
10	RUSSIA	35.228%
52	USA	9.817%
	S&P 500	23.540%

Source: agorafinancial.com, S&P, PPHB

How to Make the “Best Companies to Work For” List

The results of the *Fortune Magazine* ranking, according to Collarini, support the statistical results of a survey the firm conducted last November on the topic of what it takes to attract and retain employees

Was it because energy companies are not meeting the non-monetary needs of its employees or is it that they didn't participate in the *Fortune Magazine* survey of employees for fear of what they would find out?

The March Collarini Newsletter, published by employment firm Collarini Associates, discussed the results of *Fortune Magazine*'s list of “Best Companies to Work For.” It talked about the top ranked company in the survey, Google (GOOG-NASDAQ), which offers on-site swimming pools, gourmet restaurants, pool tables, a climbing wall, unlimited sick leave, five weeks of vacation after one year of employment, tuition reimbursement and free bus transportation to and from work among other perks. The employees like working there with the other enthusiastic employees. The results of the *Fortune Magazine* ranking, according to Collarini, support the statistical results of a survey the firm conducted last November on the topic of what it takes to attract and retain employees. In that survey, respondents cited corporate reputation as the top factor in choosing an employer, followed closely by challenging work. The next four reasons dealt with the people the respondents worked with and the corporate culture. Collarini also said that feedback from readers of its newsletter after the results were published further supported the results.

Given those responses, Collarini wondered why only one energy company made the *Fortune Magazine* list. Was it because energy companies are not meeting the non-monetary needs of its employees or is it that they didn't participate in the *Fortune Magazine* survey of employees for fear of what they would find out? Regardless of the reason, there are clearly things that employers should be doing to attract and retain great employees. This is becoming increasingly important given the growth demands for labor within the energy business.

Collarini looked into the qualities of the sole energy company to make the *Fortune Magazine* top list – Valero Energy (VLO-NYSE). This is a company with a very interesting history and culture. Valero was created in 1980 out of the collapse of the LoVaca Gas Gathering Company, at the time a subsidiary of Coastal States Gas Corporation, controlled by Oscar Wyatt, over its inability to deliver volumes of natural gas sold under long-term contracts principally to the cities of San Antonio and Austin during the Texas natural gas shortage in the early 1970s. The remedy for this problem, after six years of litigation was a \$1.6 billion settlement that allowed the company's clients to take control of the company. Corporate headquarters was relocated from Houston to San Antonio and management, led by Bill Greehey, embarked on a plan to reconstitute the company based on its local gas-gathering pipeline operations and a refinery it obtained from Coastal as part of the litigation settlement over the LoVaca problem. The refinery was built in 1955. Valero has since grown via acquisitions into the largest U.S. oil refiner with 18 refineries and almost 1,000 gasoline stations around the country. For those history buffs, the company's name came from San Antonio's most famous landmark, the Alamo, whose original name was Mission San Antonio de Valero.

Collarini found that Valero is a safety-conscious, community-minded, loyal employer

In its research, Collarini found that Valero is a safety-conscious, community-minded, loyal employer. Out of 23 refineries the Occupational, Safety and Health Administration (OSHA) designates as having the best safety programs, 11 belong to Valero. Last year Valero donated \$1 million to the Red Cross in the aftermath of the hurricanes that devastated the Gulf coast. As for loyalty, Valero has never let any employees go for economic reasons. In addition to these qualities, Valero is one of the few companies that provide 100% paid health care coverage. It also is on the list of recognized companies that provide active career path counseling programs for its employees.

Given the cyclicity of the oil refining business, Valero's financial performance has been remarkable

Interestingly, Valero appeared on the most recent list of the *Business Week* 50 Best Performing companies. Valero ranked 36th on the list. The company was given a B+ ranking for profitability and a B for sales growth. The company's 7.6% total stock market return for the past 12 months was not great, but the 290.6% total return over the past 36 months was the second best performance among the top 50 companies. Given the cyclicity of the oil refining business, Valero's financial performance has been remarkable. With its corporate culture, the company has to be considered as one of the outstanding energy companies to work for. Others in the energy industry should pay close attention to Valero's culture and its successful financial results.

**Contact PPHB:
1900 St. James Place, Suite 125
Houston, Texas 77056
Main Tel: (713) 621-8100
Main Fax: (713) 621-8166
www.pphb.com**

Parks Paton Hoepfl & Brown is an independent investment banking firm providing financial advisory services, including merger and acquisition and capital raising assistance, exclusively to clients in the energy service industry.