

PARKS PATON HOEPFL & BROWN

E N E R G Y I N V E S T M E N T B A N K I N G , L P

MUSINGS FROM THE OIL PATCH

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Note: *Since the last issue of Musings from the Oil Patch on January 19, 2005, a number of changes have occurred. This issue of the Musings marks the first under the banner of Parks Paton Hoepfl & Brown. The format and thrust of the newsletter will remain the same – an eclectic collection of stories dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating in the oilfield service industry. The newsletter currently anticipates a bi-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

Crude Oil Prices – Is \$105 the Right Number?

A report projecting \$105 a barrel crude oil prices in the future roiled commodity and equity markets at the end of last week

A Goldman Sachs equity research report arguing that crude oil had entered a potential ‘super spike’ period that could lift prices to \$105 a barrel roiled commodity and equity markets at the end of last week. May futures jumped after the report’s issue and climbed at week’s end to a new closing high of \$57.27 after trading at an intraday record of \$57.70. The GS report talks about oil prices being driven by continued surprisingly strong energy demand growth in China and the United States. Moreover, GS believes that the continued high growth of gasoline indicates a lower economic sensitivity to high oil and commodity prices. Based on gasoline spending rising close to the percent of personal disposable income and GDP it represented in 1979-81, crude oil prices could climb to \$105, up from GS’s previous forecast of \$80.

The underlying point of the GS report is that it will take demand destruction of some period to rebuild surplus productive capacity that will drive oil prices lower on a sustained basis. The analysis is predicated on an oil U.S. consumption pattern similar to the 1979-1985 period. We agree that \$105 will create this environment. But would \$80, or \$70, or \$60 achieve the same result? Are current oil prices in the \$50s already undermining oil consumption growth? We won’t know until some time in the future. However, for the first

We have begun hearing antidotal evidence that even energy executives here in Houston have begun to notice gasoline prices

time, we have begun hearing antidotal evidence that even energy executives here in Houston have begun to notice gasoline prices. After gasoline futures prices closed at a record of \$1.731 per gallon last week due to two refinery problems plus continued gasoline demand growth, wait until pump prices reflect this level! This reaction to pump prices is a first, and shouldn't be ignored, even though it might not have much impact for a while.

Back on March 17, April oil futures breeched the \$57 per barrel level reaching a record level the day after the U.S. Energy Information Administration (EIA) reported lower growth in domestic crude oil supply and greater draws in gasoline and distillate (home heating oil). On the same day the inventory data was reported, OPEC held a meeting to address its crude oil production quotas and production volumes in the face of the sky-high oil prices. OPEC, in all its twisted logic, decided that the solution to the divided opinion of the members was to boost its production quota by 500,000 barrels per day (b/d) to 27.5 million b/d from the current 27.0 million b/d quota. In addition, OPEC members talked about the possible need to further increase its production quota by 500,000 b/d during the second quarter.

Saudi Arabia and Kuwait, are the only OPEC members with immediately available surplus production

In boosting its production quota, all OPEC really accomplished was to lower the current amount of unauthorized overproduction by cartel members from 700,000 b/d to 200,000 b/d. Saudi Arabia and Kuwait, about the only OPEC members with immediately available surplus production, have indicated that they are boosting their production by 370,000 b/d. The production hikes, relative to their February production volumes, should be achieved by the end of April. Once that oil is on stream, OPEC will be producing in excess of 28 million b/d, an all-time high.

While OPEC talks about wanting to bring crude oil prices down into the \$40 to \$50 per barrel range by boosting its production, it really has few options in the near term to achieve this goal. It will likely take a slowing in economic activity to convince crude oil buyers that oil supplies are plentiful. The most recent economic data doesn't appear to support a slowing GDP scenario. The incremental oil production coming from Saudi Arabia tends to be heavy and loaded with sulfur. In today's world of sophisticated refining and increased specialty gasoline demands, all crude oils are not valued alike. The light, sweet crude oil that is representative of the futures price is a shrinking proportion of global oil output. Increasingly, heavy oil with substantial sulfur content is dominating the global production stream. This heavy, high sulfur content oil does not yield similar volumes of

Crude oil prices have risen much more this year than anyone expected

light refined products (gasoline and jet fuel) as barrels of light, sweet crude. Therefore, there is a difference in the price refiners are willing pay for each of these barrels. The price is dependent upon realizations in the gasoline and heating oil markets.

The almost 35% increase in crude oil futures prices so far in 2005 has many observers and investors nervous. Clearly, crude oil prices have risen much more this year than anyone expected. Moreover, people are struggling to understand why prices have moved so far so quickly. Is it merely because oil demand is so strong in the United States, China and India? Or is it because global oil supplies are barely increasing? In either case, the net effect is the same – a tight crude oil market whereby the amount of readily available additional oil supply is less than the amount of production that could be lost due to natural events such as hurricanes, or political unrest such as experienced in Nigeria and Venezuela. Without this supply cushion, crude oil prices should remain high as that is the only mechanism to throttle back demand.

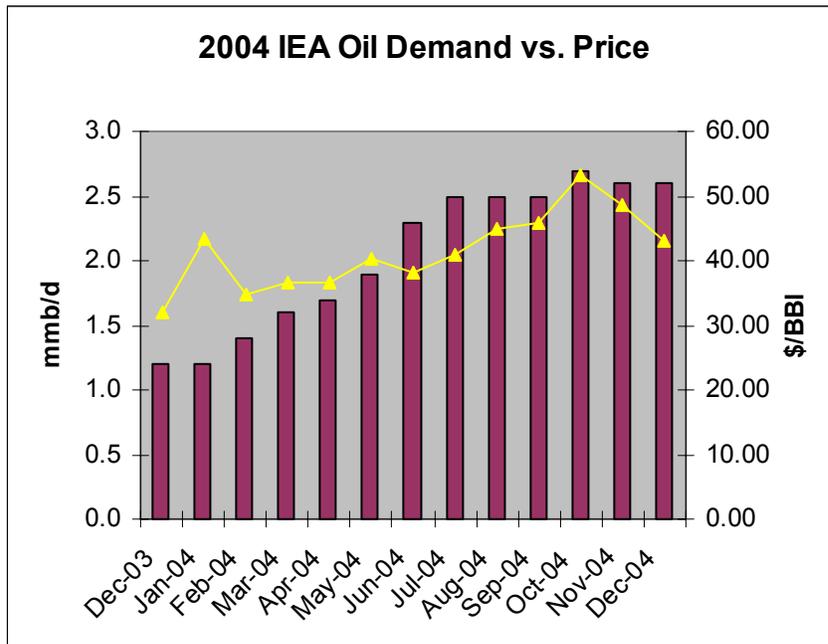
Recently, two respected forecasters boosted their estimates for oil demand growth in 2005

One of the major reasons why crude oil prices are trading at all-time highs is the continued upward revisions to global oil demand forecasts. The three main market forecasts that people pay close attention to are those prepared by the International Energy Agency (IEA), the U.S. Energy Information Administration (EIA) and OPEC. Recently, two of them boosted their forecast for oil demand growth in 2005, and it is this trend, we believe, that is driving crude oil prices to record levels.

Why do we believe this? In Exhibits 1 and 2, we have plotted the yearly global oil demand increases forecast by the IEA for 2004 and so far in 2005. Beginning in December 2003,

(Exhibit 1) the IEA forecast 2004 global oil demand to climb by 1.2 million b/d. As 2004 progressed, the IEA’s forecast was consistently revised higher. In fact, 2004’s global oil demand growth increased by 2.7 million b/d, or more than double the IEA’s projection prior to the start of the year.

Exhibit 1. IEA Demand Forecast Revisions for 2004

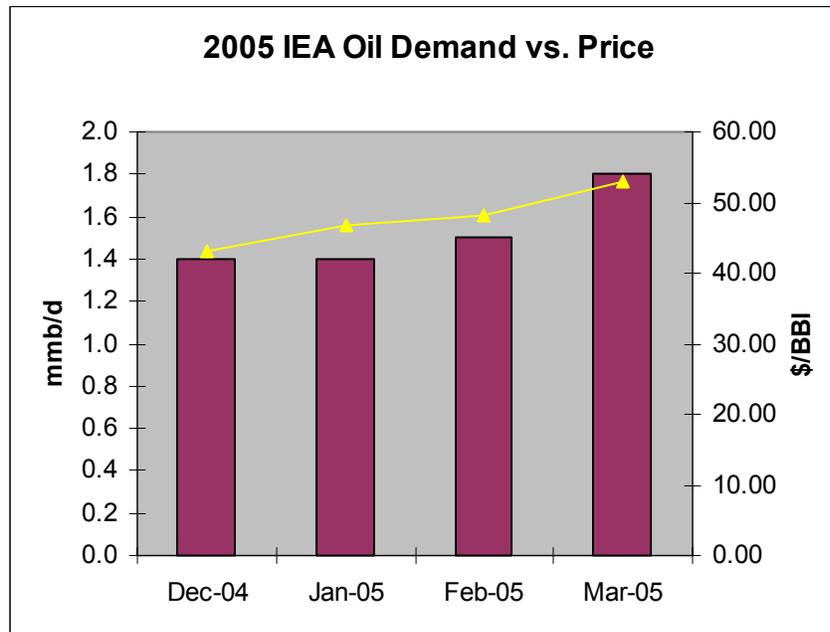


Source: IEA and EIA

“This is like déjà vu all over again” – Yogi Berra

In looking at current demand trends, oil market observers are pondering whether Yogi Berra’s famous statement, “This is like déjà vu all over again” will prove prophetic in describing the 2005 oil market. Between December 2003 and March 2004, the IEA boosted its demand forecast by 400,000 b/d. (Exhibit 1.) From December 2004 to their March 2005 report, the IEA has boosted their 2005 oil demand forecast by a similar 400,000 b/d. While the economic and financial data emanating from China is somewhat confusing and contradictory, it appears that China’s economy may not be slowing as much as the government desired and this is the main catalyst for the upward revisions.

Exhibit 2. IEA Demand Forecast Revisions for 2005



Source: IEA and EIA

If 2005's oil demand were to grow as it did in 2004, the world will need an incremental 1 mm b/d above the 1.8 mm b/d of supply growth currently projected

While the forecast for 2005 calls for a slowing in the oil demand growth rate experienced in 2004, we have seen the projection increase from a 1.7% annual growth rate to the current 2.1% increase. Last year during the comparable period, the IEA's annual oil demand growth forecast increased from 1.5% to 2.0%. For all of 2004, demand actually grew by 3.4%, meaning that demand growth in the latter two-thirds of 2004 was substantially greater than anticipated at the start of the year. If 2005's oil demand were to grow by as high a rate as experienced in 2004, the world will need an incremental 1 million b/d of supply coming into the market above the 1.8 million b/d of supply growth currently projected. Where will the supply come from? The inability to readily answer that question is what has the crude oil market scared. Absent a convincing answer to the missing supply question, high oil prices need to break demand growth.

Challenges for Russia

In recent weeks the Yukos (YUKS.RS) saga has disappeared from the headlines. Although the battle initially appeared to be a personal one, eventual developments showed it was merely the first step in an organized program to re-empower the Russian government's control over its economy. It seems

Energy is the most powerful weapon Russia possesses at the present time

Russia had been struggling to find a way to re-establish its economic and political power on the world stage. Historically, Russia's power had been demonstrated by its military might. Now, its weakened military power has been supplanted by Russia's growing role in world energy markets. Energy is the most powerful weapon Russia possesses at the present time, as the country has become the leading supplier of natural gas to Western Europe and it is a principle supplier of oil to the West. However, the government's bungling efforts to gain greater control over its energy resources has transformed Russia from the great hope of oil markets to a source of great instability. The government's actions are beginning to choke off the flow of capital investment into the sector, which will ultimately impact Russia's resource development.

The major actions that have created uncertainty about the country's future course include stripping ExxonMobil (XOM.NYSE) of one of its licenses in Sakhalin, instituting a rule that only companies at least 51%-owned by Russian companies should be allowed to bid on new resource developments, and stumbling in its strategy of creating a global oil and gas power in Gazprom (OGZPF.PK).

The inability to compete the Rosneft deal prevents Gazprom from becoming a world-class oil company that can readily tap western capital markets to develop its resources

When Russia undertook to dismantle Yukos, its strategy was simple. The major producing unit, Yuganskneftegaz, was to be sold in an auction that would be rigged to enable Gazprom the win. However, the Yukos move to file bankruptcy in Houston, Texas disrupted the plan and forced the government to come up with another company to buy the main producing assets. That was accomplished, and the new company was subsequently acquired by state-owned Rosneft. Rosneft previously had agreed to be acquired by Gazprom, but that merger has not been completed. Now it appears that the head of Rosneft, with a new million-plus barrel-a-day producing company sitting on his plate, is less interested in completing the Gazprom deal. The inability to complete this deal prevents Gazprom from becoming the world-class oil company that can readily tap western capital markets to develop its resources.

It is difficult for Russian President Vladimir Putin to get involved in solving this problem as he has a number of geopolitical battles that are not going well. The Chechen insurgency, the "Orange Revolution" in the Ukraine that has spread to Moldova and has emboldened these countries to seek control over their separatist regions, the "Rose Revolution" in Georgia, coupled with Russia's involvement with Syria and Iran, and efforts to gain a better working relationship with China, are all occupying Putin's attention.

A quarter of Russia's oil wells are depleted

A recent report has concluded that almost a quarter of Russia's oil wells are depleted. The estimate that 23.8% of all its oil wells are exhausted came from Gennady Shmal, the President of Russia's Oil and Gas Industry Union, speaking at the sixth congress of Russian's oil and gas producers. Shmal said that 19% of Lukoil's (LKOH.RS) wells, 12% of Surgutneftegaz (SNGS.RS), 56% of Sibneft's (SIBN.RS), 39% of TNK-BP's (TNKB.YY) and 30% of Yukos' wells were exhausted.

If Russia does not develop new "unique" deposits and does not develop a law to stimulate oil production, the country will have to stop exporting oil

Shmal stated that if Russia does not develop new "unique" deposits and does not develop a law to stimulate oil production, the country will have to stop exporting oil as it would be hardly able to meet domestic demands. The latest Russian monthly estimate from the International Energy Agency (IEA) indicates the country increased production to 9.34 million b/d after four months of decline. For a country counting on oil production and export capacity growth, this is not a good performance record, or a positive omen for the future, although forecasters still are projecting a production increase for all of 2005. Without strong capital flows and greater western oilfield technology, prospects for Russian oil production growth would appear to be dimming.

Deepwater Drilling Outlook Enhanced by GOM Success

2004 marks the tenth year of sustained expansion of deepwater production in the Gulf of Mexico

At the end of January, the Minerals Management Service reported that there were 12 new deepwater discoveries and 14 new deepwater field startups during 2004. This record marks the tenth year of sustained expansion of deepwater production. The deepwater success has been the key force in the revival of the Gulf of Mexico as an exploration and development basin. It has contributed to the recent strength of the deepwater drilling cycle that Transocean (RIG.NYSE) CEO Robert Long told investment analysts should last at least for the next two years. Long's view is based on the full employment of the industry's deepwater fleet, the length of contracts and time required to drill these deepwater wells and the absence of new rigs entering the fleet.

Exhibit 3. 2004 Deepwater Gulf of Mexico Discoveries

Prospect Name	Operator	Area	Block	Water Depth (ft)
Tobago	Unocal	Alaminos Canyon	859	9,627
Silvertip	ChevronTexaco	Alaminos Canyon	815	9,226
Tiger	ChevronTexaco	Alaminos Canyon	818	9,004
Atlas	Anadarko Petroleum	Lloyd Ridge	5	8,810
San Jacinto	Dominion Exploration	Desoto Canyon	618	7,850
Jack	ChevronTexaco	Walker Ridge	759	6,965
Thunder Hawk	Dominion Exploration	Mississippi Canyon	734	5,724
Goldfinger	Dominion Exploration	Mississippi Canyon	771	5,423
Ticonderoga	Kerr-McGee	Green Canyon	768	5,250
Puma	BP Exp. & Prod. Inc.	Green Canyon	823	4,130
Dawson Deep	Kerr-McGee	Garden Banks	625	2,900
Crested Butte	Nexen	Green Canyon	242	2,846

Source: Minerals Management Service

The sustainability of the deepwater drilling cycle will depend on the success of operators' exploration programs

The sustainability of the deepwater drilling cycle will depend on the success of operators' exploration programs. Drilling success should cause operators to shift rig contracts from exploration to development efforts. Given the wide geographic spread of the deepwater drilling efforts, it would appear that modest exploration success should sustain a high level of rig utilization and high rig day rates.

The outlook for international jackup drilling rigs is not as favorable

Long said that day rates for fifth-generation floating drilling rigs have moved into the mid-\$200,000 range. These rigs are in demand for the ultra-deep and harsh drilling environments. The rise in crude oil prices over the past year has stimulated drilling activity in the North Sea where mid-water depth floating rig day rates have climbed from \$45,000 in early 2004 to over \$100,000 per day in the first two months of 2005.

The outlook for international jackup drilling rigs is not as favorable. Both Long and ENSCO (ESV.NYSE) CFO Jay Swent have commented that the growth in the global jackup rig fleet in 2006 and 2007 will likely depress rig day rates in this sector. There are 25 new jackups under construction on speculation or without contracts that should arrive in the market in 2006 and 2007. These rig owners also possess options to build a further 12 rigs. When these rigs arrive, the fleet utilization rate should still remain high, but day rates will likely decline some. Exactly how much day rates might drop is difficult to project since the pressure to find and develop new offshore oil and gas resources on the outer continental

shelves around the world might stimulate a higher rate of rig demand than currently anticipated.

Saudi Arabia's Capacity Expansion Tied to Demand

Saudi Arabia's has a major oil production capacity expansion program under way

Saudi Arabia's Aramco Oil Company has a major oil production capacity expansion program under way. During the last half of 2004, Saudi Aramco undertook to significantly increase the number of active drilling rigs, boosting the country's count from 44 in May 2004 to 76 by June 2005. This 73% increase in rig activity is designed to enable Saudi Aramco to boost its production capacity by 2.3 million b/d by 2009. Abdallah al-Saif, a senior vice president of Saudi Aramco, speaking at an oil conference in Bahrain recently, outlined the company's growth plan. The company is expecting to bring 300,000 b/d of Arabian light crude oil on stream from the Haradh field in 2006, 500,000 b/d from the Kharsaniyah field in 2007, 300,000 b/d of light crude from the Shaibah field in 2008 and a further 1.2 million b/d of Arabian light from the Khurais oil field in 2009.

According to al Saif the development pace will be either advanced or deferred depending upon future forecasts of global oil supply and demand trends. This is important given that Saudi Arabia is committed to maintaining spare output capacity of 1.5-2.0 million b/d at all times. At the present time, Saudi Aramco says it has 11 million b/d of production and is producing about 9 million b/d, before it adds to its output following the recent OPEC meeting.

The Saudi plan has no oil capacity expansion in 2005 projected

What is interesting about Saudi Aramco's plan is that there is no projection for oil capacity expansion in 2005. Additionally, almost half of the total projected capacity addition is scheduled to occur in 2009, four years away. That would seem to support the case made by oilfield service executives and industry consultants that the ability of Saudi Aramco to add production capacity quickly no longer exists. If true, then people concerned about the current global crude oil market tightness must worry about the ability of Saudi Aramco to meet this production capacity growth schedule, and the implications of an extended period of supply tightness on prices and economic activity.

Energy Stock Prices – Boosted by Tech Investors?

A recent analysis by Morningstar.com, the mutual fund evaluation firm, examined the issue of whether institutional

Value-oriented funds didn't see much of a shift in their overall allocation to energy

investors have been abandoning technology and boosting their energy investments. The study examined the year-end energy weightings of funds in the nine diversified domestic categories for 1998 through 2004. They also examined the allocations for hardware and software investments in the funds. The purpose of the review was to see whether portfolio managers had been shifting money from technology to energy investments.

Among large-cap funds, value-oriented offerings didn't see much of a shift in their overall allocation to energy. The typical large-value fund has seen its overall weighting in energy rise by just one percentage point over the past six years. This suggests that the funds have actually been selling energy stocks given their price appreciation.

Large-cap growth funds have seen their energy weightings double, but the allocation is only up to 4% of assets, so there hasn't been a meaningful trend on new investment. More significant, these funds have seen their allocation to technology shares decline from 25% to 15% of assets. Some of the drop is a result of depreciation in share prices, but some of it also reflects a reduction in interest by portfolio managers.

In the mid-cap area, value, blend and growth funds have all increased their energy exposure in the past few years

In the mid-cap area, value, blend and growth funds have all increased their energy exposure in the past few years. Mid-growth funds started the period with a 2% weighting that has now tripled. Value funds have seen their energy allocation rise from 5.6% to more than 8%. On the tech front, mid-growth and mid-blend funds have meaningfully reduced their exposure to the group, while mid-value funds are not really doing anything dramatic. The trends in energy and technology investing are similar in the small-cap area, but even after the reduction in tech weightings most small-cap growth funds continue to devote about 20% of their assets to the sector.

The study concluded at the end of 2004, so it did not capture the sharp rise in energy stocks that has occurred in the first quarter of 2005. The energy stock price rise may signal that portfolio managers have materially increased the weighting of energy stocks in their portfolios. This would not be surprising given the tendency of portfolio managers to want to be associated with the hot investment groups at any particular time. As the first quarter ended, natural resource portfolios were the only positive performing funds while the balance of the market was down. This performance disparity is reminiscent of the 1970s stock market.

Japanese Offer To Protect Oil Flows

A Japanese tugboat towing a barge drilling rig to Myanmar was stopped by pirates in the Straits of Malacca

On March 14, the Japanese tugboat *Idaten*, towing a barge drilling rig to Myanmar, was stopped by pirates in the Straits of Malacca. The pirates were armed with M-16 rifles and grenade launchers. They abducted three crew members, including the Japanese captain, a Filipino engineer and another Japanese sailor. As a result of this action, Japan offered to send coast guard ships to the strait, which is jointly patrolled by Indonesia, Malaysia and Singapore. On March 20, the three captives were released by the pirates.

Exhibit 3. Malacca Straits Represents Major Asian Oil Choke Point



Source: Wikipedia

The Straits of Malacca is one of the most important waterways in the world and ranks as one of the major choke points for oil shipping

The Straits of Malacca is one of the most important waterways in the world and ranks as one of the major choke points for oil shipping. The Straits constitutes a narrow passage between Malaysia and the Indonesian island of Sumatra. (Circled in Exhibit 3.) Some 50,000 ships, and half the world's oil supply, transit the 550-mile long waterway each year. Japan receives about 90% of its oil imports through the straits. According to the International Maritime Bureau, there were 37 incidents of piracy in the straits in 2004. While piracy declined in most

places in 2003 and 2004, it increased in the straits. This past weekend, a gas carrier was attacked by pirates, but they eventually allowed the ship to continue on its journey.

The Japanese offer to assist in patrolling the Malaccan Straits was rejected

The Japanese offer to assist in patrolling the Malaccan Straits was rejected by the Indonesian and Malaysian governments. Most likely they rejected the offer because they do not want Japanese presence in the straits. Japan has been shifting its military thinking from a defensive stance to the ability to respond to threats throughout the region without having to rely on the United States. If the current security efforts in the straits prove inadequate, the Japanese might consider taking unilateral action to protect their economy.

Hurricane Forecasts Less Active Year than 2004

The new forecast calls for an above average hurricane season this summer and fall for the Atlantic Basin and an above average probability of hurricane landfall

A newly revised forecast of hurricane activity was released on April 1 by the Department of Atmospheric Science at the Colorado State University. The new forecast calls for an above average hurricane season this summer and fall for the Atlantic Basin and an above average probability of hurricane landfall. The new forecast calls for 13 named storms in 2005, up two from the December forecast. The average for the past 52 years is 9.6 named storms.

This year should see seven hurricanes, up one from the prior forecast, which was about at the historic average. Three hurricanes are forecast to become intense (Category 3-4-5), unchanged from the December forecast. Historically, there are 2.3 intense hurricanes a year.

The new forecast calls for a probability of landfall along the entire U.S. coastline of 73% compared to the average of 52%. The probability of landfall on the East Coast including the Florida peninsula is 53% vs. the average of 31%. The Gulf Coast landfall probability is 41% compared to an average of 30%.

The reason for the upward revision in the hurricane forecast is the continued warming of the Atlantic Ocean and that El Nino conditions for the summer/fall period are anticipated to be less likely. The forecasters say that if these assumptions prove correct and/or the trends increase, subsequent hurricane forecasts (May 31 and August 5) could be raised.

While the new forecast calls for fewer storms than experienced in 2004, it only takes one storm such as

Hurricane Ivan to create significant havoc for the Gulf of Mexico oil and gas industry.

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