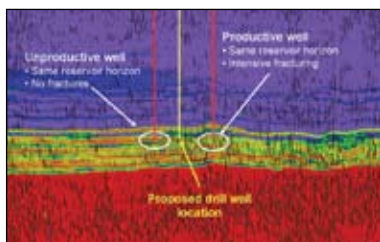


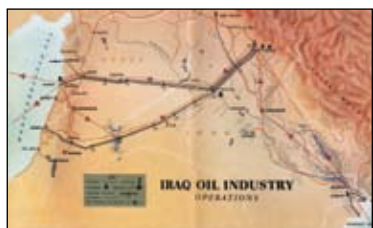


## NEWS

## Sembcorp Marine receives a 2nd Egyptian Jack-up order



Full-Wave Seismic for Reservoir Analysis page 10



Opening a way... Iraq opens the door to international oil companies page 16



High-Performance Water-Based Fluids in Ultra-Deep Offshore Wells page 18

Jeddah oil summit apparently failed to bear fruit .....page 17

IS for Horizontal Well Design Workshop..... page 20

Statistics.....page 22

### LAST MONTH'S OIL PRICES



## MIDOR on the spot Will it be privatized?

Over the past month, rumors were spread in every corner of Egypt claiming that the government is to start a privatization plan for the petroleum companies. Since then, a wave of disagreements, oppositions and discontents has dominated the petroleum scene, asking for replies and facts from the government in general and from the Ministry of Petroleum in particular

By: Yomna Bassiouni  
Continued on page 12



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The 2nd Ramadan Petroleum  
Soccer Tournament '08



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## Back to the dark ages!

For thousands and thousands of years, the humankind has been struggling on Earth; seeking power and dominance, fighting for food, energy... etc. In the dark ages, people were continuously suffering from hunger, instability and weakness; that is why brutal attacks were very common during that time.

Currently, despite the technology advancement and luxurious lives of some people, nations are still struggling and fighting each other for the same reasons like in the dark ages. The strategic invasions and political attacks to gain more power and get hold of economic and energy resources have been considered as main elements symbolizing this era.

If we analyze the series of tensions and attacks over the past few years, we can clearly find out that either energy or power dominance lie behind the attack. The political tensions between the USA, from one side and North Korea and Iran over their nuclear programs illustrate the struggle over power. The American reign is threatened by the new mega powers which are attempting to undermine the American supremacy.

The invasion of Iraq in 2004 has been another scenario; getting hold of one of the richest oil producing countries under the umbrella of saving the region from the brutality of late dictator Saddam Hussein who claimed the ownership of mass destructive weapons. For four years now and after this fake veil was taken off, the American troops are still occupying the Iraqi territories. All for the sake of oil!

Claiming to be modernized and living in the era of space invasion, we are still similar to our ancestors in the dark ages; we are using force and viciousness to get our needs. Water, food and energy crisis are becoming more complicated and tensions are on the rise.

Yomna Bassiouni  
Managing Editor

Scoring with connections and not just points

## The 2<sup>nd</sup> Ramadan Petroleum Soccer Tournament '08



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## Egypt-Syria activate a joint pipeline project

Egypt has begun pumping natural gas to Syria by a pipeline running through Jordan as part of a giant project to export Egyptian gas to the Middle East and eventually to Europe, announced Suffian Allaw, Syria's Oil Minister.

Under the terms of the Arab Gas Pipeline Project signed in 2001, Egypt is to supply Jordan, Lebanon and Syria with natural gas for 30 years. The project costs more than \$1.2 billion, with a total pipeline length of 1,200 kilometers, about half of it inside Syrian territories.

Approximately 88.3 million cubic feet of gas per day will be pumped to Syria, increasing gradually to 212 million cubic feet over the next nine years, highlighted Allaw.

The Syrian Minister added that this pipeline is of high vitality to his country, especially the electricity sector as 40% of power-generating stations are run by burning gas.

According to Egypt Daily News, Syria has been facing a decline in its oil production over the past few years, which has led Damascus to rely more on natural gas. The country's daily gas consumption is estimated at 477 million cubic feet per day. Its daily production of natural gas was estimated at 494 million cubic feet in 2007.

The first phase of the Arab Gas Pipeline, accomplished in 2003, linked Egypt with the Jordanian Red Sea Port of Aqaba through a pipeline passing under the Gulf of Aqaba. Egypt has been exporting nearly 99 billion cubic feet of gas a year to Jordan under a 15-year deal.

Two years later, the second-phase extension of the pipeline reached the Jordanian town of Rihab north of the capital Amman.

The third phase brought the pipeline to Syria's Deir Ali power station south of Damascus, said Allaw.

An extension to Lebanon is supposed to open later this year, followed by an extension to Turkey's border, where the pipeline will be connected to the planned Nabucco Pipeline for the delivery of gas to Europe, under a deal reached in 2006 between Egypt, Syria, Jordan, Turkey, Lebanon and Romania.

(Egypt Daily News)

## Hill International to initiate a joint venture company in Egypt

Hill International, the worldwide construction consulting firm, announced recently that it has entered into an agreement with the Egyptian Natural Gas Holding Co. (EGAS) and the Egyptian Natural Gas Co. (GASCO), two subsidiaries of the Egyptian Ministry of Petroleum, pursuant to which they will form a new joint venture company that will provide project management services primarily on oil and gas projects throughout the Middle East and Africa.

The new company, Hill International Petrol (Egypt) Ltd., will be owned 50% by Hill and 50% by the Ministry of Petroleum's subsidiaries.

«This new joint venture will allow Egypt to bring Hill's project management resources and capabilities to projects throughout Egypt and the surrounding region, as well as to help develop a pipeline of work for Hill into the expanding oil and gas sector,» said Irvin E. Richter, Hill's Chairman and Chief Executive Officer. «We believe that EGAS and GASCO are the ideal partners to help us make this new company successful as they will provide many of the technical resources necessary to help manage these projects,» Richter added.

(Zawya)

# Melrose abandons East Sindy No. 1

Melrose Resources plc has provided an update on its exploration and appraisal program in Egypt.

The Ar Rub No.1 exploration well has been drilled to test a deep Sidi Salim exploration play in the northern area of the South East El Mansoura concession. The well reached a total depth of 10,300 feet and open-hole logs suggest that two potential reservoir intervals were encountered within the target formation. The upper interval has an apparent net pay of 53 feet with an average porosity and water saturation of 21% and 35%, respectively, and the lower interval has 10 feet of net pay with a porosity and water saturation of 10% and 43%, respectively.

The potential reservoir intervals comprise a mixture of carbonates and sandstones which have not previously been tested on the concession and the wellbore conditions did not allow conclusive open-hole log data to be obtained. Therefore, the well is being prepared for testing to confirm whether the two zones will produce at commercial flow rates. Melrose's pre-drill unrisked reserves estimate for the prospect of 90 Bcfe is unchanged pending the well test results.

The Qantara No.4 well has been sidetracked to determine whether production can be re-established from the shut-in Qantara field. The well reached a total depth of 10,454 feet and encountered a net pay interval of 11 feet with an average porosity and water saturation of 17% and 50%, respectively. The well has been cased prior to production testing.

The East Sindy No.1 exploration well has been drilled to test a shallow Sidi Salim prospect in the northern area of the South East El Mansoura concession. The well reached a total depth of 7,300 feet and, although it intersected a thick net sand interval of 400 feet, it had no commercial hydrocarbon shows. The well has therefore been plugged and abandoned.

Following the completion of operations on the Ar Rub No.1 well, the EDC-54 drilling rig will move to the West Dikrnis field to sidetrack the West Dikrnis No.7 well and recomplete it as a high-capacity, horizontal oil production well.

The EDC-9 rig will move from the Qantara field to drill the West Zahayra No.2 well in the El Mansoura concession. This well will appraise the up-dip area of the Qawasim discovery made by West Zahayra No.1 and will also test a deeper Sidi Salim exploration target which has unrisked reserves potential of 165 Bcfe with an estimated chance of success of 45%.

The ECDC-1 rig will be used to drill the Ghizala No.1 well on a recently identified Sidi Salim prospect in the South East Mansoura concession. The prospect lies on trend with Ar Rub and the Tamad oil field which is currently producing 1,100 bopd. Ghizala has unrisked reserves potential of 2 MMbbls of oil with an estimated chance of success of 26%.

The seismic acquisition program which commenced in March 2008 on the South East El Mansoura concession is progressing well. To date, 712 km of 2-D seismic data and 269 km<sup>2</sup> of 3-D seismic data have been acquired, with a further 486 km<sup>2</sup> of 3-D data still to be acquired.

The preliminary interpretation of the seismic data is encouraging and 10 good quality leads and prospects have been identified in the Tertiary formations and a further 16 in the older Cretaceous and Jurassic formations. In light of these results, Melrose is considering extending the 3-D seismic survey area to cover more of the concession later this year.

«The Ar Rub No.1 well in Egypt also appears interesting and we look forward to flow testing the well over the next few weeks,» said Chief Executive David Thomas.

(Melrose Resources Plc Press Release)

## Libya to boost its petroleum projects

Libyan prime minister announced that his country is planning to construct an oil refinery and a natural gas pipeline in Egypt, helping boost investment in its Arab neighbor to \$10 billion in the next two years.

«We have now about \$2 billion (of investments) and we expect that within a period of two years maximum this will reach \$10 billion,» al-Baghdadi Ali Al-Mahmoudi told a news conference in Cairo. «It was agreed that an oil refinery will be built west of Alexandria with Libyan funding and it will be used for Libyan crude.»

(Ministry of Petroleum)



## Egypt to produce eight tones of gold

The chairman of the Egyptian Geological Survey and Mining Authority reported that Egypt will produce eight tones of the metal from mines in the eastern desert in 2009.

«We have been producing gold since last December and one of the mines that started production has a reserve of 13 million ounces of gold,» Hussein Hammouda said.

«Once this mine is fully operational, it won't be only one of the biggest in Africa, but rather one of the biggest worldwide,» he told Reuters in a telephone interview from Cairo.

Egypt's gold production stopped in the late 1950s as the volume mined was considered too small to be profitable. The country produced 7.4 tones from 1902 to 1958.

«We are planning to produce eight tones of gold in 2009, which is more than what the country had produced in a century,» Hammouda said.

This is only the beginning ... and we are planning to become a major producer in the region as we explore other mines we have,» he said.

The country hopes this year's output will reach at least 15,000 ounces of gold, Hammouda said.

The revival plans for gold production were boosted last year when the North African country signed a memorandum of understanding with the International Finance Corp (IFC),

the private sector lender of the World Bank, to replace antiquated mining laws.

Egypt's old regulations, based on profit-sharing, made it virtually impossible for foreign mining players to exploit the reserves, while local companies lacked the capital or expertise to develop a commercial, home-grown industry.

Last year, Egypt offered eight gold mining concessions for various parts of the country. The 2007 round of concessions were awarded to five companies from Canada, Australia, Europe and the United Arab Emirates, Hammouda said.

«We are planning to offer a second round of concessions before the end of this year ... they will include about eight gold mining concessions and we are also looking at concessions for silver and other materials,» he said.

First-quarter gold demand in Egypt was up 14.5 percent at 18 tones, while sales value surged 63.5 percent to \$641 million, industry-funded World Gold Council said in May.

The once leading world gold buyer is likely to continue seeing double-digit growth in demand for the yellow metal over the next five years as the economy expands and tourism grows, it added.

(Egypt News)





## Sembcorp Marine receives a 2nd Egyptian order

Singapore rig builder Sembcorp Marine is primed to start a \$220 million deal to build a second deep drilling jack-up for the Egyptian Drilling Company (EDC).

The latest order, which is due for delivery in mid-2010, is the second consecutive newbuild jack-up rig that Egyptian Drilling has placed with Sembcorp Marine's PPL Shipyard.

The unit will be based on PPL's proprietary Baker Marine Pacific Class 375 (BMC Pacific 375) deep drilling design. The rig will be capable of drilling high pressure and high temperature wells at 30,000 feet whilst operating in 375 feet of water and be able to accommodate 120 people.

The first jack-up being built at PPL is scheduled to be delivered to EDC in December next year.

Since its inception in 2004, a total of 24 jack-up rigs have been ordered based on the BMC Pacific 375 design. To date, 11 units have been successfully delivered to the owners with 13 other units in various planning, engineering and construction phases with deliveries from 2008 to 2010, Sembcorp Marine said in a statement today.

EDC, which has operations in Egypt and Saudi Arabia, is owned equally by the Egyptian General Drilling Corporation and Maersk offshoot A.P. Moller. (Sembcorp Marine Press Release)



## PICO Logistics achieves Integrated Management System

PICO Logistics is a one-stop-shop logistics solutions provider with a special focus on the Oil & Gas Industry. With an Integrated Management System (IMS) in place, PICO Logistics is able to demonstrate a management system that satisfies various stakeholder demands. Quality, health, safety and environmental concerns are among many requirements that the company has to comply with in its day-to-day operations for its clients in the oil & gas industry and other sectors.



The IMS is one single management systems that runs the organization and addresses all objectives including QHSE at once, while being beneficial to enhancing the organization's efficiency and effectiveness. Having achieved the IMS against the relevant standards also demonstrates the company's commitment to customer and employee satisfaction. Moreover, the IMS enables a more streamlined flow of information throughout the organization plus an improved recognition and understanding of responsibilities and interrelationships in parallel to improvements in internal collaboration and in staff motivation and commitment.

With the IMS in place and working as an integrated whole, PICO Logistics is able to increase its operational efficiency and overall performance, and also risks as well as costs are reduced as responsibilities become clearer. As the company focuses on offering solutions rather than services and tailors offers matching specific sector or customer requirements, it has also implemented customer service standards and a customer satisfaction recognition program.

Egypt Oil & Gas Newspaper seizes the opportunity to congratulate PICO Logistics, a subsidiary of PICO Energy Holding, on being certified by SGS for ISO 9001/2000 (quality), OHSAS 18001/2007 (safety) and ISO 14001/2004 (environment) since June 2008.

## RENEWABLE ENERGY

### StatoilHydro to build 1<sup>st</sup> full scale offshore Floating Wind Turbine

StatoilHydro has decided to build the world's first full scale floating wind turbine, Hywind, and test it over a two-year period offshore Karmøy. The company is investing approximately 400 million NOK. Planned startup is autumn 2009.

The project combines known technology in an innovative way. A 2.3 MW wind turbine is attached to the top of a so-called Spar-buoy, a solution familiar from production platforms and offshore loading buoys.

The rotor blades on the floating wind turbine will have a diameter of 80 meters, and the nacelle will tower some 65 meters above the sea surface. The floatation element will have a draft of some 100 meters below the sea surface, and will be moored to the seabed using three anchor points. The wind turbine can be located in waters with depths ranging from 120 to 700 meters.

"Taking wind turbines to sea presents new opportunities. The wind is stronger and more consistent, areas are large and the challenges we are familiar with from onshore projects are fewer," said Alexandra Bech Gjorv, head of New Energy in StatoilHydro.

### Ramco Energy launches renewable subsidiary

Ramco announced that it has participated in the formation of a new subsidiary, SeaEnergy Renewables Limited (SeaEnergy), in which it has an 88% interest, with the founding management team owning the remaining interest.

SeaEnergy has been created to exploit the global opportunities for large scale offshore wind farm development. SeaEnergy has assembled a leading offshore wind farm development team; which will now, with Ramco's support, bring their combined extensive offshore expertise to the development of deep water offshore wind farms.

SeaEnergy's strategy is to develop, project manage, own and operate large-scale offshore deepwater (20m – 50m) wind farms, with significant generating capacity. This market is growing significantly with the wind industry growing at 10-15% globally, and new aggressive renewable energy targets mandated across the EU. SeaEnergy has already identified a number of potential opportunities which the team are looking to develop, initially these are expected to be in the EU.

### Siemens to open wind research center in Colorado

Siemens Energy announced it will open a wind research and development center in Colorado, according to the Denver Business Journal.

"We are very pleased to establish our first wind turbine R&D competence center in Boulder. The proximity of important institutions such as NREL and the NWTC, as well as the support received from the State of Colorado and the City of Boulder, make Boulder the perfect location for a R&D center in the U.S.," Randy Zwirn, head of Siemens Energy Sector in the U.S., said in a statement. "This is another great testament to Colorado's growing New Energy economy," Gov. Bill Ritter said in a statement. "We continue to establish ourselves as a worldwide leader in renewable, sustainable and modern energy. The arrival of Siemens Energy's U.S. wind turbine research center draws particular attention to the creative and groundbreaking work being done in energy R&D in Colorado." The Siemens Energy facility will focus on testing basic wind turbine.

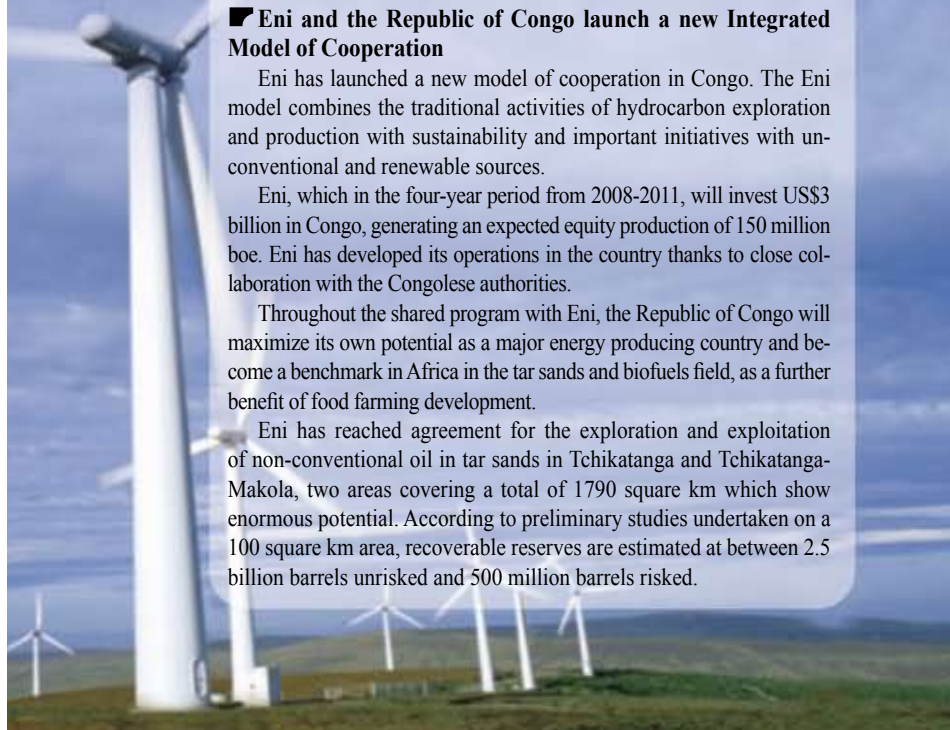
### Eni and the Republic of Congo launch a new Integrated Model of Cooperation

Eni has launched a new model of cooperation in Congo. The Eni model combines the traditional activities of hydrocarbon exploration and production with sustainability and important initiatives with unconventional and renewable sources.

Eni, which in the four-year period from 2008-2011, will invest US\$3 billion in Congo, generating an expected equity production of 150 million boe. Eni has developed its operations in the country thanks to close collaboration with the Congolese authorities.

Throughout the shared program with Eni, the Republic of Congo will maximize its own potential as a major energy producing country and become a benchmark in Africa in the tar sands and biofuels field, as a further benefit of food farming development.

Eni has reached agreement for the exploration and exploitation of non-conventional oil in tar sands in Tchikatanga and Tchikatanga-Makola, two areas covering a total of 1790 square km which show enormous potential. According to preliminary studies undertaken on a 100 square km area, recoverable reserves are estimated at between 2.5 billion barrels unrisks and 500 million barrels risks.







## Algeria invites bids for its 7th E&P round

OPEC member Algeria, revealing details of its seventh exploration and production licensing round, invited prequalified companies to bid for acreage with what it called high potential for petroleum resources.

According to the official website of the Algerian Energy and Mines Ministry, the deadline for bids for 16 zones containing 45 blocks is December 3, 2008.

The round, the first since April 2005, has been keenly awaited by multinational companies seeking permits to explore in Algeria, which is among the world's top owners of oil and gas reserves and a major gas exporter to Europe.

"The selected zones are in different sedimentary petroleum basins offering a high potential in petroleum resources," said a statement by the ministry's National Agency for the Valorisation of Hydrocarbon Resources (ALNAFT).

The round is the first to be offered under a 2006 law that gives state energy conglomerate Sonatrach a mandatory minimum 51 percent share in every oil and gas exploration contract awarded to foreign companies.

British Petroleum, Amerada Hess, StatoilHydro, Anadarko Petroleum, Repsol and Total are the main foreign companies involved in exploration and production of hydrocarbons in Algeria. *(Gulf News)*

## Interpipe launches new anti-corrosive coating line

Interpipe, the major global producer of steel pipes and 2nd largest producer of forged railway wheels in the world announced the opening of a new production line at Interpipe NMPP mill, which gives Interpipe the capacity to produce pipes with an external anti-corrosive 3-layer coating for both seamless and welded pipes up to 530 mm for oil and gas transportation. Total investment in the project has reached \$8.5 million.

The new equipment was supplied by the Dutch company Selmers Technology B.V., a global supplier of pipe blasting and coating plants and pipe logistics.

The new line's production capacity is 400 m<sup>2</sup> per hour, which is the maximum line capacity for this type of pipe in Ukraine. At the moment, the mill can produce pipes with an anti-corrosive 3-layer coating according to the following standards: DSTU 4219-2003, DIN 30670, GOST R, API 5L, ASTM.

Aleksey Slyusarev, Director of Production and Investments at Interpipe, said "The issue of quality is a top priority for pipes used in oil and gas transportation. Interpipe's investment in new production facilities confirms its commitment both to quality and to serving our customers' needs. Pipes from the new line will meet the highest requirements in terms of reliability and life-span."

*(Interpipe Press Release)*

## ION agrees to acquire ARAM Systems Ltd.

ION Geophysical Corporation has signed a definitive agreement to acquire all of the outstanding shares of ARAM Systems Ltd., a Canadian-based provider of cable-based land seismic recording systems, and its affiliate company, Canadian Seismic Rentals, Inc. of the gross purchase price of CDN \$350 million. A total of \$275 million will be paid in cash while the remainder will be paid in ION common stock.

Commenting on the acquisition, Bob Peebler, ION's President and CEO, stated, "Over the last several years, ARAM has demonstrated a clear ability to gain presence in an expanding global market for cable-based land seismic recording systems. ARAM's reputation for engineering and supply chain excellence, product reliability, and value-adding customer support have contributed to rapidly growing revenues that now exceed \$100 million per year. ARAM has firmly established itself as a major player in the analog segment of the market. Their ARIES recording systems, known for reliability and ease of use, have been embraced by contractors. The pending introduction of ARIES II will allow

## Aker Solutions wins \$260-million drilling equipment contracts



Aker Solutions has been awarded two contracts with Daewoo Shipbuilding & Marine Engineering Co. Ltd (DSME) in South Korea for the delivery of identical drilling equipment packages for Odebrecht's two new drillships. The total contract value for Aker Solutions is approximately \$260 million.

The scope of work for Aker Solutions is to deliver complete drilling equipment packages consisting of engineering, equipment deliveries and commissioning services.

Mads Andersen, Executive Vice President of Aker Solutions commented "winning this contract has reinforced our positive relationship with Daewoo Shipbuilding & Marine

Engineering Co Ltd and confirms our strong position in the booming drillship market".

The customer, Daewoo Shipbuilding and Marine Engineering Co. Ltd will manufacture both the Odebrecht I and II drillship for the client Odebrecht, who are one of Brazil's largest contractor companies with presence in over twenty countries.

The first drillship is scheduled for delivery in Q1/2011 and the second in Q2/2011.

The contract party is Aker Solutions' subsidiary Aker MH AS.

*(Aker Solutions Press Release)*

## Petrobras hits two more oil discoveries

Brazilian state-run Petrobras announced two oil discoveries in two blocks located in Rio Grande do Norte and Bahia states in Northeast Brazil.

Wells drilled in the BT-POT-4 Block in Rio Grande do Norte and the REC-T-31 Block in Bahia both showed indications of oil.

The filing did not provide any details about reserve estimates or commercial viability, reported Dow Jones Newswires.

In addition, no details about the oil's weight on the American Petroleum Institute's grading scale were provided.

Oil companies operating in Brazil are required to inform the ANP if any exploratory wells hit oil or gas.

*(Upstream Online)*



GX Technology and Concept Systems, ION has assembled a portfolio of land imaging hardware, software, and imaging services that is capturing the imaginations of both contractors and E&P companies. We believe ARAM's products and people can play a key role in helping ION to achieve its vision more quickly and with improved financial results."

The \$275 million cash portion of the transaction is expected to be sourced by a term loan issued in conjunction with ION's existing line of credit and from the proceeds of long-term debt, terms and conditions of which have yet to be finalized. Including anticipated interest expenses, the issuance of ION common stock to finance the non-cash portion of the transaction, and synergies, but excluding one-time charges, the acquisition is projected to be earnings-neutral for the remainder of 2008 and accretive on a consolidated pro-forma basis in 2009. Evercore Group L.L.C. served as ION's financial advisor, while Tudor, Pickering, Holt & Co. L.L.C advised ARAM. *(ION Press Release)*





## Iran reveals "New" billion barrel oilfield in Southwest

Iranian Oil Minister, Gholam Hossein Nozari said that Iran has discovered a new oilfield in the southwest province of Khuzestan with in-place reserves of 1.1 billion barrels.

The field, which is located near Andimeshk in Khuzestan, holds an estimated reserve of 233 million barrels of recoverable crude oil, state television quoted Nozari as saying.

The oil discovered in the new field is light crude with an API gravity of 33 degrees, the Iranian Oil Minister said.

Iran is the fourth-largest oil producer in the world and ranks second in output among the Organization of Petroleum Exporting Countries (OPEC) members.

Iranian officials have said that the country's oil reserves were estimated at more than 130 billion barrels, about 12 percent of global reserves.

(Xinhua News Agency)



## First Energy Bank launches a \$3 billion drilling company

Bahrain-based First Energy Bank announced the formation of a new \$3-billion offshore drilling and services company, MENAdriL. Launched with strategic partners Gulf Finance House and ADWOC and strategic and technical advisors PFC Energy International and Noble Denton, MENAdriL plans to be one of the largest companies of its kind in the Middle East, Asia and North Africa and is designed to capitalize on ever-increasing hydrocarbon prices and the resulting robust demand for oil and gas drilling services.

Headquartered in Bahrain, MENAdriL will focus on offshore exploration and development drilling in the GCC, North Africa and South East Asia. The company aims to have over 20 rigs operating within three to five years and is in the process of acquiring a leading drilling company with a number of rigs already working in the region and others under construction. MENAdriL's diversified drilling portfolio will include jackup and semisubmersible rigs capable of drilling in shallow, medium and deep water as well as land rigs and it will also provide project management services.

"With the oil price regularly reaching record highs

and reserves steadily decreasing, we saw a first class opportunity for a new company to bring together the skills, know-how and investments required to drive the industry in the region and set a new benchmark in drilling operations. By penetrating this high entry barrier industry with its high margins, MENAdriL will be able to deliver outstanding returns to its investors," said Esam Janahi, Chairman of First Energy Bank.

"The largest European and South American reserves are offshore. In the Middle East, Africa and Asia, offshore reserves are not fully explored. MENAdriL is positioned to capitalize on the heavy global investment in finding and delivering new resources and has set the cornerstone for a leading off-shore drilling regional operator," further added Janahi.

The lead financial advisor is First Energy Bank. Launched in 2008 with an initial paid-up capital of US \$1 billion, First Energy Bank focuses on key sectors of the energy industry, from oil and gas to power, offering Sharia-compliant investment solutions backed by professional standards of the highest order.

(First Energy Bank Press Release)

## Al Ghurair Investment & ETA Ascon Star Group conclude \$2 billion deal with NOC, Libya

In a landmark achievement, the Star Consortium comprising of the Al Ghurair Investments' subsidiary TransAsia Gas International and ETA Ascon Star Group's Star Petro Energy, have successfully concluded a deal with the National Oil Company (NOC) of Libya to set up a joint venture company to own and upgrade its Ras Lanuf refinery.

The companies signed a Joint Venture framework agreement in February earlier this year confirming their intentions to form the Joint Venture Company which has now been concluded after signing of the Shareholders Agreement. The shareholder agreement was signed by Shukri Ghanem, Chairman of National Oil Corporation of Libya, and Abdullah Ahmad Al Ghurair, Chairman Al Ghurair Investments and Star Consortium.

The proposed Joint Venture Company will be incorporated and registered in one of the free zones in Dubai, with

offices in Ras Lanuf, Tripoli and Dubai. The consortium is considering the DMCC, among the free zones in UAE, to set up the JV. The company will be a 50:50 Joint Venture between the Star Consortium and NOC. Ras Lanuf refinery produces 10 Million tones of refined petroleum products per year which are sold locally as well as exported to America and Europe.

The upgradation project which is estimated to cost \$2 billion will take five years to complete and would start immediately. It will involve revamping and refurbishment of the existing plant to increase capacity and improve efficiency as well as upgrading and expansion of the refinery, using state-of-the-art technology to improve the quality of products to meet latest international standards.

Commenting on the conclusion of the joint venture, Abdullah Ahmad Al Ghurair, Chairman of Al Ghurair, said "This deal with Libyan National Oil Company is a ma-

## OMV discovers gas and condensate in Tunisia



OMV Aktiengesellschaft announced the discovery and successful testing of condensate and gas in its Ahlem-1 exploration well in the Jenein Sud exploration permit in Southern Tunisia.

This is the third successful discovery in the permit within the last two years and highlights the potential of this block, which is operated by OMV (Tunisian) Exploration GmbH.

The exploration well reached a total depth of 4,020 meters and encountered a total of 36 meters net gas and condensate pay in several layers at depths ranging from 3,700 to 3,980 meters. Further exploration and appraisal activities are planned in the area, including the acquisition of 3D seismic and drilling of additional wells.

Helmut Langanger, OMV Executive Board Member responsible for Exploration and Production, stated, "I am delighted with this new discovery in our Jenein Sud exploration block as it confirms the potential of this block and reinforces our plans for further growth in Tunisia."

The cumulative flow rate of all layers tested by the Ahlem-1 well amounts to 3,500 bbl/d of condensate and 120 mn cf/d (20,000 boe/d) of gas.

OMV and the Tunisian national oil company ETAP each hold a 50% interest in the Jenein Sud exploration permit, which covers an area of 1,992 km<sup>2</sup>, 700 km south of the Tunisian capital Tunis. (Rigzone)

major achievement for TransAsia Gas International, which clearly demonstrates its capacity to carry out work on large scale refinery projects. By winning this JV contract, the company has moved one step closer to becoming a fully integrated energy company. We are confident that and the Star Consortium, including TransAsia Gas International, would meet the expectations of our JV partners."

Syed Salahuddin, Managing Director, ETA Ascon Star Group, said "Star Petro Energy is proud to be part of the Star Consortium in the deal with Libyan NOC to revamp one of its refineries. We will contribute our best of efforts to make this project a role model for other UAE companies seeking to spread into North African markets."

Following the Ras Lanuf deal, Al Ghurair and ETA Ascon Star Group are also pursuing other investment and joint venture opportunities in Libya's Oil field services, steel and cement industries.





## Torres ends Spanish wait for glory



**A first-half goal by Fernando Torres gave Spain their first major trophy in 44 years after a 1-0 Euro 2008 final win over Germany**

No doubt, Spain deserved to win the cup as, despite the excitement provided by Russia, Turkey, Netherlands and Portugal, they scored more goals and conceded fewer than any other team.

The Liverpool striker Torres beat the hesitant Philipp Lahm to a Xavi through ball on 33 minutes and prodded it beyond Jens Lehmann. Although a dominant Spain side never delivered a knock-out blow, it mattered little as Germany never seriously looked like mounting a comeback.

The victory at the Ernst Happel Stadium in Vienna rounded off a superb tournament for the Spanish, for whom it was a second European triumph in addition to their 1964 win.

## Fresh emperor

**Rafael Nadal dethroned Roger Federer after a five-year reign by winning the longest-ever Wimbledon men's final**

This will be considered the greatest final ever. It was certainly the longest at 4 hours 48 minutes, and that is without the two rain delays. On occasions, Nadal and Federer could only shake their heads and marvel at the quality of their opponent's shots. They were spectators, like the rest of us, to a master class in tennis. On other occasions, shots that would have beaten any other player were returned as winners.

Not only was the tennis of the highest quality, it was of the nerve-racking variety as well; Federer went down two sets to love, he saved two Championship points, Nadal lost two tie-breakers, the fifth set was still going as it was getting darker, the players were tired. It was all too much.

When the dust settled, Nadal was the new champion, 6-4, 6-4, 6-7 (5-7), 6-7 (8-10), 9-7, and no one who saw this unforgettable match could say he didn't deserve it.

All the talk had been about Federer breaking Bjorn Borg's record of five consecutive Wimbledon titles, it was the second seed who upstaged Borg, by becoming the first player to win back-to-back at the French Open and Wimbledon.

The other matches that day, despite the quality of their tennis, were eclipsed by this finale. For the record, Samantha Stosur and Bob Bryan won the mixed doubles, Jessica Moore and Polona Herczeg claimed the girls' doubles, while Chinese Taipei duo Cheng-Peng Hsieh and Tsung-Hua Yang were crowned boys' doubles champions. In the Wheelchairs Masters Series, Dutch duo Robin Ammerlaan and Ronald Vink retained their Wimbledon title.

"In tennis, unfortunately there has to be winners and losers, there's no draws," Federer said. "But I really had to push hard to come back. And I wasn't able to break him in the last three sets, but still I pushed him right to the edge. It's probably my hardest loss, by far. I mean, it's not much harder than this right now."

"Because I know how tough is lose a final like this. This

is tougher than last year, and last year I was very disappointing in the end. So he is a great champion, no? His attitude always is positive when he loses, when he wins. Always accept the victories and the losses with the same humble for him."

Venus Williams claimed her fifth Wimbledon singles crown after ending her losing run

against sister Serena in Grand Slam finals to win 7-5, 6-4 in a riveting match which wonderfully lived up to the occasion.

It was the seventh clash of the sisters in a Grand Slam final, but, ever since Venus won the first of those at the 2001 US Open, it had been Serena all the way in those big matches, including two previous Wimbledon finals.

Both looked nervous as they arrived on court, but if that was the case, they must have thrived on it. To describe the match as superlative is to somewhat do it down. This was not one for the conspiracy theorists to relish. The sisters had their match faces on. They were blasting not only the ball to bits but also, when they could, each other. It was an out-and-out display of competitive play, and it was gripping to watch.



## New arrivals

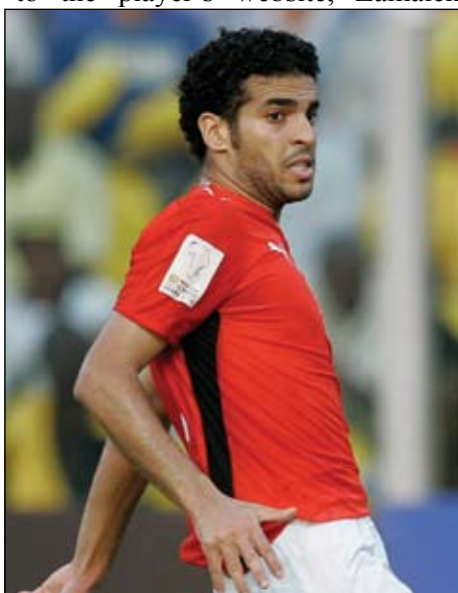
**The football transfer season has been dynamic as ever**

Ahli and Zamalek are ahead of the pack in signing new players in preparation for the new season of the Egyptian domestic league. The renovations included the coaching job in Zamalek. The club confirmed that German Reiner Hollman had become the new coach, succeeding Dutch tactician Ruud Krol after the club could not meet the Italian Alberto Zaccheroni's financial requirements.

Also in Zamalek, surprisingly and despite the long disputes, they have finally decided to allow the club's star striker Amr Zaki turn pro at Wigan Athletic on a one-year loan deal.

According to the player's website, Zamalek agreed to let the 25-year old attacker go and fulfill his dream of turning pro.

Zaki was able to reach a deal with Zamalek's board member Ahmed Hafez, who helped calm matters down between the club management and the



player. Zaki's new contract with Zamalek expires at the end of the 2011-2012 season.

It is said that the contract is worth £1,250,000. Zaki's new club is also expected to pay 400,000 Euros to Zaki's previous club Lokomotiv of Russia.

According to Zamalek's media officer and spokesman Khaled Gaber, further details will be revealed soon at a press conference in Cairo.

No sooner had Zaki's problem been solved than up sprang the issue of Hani Saied. After signing with Zamalek, the player decided to play for Ahli.

However, Saied's protracted move to Zamalek has been finally completed after the Egypt sweeper penned a three-year deal with the Cairo giants.

Saied backtracked on his decision to lodge an official complaint to world governing body, FIFA, over being obliged to join Zamalek.

Saied is Zamalek's sixth signing at the close of the season following the arrival of Arab Contractors duo Alaa Kamal and Mahmoud Samir as well as Trabzonspor's Ayman Abdel-Aziz, free agent Al-Gaish defender Amr Adel and the Ghanaian striker Junior Agogo.

After targeting Ghanaian striker Junior Agogo, the 29-year old striker finally completed 6-million LE move from Nottingham Forest to Zamalek that will earn him 350,000 Euros per season.

Agogo, who participated in Ghana's 2008 African Cup of Nations campaign on home soil, netted 13 goals in 27 games last season.

On the other hand, Ahli signed Palestine keeper Ramzi Saleh to compensate for the loss of Essam El-

Hadari. In a bizarre response to Ahli's bid for Saleh, the Palestinian club Shbab Jbaila did not demand a specific fee to release their first-choice keeper. "The Palestinian side has told us we are free to pay whatever price to sign Saleh," Ahli said in a statement on their website.

Saleh is set to play second-fiddle to Amir Abdel-Hamid, who is now Ahli's first-choice keeper following the abrupt departure of El-Hadari to Swiss side Sion FC.

Ahli signed strikers Hani El-Egeizi in February and Ahmed Hassan of Mehalla. In addition to the other Ahmed Hassan, the veteran midfielder and Egypt captain, the league champions garnered Qatar national team player Hussein Yasser Al-Mohamadi, Mansoura's right back Ahmed Ali as well as former Ismaili left back Sayed Moawad and Wadi Degla's right back Abdel-Hamid Ahmed.







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# Full-Wave Seismic for Reservoir Analysis

By: John Tinnin, Pete Stewart, James Hallin & Brian Donnelly  
ION Geophysical Corporation

The need to increase hydrocarbon production is particularly acute in China. China produces nearly 5 Bcf/d of natural gas, and demand is expected to reach nearly 11 Bcf/d by 2010. To meet the demand, pressure is being brought to bear on the two main domestic producers, CNPC and Sinopec, to increase in-country production. The government has set a target to nearly double gas usage within the country's energy mix to 5.3% in 2010 from 3% today.

Sinopec is the country's second largest energy company, and so plays a key role in addressing China's energy supply challenges. Forty percent of Sinopec's gas production comes from the Sichuan Province of Western China, which is characterised by low permeability, heavily-fractured reservoirs. One of the larger fields in the Sichuan basin is XinChang, this asset has been targeted for a multi-year exploitation and step-out drilling programme by Sinopec. Although seismic data existed for the field, it was not considered to be of the quality needed to image the deeper reservoir intervals and to target fracture 'sweet spots' that correlated with the highest producing wells. In 2003, geophysicists from Sinopec's local operating company - Southwest Petroleum Branch (SWPB) - began considering alternatives for improving seismic data quality at XinChang. Over the next several years, SWPB undertook the largest full-wave imaging programme on record, yielding impressive results, both in terms of well success rates and productivity.

## Exploration and Production

The XinChang gas field is one of the larger fields in the Sichuan Basin of Western China, and currently produces 39 MMCF/d from four wells. It is operated by the South West Petroleum Branch of Sinopec. Gas is produced from multiple pay zones within the Upper Triassic tight sandstones at depths of around 5,000 metres. Productivity of individual wells varies significantly, even within the same geological horizon, due to the fractured nature of the reservoir.

The operator had particular goals for improving their understanding of their field:

- Obtain high resolution images for the deeper reservoir targets
- Optimize images despite challenging near-surface conditions
- Increase the S/N ratio and bandwidth
- Eliminate background noise, especially from man-made sources
- Characterise reservoir properties: lithology, sand thickness, porosity, gas saturation, and fracturing.

## Seismic Data Acquisition

In October 2004, SWPB commissioned BGP to commence acquisition using 6,000 VectorSeis full-wave (3C) stations (18,000 channels) connected to an I/O System Four acquisition platform. The topography of the field presented several survey design challenges. Most of the area is relatively flat with a surface layer that has been tilled for hundreds of years,

which introduces challenges with near-surface attenuation of both frequencies and signal. The acquisition objectives ranged in depth from 2,000 to 6,000 m, with the chief zone of interest at around 5,000 m. Illumination of the complex subsurface and the deeper Triassic reservoirs required broadband, wide-azimuth, densely-sampled data. The seismic operation was complicated by significant surface obstructions which cut across the landscape, including rivers, pipelines, railway lines and roads, as well as urban areas. As a consequence, the seismic acquisition system needed to be flexible to ensure the health, safety, and environmental (HSE) requirements of both seismic field workers and nearby residents.

The survey size, amount of data acquired, and scale of the operation make XinChang the largest full-wave program yet undertaken, using a crew of over 1,500 people and more than a hundred vehicles.

## Data Processing

Converted shear-wave energy had been seen on shot records from prior surveys. By specifying 3-component acquisition employing MEMS sensors, SWPB's aim was to obtain high quality broadband data with enhanced low frequencies to improve resolution, and also to record both P-wave and S-wave data that could be combined to yield information regarding fracture intensity, variations in lithology and fluid content. The data processing aims were to obtain a high-resolution structural image that had compatible detail and frequency content when stretched to P-wave time; then extract geophysical information such as shear impedance and Vp/Vs ratio to help to characterizing reservoir lithology. Final-

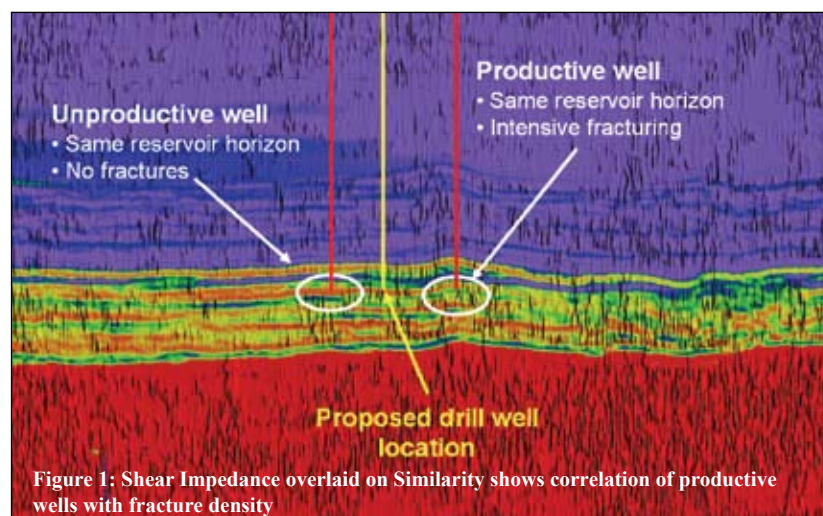


Figure 1: Shear Impedance overlaid on Similarity shows correlation of productive wells with fracture density

ly, it was hoped to map fracture patterns within and around the reservoir by employing shear-wave splitting analysis. In this method, the recorded horizontal data is first rotated into radial and transverse components. Azimuthal properties were preserved though the migration proc-

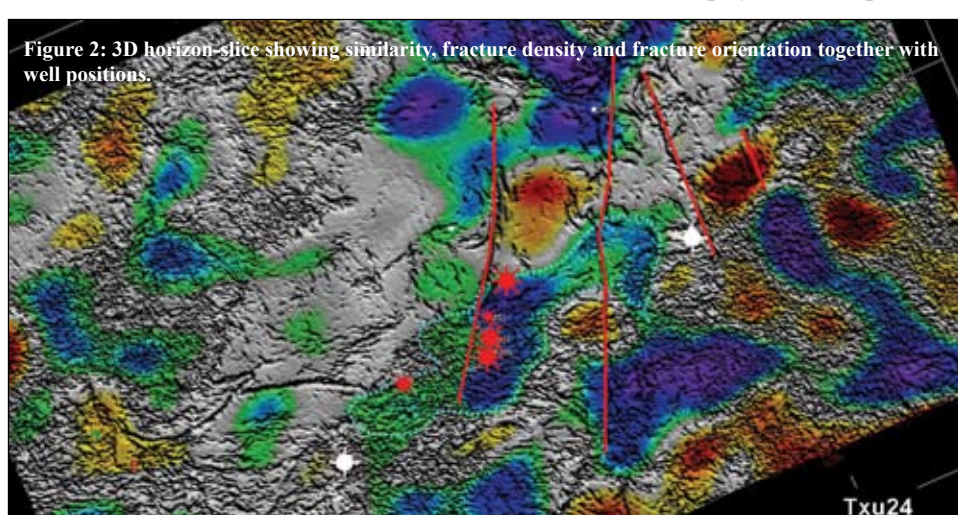


Figure 2: 3D horizon slice showing similarity, fracture density and fracture orientation together with well positions.

ess. The reservoir is affected by significant azimuthally varying anisotropy, which complicates the isolation of radial and transverse energy. This was dealt with using a layer-stripping technique called '2C Forward & Reverse Rotation'. The processed seismic data was then integrated with well logs, outcrop data and core analyses to better define the region's geologic and tectonic history; build structural and stratigraphic models for the area; map fracture patterns and intensity; and determine the best locations for future drilling.

## Integrated Reservoir Interpretation

The XinChang reservoir is highly compacted, with porosities less than 4%, and it is almost completely impermeable. Consequently production is totally fracture-dependent. The best exploitation targets are thin-bedded, brittle clastic rock types interconnected by faults. The high quality, high frequency P-wave data provided an improved structural picture with excellent fault resolution, but was unable to unequivocally determine lithology. Fortunately, the converted wave data was exceptional at discriminating lithology, e.g. Vp/Vs ratios. Similarity processing, curvature attributes, and shear-splitting analysis provided independent fracture intensity measures which were integrated into discrete fracture network (DFN) models and fracture maps. The P-wave and C-wave data were separately inverted to give true values of P-impedance and shear impedance.

## Early Results from Drilling

As processing and reservoir analysis progressed, SWPB geoscientists had more insights into the primary drivers of well productivity, including sand thickness, reservoir gas saturation, and fracture intensity near the well bore. These insights have improved well placement. Since the delivery of the final results in September 2007, three wells have been drilled and all completed as producers. One of these, at 18 MMcf/d of gas, is now the best productive well in the entire area. An additional 16 well locations have been identified from this integrated, full-wave imaging and reservoir analysis project.

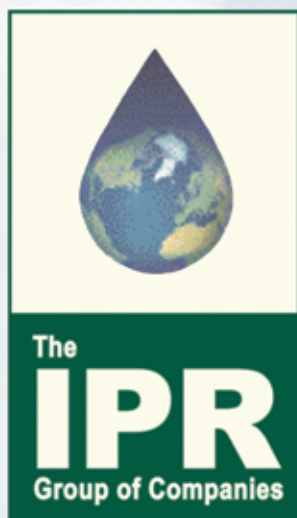
### Acknowledgements

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The IPR Group of Companies (IPRGOC) constitutes an international exploration & production (E&P) company and engineering consulting organization with extensive experience and resources in the following areas:

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# MIDOR on the spot

## Will it be privatized?

**Over the past month, rumors were spread in every corner of Egypt claiming that the government is to start a privatization plan for the petroleum companies. Since then, a wave of disagreements, oppositions and discontents has dominated the petroleum scene, asking for replies and facts from the government in general and from the Ministry of Petroleum in particular**

By: Yomna Bassiouni

These speculations erupted due to the Ministry latest decision to get the Middle East Oil Refining Co. (MIDOR) abide by the new law of abandoning the taxes exemption given to companies operating in the Free Zone. This new law was approved by the People's Assembly earlier at the beginning of 2008.

In an article published in Al-Ahram Newspaper, the daily state-run publication, the Committee of Industry and Energy of the Shura



Council has totally refused any attempts from the government side to sell MIDOR for any investors, last month. After a visit to the petroleum companies located in the governorate of Alexandria, Mohamed Farid Khamis, Head of the Committee of Industry and Energy declared that the company supplies a large share of solar, benzene and jet fuels to serve the local market demands.

Medhat Youssef, MIDOR President said that the company's market value counts for approximately \$4.5 billion, revealing that the company achieved a \$308.2-million net profit in 2007 and \$110 million during the first quarter of this year. Youssef added that \$500-million total profit is to be achieved by the end of 2008.

MIDOR produces 2.9 million tons of petroleum derivatives, worth \$1.95 billion, directed to the local market, and another 1.8 tons worth \$1.04 billion for exportation. The company's



head capital is to be raised from \$930 million to more than one billion during this year.

It is worth mentioning that MIDOR has been one of the industrial institutions that have been affected by the recent decision approved by the People's Assembly to abandon the taxes exemption given to the free zone.

In 2006, MIDOR refined around 4.5 million tons during 2006 and achieved \$1.4 billion as total operational revenue, scoring a 21.5% increase compared to previous year. The company's net profit counted for \$162.5 million; 59% increase.

Moreover, the company refined for others 2.4 million tons of crude oil costing \$134 million, which highlighted an increase of \$9 per barrel.

Accused of having Israeli shareholders, Youssef affirmed that the company is 100%-Egyptian owned; the Egyptian General Petroleum Corporation (EGPC) holds 78%, Enppi 10%, PetroJet 10% and Bank of Suez 2%.

MIDOR's lab consists of nine production units characterized by their advanced technologies and designed based on international features ensuring environment protection. The lab is operated by specialized, well-experienced Egyptian cadres qualified to run such high technological labs.

**“If the government insists on selling the petroleum companies; it has to offer at least 80% of the shares to Egyptian investors only”**

“If the government insists on selling the petroleum companies; it has to offer at least 80% of the shares to Egyptian investors only,” said Khamis to Al-Mal Newspaper. The Head of the Committee of Industry and Energy wonders the reason behind targeting the most successful and profitable sectors such as the petroleum sector, especially with the current challenges facing the entire world; the shortages of food, water and energy.

Hamdy El-Banbi, Former Minister of Petroleum warned of applying any privatization move, declaring that refining labs are a main security factor for the country and should be

in the hold of the government in order to control prices of petroleum products in the market. “The concept of privatization pays attention to profit in the first, which contradicts the current government's target to provide subsidized products to citizens,” highlighted El-Banbi.



Salah Hafez, Former Vice President of EGPC believes that before moving to privatization, the strategy of “free prices” of petroleum products should be applied first. Hafez told the daily Egyptian independent newspaper Al-Masry Al-Youm that the petroleum industry is a strategic sector which strengthens the country's security and safety, yet it can sell some, not all, of the companies' shares as applied in the UK.

From his side, Eng. Sameh Fahmy, the Egyptian Minister of Petroleum replied indirectly to rumors by announcing the purchase of the 2% share of the Suez Bank to get MIDOR fully owned by the government. This deal is the first of its kind; first time the government buys shares from the private sector. Fahmy clarified that MIDOR serves 25%



of the local demands. “Although this refining lab was initially established for exporting, MIDOR is currently targeting the Egyptian market as its top priority and plans are set to maximize its capacity,” said Fahmy.

At the end of 2007, Fahmy continuously announced that plans to increase Egypt's daily





output of petroleum products are on track as scheduled. Fahmy said the ministry aims to increase oil output by 100,000 barrels per day (bpd) to 800,000 bpd in 2008 by developing recent discoveries in the Gulf of Suez and the Western Desert.

An increase of output should be associated with an expansion of refineries' capacity and this is the current strategy. Last November, GS Engineering & Construction signed a \$1.8 billion contract to build secondary processing

units as part of a new refinery being built by the Egyptian Refining Company, on late August 2007. GS will build the units in the refinery in Mostorod, North of the Egyptian capital Cairo, by September 2011. The complex units include an 80,000 bpd vacuum distillation unit (VDU), and a 40,000 bpd hydrocracker that can transform low-quality products into middle distillates which are in higher demand.

Moving in the same context, Citadel Capital, an Egyptian private equity firm with invest-

ments in energy and cement, announced in last October that it would start building a \$2.4 billion refinery with an annual capacity of 5 million tons (100,000 bpd) of refined products, which will be completed in four years, according to plans.

Egypt's refining capacity; the largest in Africa owns nine refineries which have a com-

**“Fahmy announced the purchase of the 2% share of the Suez Bank to get MIDOR fully owned by the government”**

bined crude oil processing capacity of 761,700 bbl/d. The largest being the 146,300-bbl/d El-Nasr refinery at Suez, which is owned by the Egyptian government through the EGPC and operated by its subsidiary, the El Nasr Petroleum Company.

The government has plans to increase production of lighter products, petrochemicals, in addition to octane gasoline by expanding and upgrading existing facilities. The oil refining sector in Egypt looks set for big expansion, with at least two new projects being promoted. One is a 500,000 bbl/d refinery to be built near the Suez Canal. The second is a 130,000 bbl/d refinery to be built at Ain Sukhna, on the Red Sea coast. The 500,000 bbl/d export-oriented oil refinery is to be a joint venture among Egyptian, Saudi Arabian and Kuwaiti investors; start up is scheduled for summer 2009.

## More discoveries booming Upper Egypt

Upper Egypt started a new phase in the history of the Egyptian petroleum industry

By: Ahmed Morsy

Wasco, a joint venture company comprised of Dana Gas, the Middle East's first and largest regional private-sector natural gas company (50%), and the Egyptian General Petroleum Corporation (50%), announced a new discovery from a new oil zone in the Komombo exploration block, located in Upper Egypt.

For Dana Gas, this achievement represents the first discovery in the company's US\$ 170 million drilling campaign for 2008. The El Baraka-2 exploration well confirmed the first discovery, El Baraka-1, in the Abu Ballas formation, and proved a new pool in the underlying Six Hills formation. The partnership will perform hydraulic fracturing of the producing reservoirs in El Baraka-1 and El Baraka-2 to enhance their productivity.

Completed in September 2007, El Baraka-1 was described as the first ever commercial oil discovery in Southern Egypt. The Block 2 well reached a total depth of 2,655m and penetrated several oil-bearing zones. Testing of the Lower Cretaceous Abu Bal-

las Formation produced approximately 150 b/d of 37° API oil from a 12m perforated interval and the reserves were estimated to 8 MMbo. Three additional intervals were also encountered in the deeper Lower Cretaceous section and recovered various oil volumes on test.

Eng Sameh Fahmi, Minister of Petroleum stated that the discovery of oil in the area of Komombo in Upper Egypt has become a strong start and a new phase in the history of the Egyptian petroleum industry, where Southern Egypt is a promising area on the map of Egyptian oil production.

Fahmi also said that this discovery will have a positive contribution to the continued expansion and intensification of the search for oil and gas in other regions in Upper Egypt will attract more international companies through a global bid to be raised in order to continue the flow of oil discoveries, will urge more development and raise the living standards of people in Southern Egypt.

“In addition to this discovery, we have com-

menced drilling of the West Baraka-1 exploration well in a new prospect in the Komombo concession, with completion expected before the end of this month, and are in advanced stages of drilling deeper gas exploration wells in our Nile Delta acreage, with results expected soon,” said Hany El Sharkawi, Dana Gas Egypt Country Director.

“The recent oil discoveries made by Dana Gas in Upper Egypt, are of great importance as they prove the presence of a hydrocarbon system for the first time in the history of the area,” El Sharkawi explained. “It certainly enhances the chances of proving large oil reserves in this part of the country which will positively impact the prosperity and the well being of the region and its residents, for the benefit of the Egyptian economy as a whole.”

The El Baraka-1 well was drilled by Dana Gas> Upstream Division, Centurion Petroleum Corporation, to a total depth of 8,712 feet and the well penetrated several oil bearing zones. Testing of the Early Cretaceous Abu Ballas Formation produced





approximately 150 barrels of oil per day from a 39 foot perforated interval. The recovered oil has a specific gravity of 37° API with wax content similar to the crude oil currently being produced and exported in large quantities to Sudan. Three additional intervals were also encountered in the deeper Early Cretaceous section and recovered various oil volumes on test. Oil reserve estimates of the various zones of this discovery are currently being evaluated.

The Komombo concession is located 700 km from Cairo and 320 km from the closest refinery at Assiut. It is currently envisaged that the early production scheme from this discovery will include transportation of the crude oil by rail road or River Nile barges to the Assiut refinery to the North.

On the other hand, Fahmy explained that for producers and consumers to reach realistic solutions to achieve the lowest rate of stability especially with the ongoing rises in the prices, many other economic fields can get affected. In addition, he confirmed that the expectations ensure that, with matters going with the same rate, the energy subsidy next year will be more than 90 billion LE. Hence, he added that the most important issue which the oil sector currently focuses on is intensifying the development of producing wells and escalating the exploration in crude oil and natural gas to maximize production.

Fahmy received a report from the Chairman of Ganope on the results of drilling the new well Baraka 2, which is located Northwest of Baraka 1, in the concession area of Centurion Petroleum Corporation on behalf of the UAE Company Dana Gas. And the report explained that the drilling of the well Baraka 2 started in early last May and went deep to about 4000ft.

The reservoir of the well will be added to the reservoir calculated for the Baraka 1, as it is from a new layer and different from what had been penetrated in Baraka 1 (at a distance of 9.5 kilometers South-west of El Baraka-1) to assess the extensions aquifer crude oil. After the completion of drilling, the El Baraka-2 well, the rig will be moved to the discoveries sites in order to perform the hydraulic breakers aimed at increasing the productivity of the field Baraka.

The report also noted also that the results achieved by the discovery and production of crude oil from the Baraka field are a byproduct of the great efforts made over the four years of searching for oil in the concession area of Komombo. In addition, the discovery of oil for the first time in Upper Egypt of El Baraka 1 and 2 in Komombo would pave the way for international companies to intensify the search for oil in this pristine region.

Dana Gas is the sixth largest natural gas producer in Egypt today. A report by the Middle East Economic Survey (MEES) confirmed that Dana

Gas was the only private company from the region to make new Middle East oil and gas discoveries in 2007. The company announced earlier this year that it would embark on a US\$ 170 million drilling program covering 15 exploration wells and four development wells in 2008.

In addition to its current projects, Dana Gas will be expanding its activities in all elements of the natural gas value-chain, including upstream exploration and production; through the midstream transmission and distribution of gas including LNG trading; and downstream into gas-related industries and petrochemicals.



## Drilling Fluid Technology

Drilling Fluids Technology – DFT was founded by PICO Petroleum Services in 2007. DFT provides its customers with reliable customized and high quality engineering services implementing the best drilling fluids practices using the full fledge of OBM & WBM Chemicals and drill-in fluids. DFT team congregates the most experienced personnel within the Egyptian Market in the field of drilling fluids. The team collaborated for Managing & Operating DFT have rich local and international experience with many Operators in Egypt utilizing varieties of mud systems that led to a successful start in the Gulf of Suez of Egypt. DFT success is a function of performance and improving well integrity as well as enhancing the learning curve which adds to our reputation further diversity.



**PICO ENERGY**  
Petroleum Integrated Services

Our experienced team of drilling engineers provide different drilling programs with risk mitigation scenarios applying years of engineering experiences and innovative designs, aided by sophisticated engineering database management to deliver optimal quality drilling solutions based on materials selection, services applications, and performance criteria. We provide integral solutions that improve your overall economics and HSE programs to provide high performance completed wells with reliable durable production. We simulate our drilling solutions aiming minimal NPT to attain a tolerance to the local & international Technical Limit Concepts for drilling operations. We encourage intimate customer participation from the initial concept to exhaustive prototype testing.

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# Opening a way Iraq opens the door to international oil companies

By: Mohamed El-Sayed

After five years of occupation, Iraq decided to open its oilfields to foreign companies. The Iraqi government's decision will pave the way for multinational companies to start developing oilfields in the oil-rich country next year; after thirty years of war, sanctions and poor government have left the country's oil infrastructure in tatters.

The significant move could play an important role in easing world oil markets as oil prices hit a new record last June, having climbed to \$144 a barrel. Besides providing Iraq with a lucrative source of income to rebuild its economy, many observers see the decision a good sign of political progress in Iraq and good news for the world economy in general.

**“The country would begin taking bids later this year for long-range management of eight oilfields... Thirty five foreign companies have qualified to participate”**

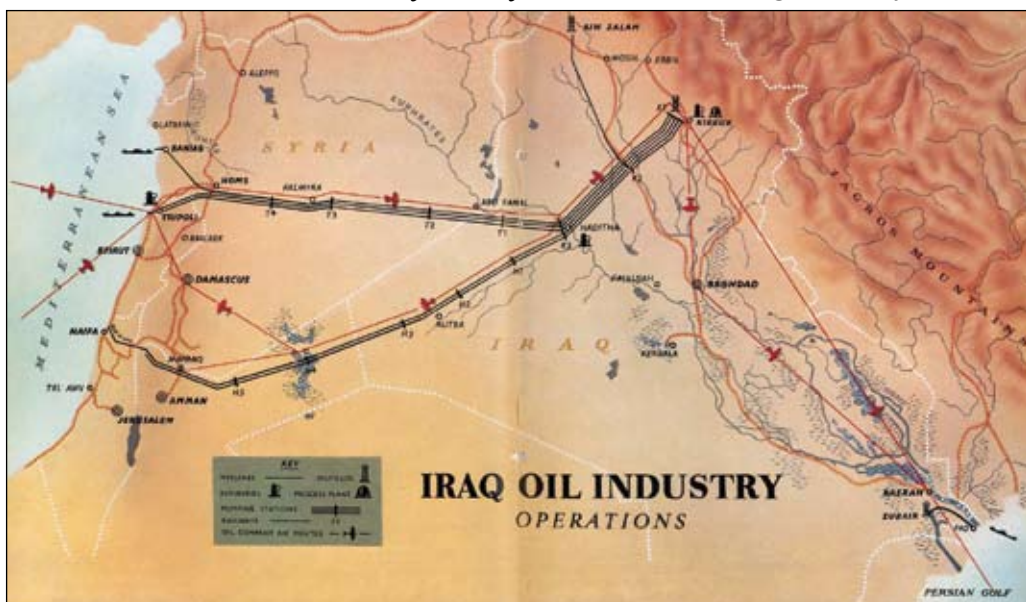
It goes without saying that oil exploration and development calls for high technical expertise and huge capital. Unstable Iraq, as a matter of fact, lacks both. Therefore, by inviting foreign companies, the country will have the necessary expertise and funds to capitalize on its huge oil reserves. The move certainly will help increase production over the next five years from the current level of 2.5 million barrels a day. Some oil experts believe that Iraq has the potential to produce 6 million barrels a day, which will definitely ease increasing oil demand pressures in international markets. Despite having the world's third-largest proven oil reserves, Iraq's production of 2.5 million barrels a day is only the 12th

largest. And although production has recently recovered to the levels seen before the 2003 invasion, it is still about 1 million barrels a day below its peak in the late 1970s.

International oil markets are facing hard times nowadays, a situation that paints a grim picture of the years to come. A report issued recently by the International Energy Agency showed that the oil market will remain tight for the next five years because of rising demand, especially from emerging economies like China and India, and tight supply. Declining production in Russia and Mexico is expected to reduce currently available supply by 3.5 million barrels daily, a matter which highlights the increasing importance of expected Iraqi oil production in the future.

Iraqi oil officials announced that the country would begin taking bids later this year for long-range management of eight oilfields. “Thirty five foreign companies have qualified to participate,” said Iraqi Oil Minister. News reports had it that Iraq was on the verge of announcing consulting contracts with five major international oil companies to obtain consultancy on developing its oil industry. The list of companies includes Exxon Mobil, Chevron, British Petroleum, Total, and Shell.

Nevertheless, many detractors of the government's decision are of the opinion that if developing oilfields was left to foreign oil companies, they would be quickly granted a share of Iraq's oil in return for heavy investment in the country. This is a formula that most Iraqis are unhappy with, for they do not agree that Iraq should give away its main source of income to foreign companies. Many Iraqi oil experts share the opinion that the role of international oil companies should be limited to carrying out exploration work in exchange for a fee. If foreign oil companies were allowed a share in the Iraqi oil cake, many an expert argue, then this is an inclusive evidence that the U.S invad-



ed Iraq for the sake of its abundant oil wealth.

In fact, there have been many news reports in the past months that Washington and major international oil companies have been urging Iraqi Prime Minister Nouri Al-Maliki and Oil Minister Hussain Al-Shahristani to formulate an oil law that will allow these companies back into the country on the basis of long-term agreements that give them a share of the Iraqi oil. Nevertheless, Iraqi parliament is highly unlikely to pass an oil law that will allow such deals. The law, which is still in a draft form, outlines clearly who is responsible for exploring and developing Iraq's oil fields, and the way oil revenues will be shared between the provinces. The Iraqi government, as a matter of fact, seeks federal authority over the exploitation of its oilfields, and in particular it wants authority over the signing of deals with foreign oil companies. But the main obstacle lying in the way of the government is that most of the oilfields are in the autonomous Kurdish region in Northern Iraq and Shia-controlled South. Both administrations in the North and South seek control over oil reserves in their regions.





# Failed Summit?

## Jeddah oil summit apparently failed to bear fruit

As oil prices continued to climb unprecedented highs, consumers and economies across the United States, Europe and much of the world have been negatively affected. Moreover, many countries have experienced social unrest and economic turmoil as a result of the food crisis augmented by soaring oil prices.

Therefore, oil exporters and importers decided to meet to put a brake on its increasingly soaring value. Saudi Arabia, the world's biggest producer, hosted an oil summit in Jeddah in June as an attempt to find solutions for what seemed to be an increasingly complicated conundrum; oil producers increase their daily output, while prices continue to soar. The kingdom also called for Jeddah's unusual meeting between oil producing and consuming nations as an attempt to show that it was not deaf to international cries that high oil prices have caused social and economic turmoil.

During the summit, oil producers harshly criticized speculators, arguing that they are to blame for the steady increase in prices, which led its value to double in the past year. Although government ministers and traders were anxiously waiting to see the effects of the summit on prices, it seemed that they were chasing a mirage. The summit, many an analyst argue, failed to bring the precious commodity prices down to reasonable levels, as it continued to hit new highs, having scored \$144 a barrel in the first half of July.

Leaders and ministers from the 36 nations agreed that "the transparency and regulation of financial markets should be improved through measures to capture

more data on index fund activity and to examine cross-exchange interactions in the crude market," according to the summit's communiqué.

Perhaps the only positive outcome of the summit was the announcement made by Saudi Arabia's King Abdullah that it would increase daily production by more than 200,000 barrels to 9.7 million, and that it could increase its output in the future if necessary. The Saudi King also blamed speculation and taxes for high oil price and suggested to set up a program of one billion dollars similar to those of the Organization of Petroleum Exporting Countries (OPEC) set up before to solve the oil crisis.

In fact, consumer nations and producers disagreed on the best way out of the current dilemma. Consumers sought increased output and producers called for greater investment in refining capacity to meet increasing demand. "There is still quite a gap between consumers and producers as to what they see as the primary factors driving prices up and also what they see as the main priorities and measures that need to be taken to reduce prices," one analyst opined. Producers slammed the role of speculators in driving up prices in recent months, calling for improved transparency in oil market deals.

While some analysts saw the Saudi decision to increase its daily oil output will definitely have a stabilizing impact on the market, others are still skeptic. Detractors of the "meager" outcome of the summit see that it probably will not lead to a large reduction in prices. Their argument proved right, with oil prices ranging around \$140.

There was a lot of determination expressed for international cooperation and there was a lot of intent expressed by producers and consumers, many a keen observer would say. However, there were no real concrete solutions apart from Saudi Arabia lifting production.

Observers agreed that the Saudi move was a result of intense pressure, particularly from the US and the UK, to alleviate the pressure in oil markets. While Saudi Arabia had tried to show that it was not responsible for rising prices, a number of OPEC members were unhappy with the Saudi decision, since it was taken without consultation with the group members. The move, others would argue, could further complicate the world's biggest oil exporter's management of OPEC in the future.



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# Introduction of High-Performance Water-Based Fluids in Ultra-Deep Offshore Wells in the East Mediterranean Sea

By: Ahmed Ebeid- Technical Advisor at Baroid Fluids Division, Halliburton

**Over the years, operators drilling offshore and onshore in the Nile Delta area have searched for a high-performance water-based fluid (HPWBF) that can replace oil-based fluids and exhibit the same characteristics. Recently a new HPWBF has been introduced to the area that has helped close this gap**

The gas fields in the Nile Delta region are critical to Egypt's plans for improved production and future development. The Mediterranean area is by far the biggest gas producer in Egypt, accounting for 60% of the country's proven reserves. Wells drilled in that area are located onshore, in the middle of Egypt's most important agricultural area, or offshore in the Mediterranean Sea (Figure 1). In either case, environmental regulations make the development and implementation of a HPWBF increasingly important.



Figure 1: Nile Delta Offshore and Onshore Region

This new fluid was actually introduced to the area when it was used to drill an ultra-deep, high pressure-high temperature (HPHT) well offshore the Nile Delta region of the Mediterranean Sea. The well presented several issues: reactive shales, high temperatures and densities, narrow margins between pore pressure and fracture gradient, the risk of lost circulation, and an environmentally-sensitive location. The numerous challenges presented provided a good opportunity to put this system to the test.

## Factors for Customized Fluid Design

Several important criteria went into the design of the proprietary fluid system. The desired performance characteristics included improved wellbore stability, superior shale inhibition and the encapsulation of drilled solids. The fluid was required to demonstrate stable rheological properties at high temperatures and provide good control over equivalent circulating density (ECD). Minimizing environmental impact was the other key concern. The new fluid would need to meet or surpass the environmental compliance standards for drilling in the Gulf of Mexico and offshore Brazil.

Extensive design work and testing resulted in a non-dispersed, clay-free WBF that can provide maximum shale stabilization in highly reactive clays. The fluid utilizes ions such as chloride, sodium and/or potassium to suppress clay hydration through ionic replacement and by decreasing the activity of the fluid/formation water exchange.

Chemical thinners or dispersants are not used. Instead, polymeric flocculants and encapsulators are employed along with inhibiting amines to prevent clay from dispersing in the system. This prevents the breaking up of drill solids into smaller particles and improves the efficiency by which the solids control equipment (SCE) can remove them.

## The three key polymers of the system perform the following functions:

1. A high molecular weight polymer is effective at low concentrations to flocculate and encapsulate reactive clay drill solids as they are drilled. As a result, colloidal clay is easily removed by the solids control equipment. The polymer can dramatically reduce solids accretion on bit and bottomhole assembly (BHA) while drilling reactive formations.
2. A low molecular weight polymer inhibitor prevents hydration and disintegration of clay-rich formations.



Figure 2: BHA pulled from well drilled with the low-solids, non-dispersed WBF fluid shows no accretion after exposure to reactive clay.

3. An amine-based polymer provides extra inhibition for illitic clay material. It attaches to electron-deficient or partially positive charges.

Introducing this fluid to such an important project required a field trial to confirm lab data prior to the actual application of the fluid on this specific well. The successful trial was performed on a development well that was drilled in the same area.

The resulting success story involved drilling approximately 1600 meters of notoriously reactive shale sections of the Mediterranean Sea, inter-bedded with occasional sand stringers, using a low-maintenance, water-based drilling mud. The mud weight was as high as 2.25 sg at a bottomhole temperature reaching 300°F. Under these conditions the fluid provided excellent equivalent circulating density (ECD) control, trips were performed problem free, and no excessive torque or drag was observed at any time while tripping or running the liners.

The unique polymer package in this new WBF, the first of its kind in the drilling fluids industry, provided almost instantaneous inhibition of highly re-

active clays. Non-productive tripping time to clean the bit and BHA was virtually eliminated.

No commercial clays were added to this true low-solids system. Maintaining a low solids content can help enhance rates of penetration. Some operators have reported drilling rates comparable to nearby offsets drilled with synthetic-based fluids. The development of a water-based fluid that can replace oil-based fluids while providing equivalent drilling performance has been an industry priority for a long time. Further study and optimization of the WBF system will help bridge any remaining performance gaps.

## Further Development

The promising results obtained allowed for further development of the new fluid system. The HPWBF was selected to drill through the Kafr El Sheik shale formation, a very reactive young shale which is present at a shallower depth. To make the situation more complicated, the hole sizes involved were much larger and had higher penetration rates and deviation angles, than the deep HPHT well described above. Historically the Kafr El Sheik shale was always drilled with an oil-based fluid and earlier attempts to use a water-based fluid were generally unsuccessful.

Again, extensive lab testing was involved and the results indicated that an actual well trial would be successful. Adjustments to the fluid formulations were also made to accommodate the new wellbore conditions. This allowed testing of the adaptability of this new fluid to different down hole conditions. The uniqueness of the polymer package was demonstrated here by the effect of adjustments made to concentrations of the different polymers and the excellent results that were obtained.



Figure 3: Kafr El Sheik Shale Adherence Comparison

Both onshore and offshore wells were drilled to the interval total depths with minimal issues. The results indicate that we have moved much closer to achieving the performance of oil-based fluids. Further, the outcome of these field trials has initiated similar projects in other areas of Egypt that may eventually lead to use of the HPWBF in the environmentally-sensitive Gulf of Suez area of the Red Sea.





# Brown Fields Development Opportunities Emerge – Part II

By: Eng. Ahmed Hassan  
Chief Reservoir Engineer, Pico International Petroleum

**As the crude oil prices are tremendously increasing; jumping above the \$100, the development economics are totally changing. Minor, and mature or Brown Fields assets have considerable economic value evolved dramatically. Given the fact that technology is evolving exponentially enough to support non traditional hydrocarbon assets development, and to extremely pushing the recoveries to the highest limit**

As the energy demand is growing world wide, the hydrocarbon suppliers are taking the role to fulfill the market consumption. Given the fact that the huge oil discoveries are diminishing, increasing recoveries from the existing g assets would be a valuable compensation parameter to equalize the demand and supply equation.

In this regard, this article highlights the evolution of Brown Fields development and redevelopment world wide and the technical efforts exerted in this area.

## Key Challenges

Brown-Field development is not an easy task, and has many challenges to overcome. In my perception, the key challenge is the organization; it should be mindset to managing mature fields as apposed to the current mindset organization to green field management.

In the technical side, the pressure depleting reservoirs have many challenges. For example, in the production performance side; drop of production rates due to draw down decline, and skin factor increasing in the positive direction due to gas saturation increasing around the well bore.

Pressure depletion of the reservoirs has negative impact on Ultimate Recoveries, and consequently has negative effect on the economics. Meanwhile, the reservoirs performance monitoring in pressure depleted horizons has technical challenges and limitation, such as pressure transient analysis of two phase flowing, which make the analytical interpretation has some limitation and might be not so accurate.

## Role of the Economics

Economics is playing a very important role

in the reserves estimation. For instance, the proved reserves definition has been stated by Security and Exchange Commission (SEC) as "the estimated quantities of hydrocarbon, which the geologic and engineering data demonstrate with reasonable certainty to be recoverable over the future years from known reservoirs under existing economic conditions", while the Society of Petroleum Engineering (SPE) defines it as the quantities of petroleum, which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable.

Technically, the definition is almost identical for both of them, but economically, there is a considerable major difference which consequently generates two different "proved reserves values" for the same reservoir.

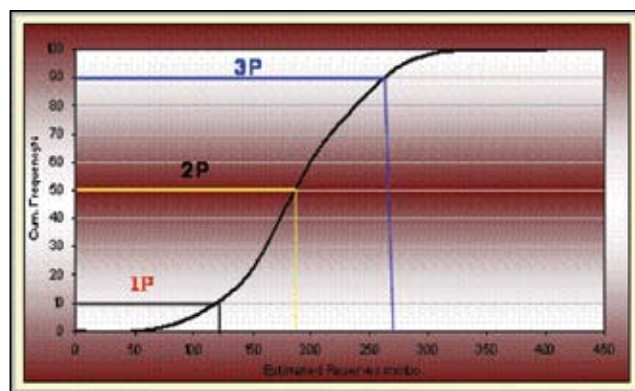
The major difference is that (SEC) are valuating the reserves based on the current existing economic conditions, while (SPE) are using forward estimation and forecasting of economic conditions.

## Reserves Reporting

World Petroleum Congress (WPC) and Society of Petroleum Engineering (SPE) are supporting the use of Probabilistic Approach to estimate hydrocarbon reserves rather than deterministic approach of estimation.

In the probabilistic approach, parameters are used in ranges with certain distribution shapes rather than fixed values. 1P is defined as the proved reserves, which have probability of 90% to be recovered, while 2P is the probable reserves which have 50% probability to be recovered, and 3P is the possible reserves, which have probability of 10% to be recovered.

It is very important to notice that, from the plot below, 2P is including 1P, and 3P is including 2P.



In this regard, it is worth mentioning that, the hydrocarbon volumes are not considered as reserves, unless they satisfy specific conditions, which are the following;

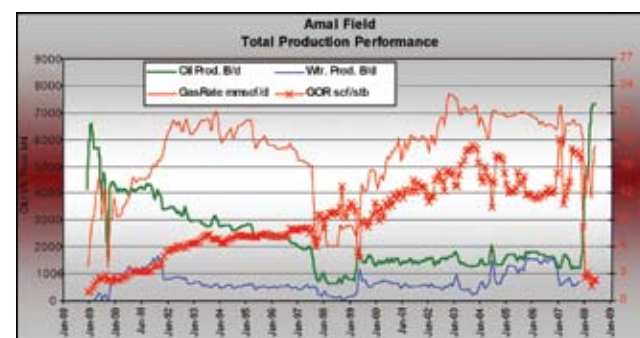
- Volumes are economically producible using current available technology

- For the operator, these volumes are producible within the license or the agreement period
- Production levels are not constrained by market conditions and demand
- Producing volumes are complying with the government regulations
- Volumes to be recovered in economical basis following the terms and conditions of the agreement.

Lot of appreciable efforts has been exerted by the E&P contractors, service providers, the scientific organizations, and the economists to evolve and maximize the value of the Brown Fields assets in the favor of the supply and demand market.

One example of Brown Field development is Amal field, which entered production phase late 1988, and its oil production peak was in the average of 6500 bopd, and gas production peak was 23 mmscf/d. Since then, the field experienced continuous decline until 2007, when a development plan has been implemented and achieved positive impact on the field production performance.

As shown in the production plot of the subject field, the oil rate was in the level of 8500 bopd, and the development plan is targeting daily oil rate of 15000 bopd, and 70 mmscf/d of gas daily rate as production plateau.



At the end, the key points of this subject can be summarized in the following;

- Mature hydrocarbon fields have considerable positive values
- Data surveillance is playing a very important role in recognizing opportunities available in mature fields
- Reserves tracking, updating, and classification are extremely important to recognize new opportunities
- Economic environment and contracting terms and conditions are playing very important roles in the development of Brown fields
- Organization style and integrated disciplinary work are key factors in new opportunities successful development





# Time to drill horizontally!

Under the slogan “Overcome your Horizontal Challenges”, the Integrated Solutions for Horizontal Well Design Workshop was held in Sharm El-Sheikh, 7-10 July 2008. Through this three-day event, organized by Egypt Oil & Gas and chaired by Eng. Ahmed El-Aidy, Mansoura Petroleum Company Chairman and Managing Director, 17 speakers contributed with their expertise and technical papers covering the various aspects of Horizontal Drilling. The 76 delegates had the opportunity to be exposed to such a variety of presentations and their interactions during the discussion rounds reflected the increasing awareness of Horizontal Drilling in Egypt and the vitality of its application.

The workshop's sessions were divided into four main categories; Geology, Geophysics and Geomechanics Studies, Reservoir Engineering, Drilling and Completion. Each was followed by roundtable discussions that enabled participants to question presenters and get more information and details.

A fifth session was added to the schedule which exclusively demonstrated on-site horizontal well designs for two operators; Centurion Petroleum Corporation and Mansoura Petroleum Company. The first was represented by Christine Gonzalez, who has over 20 years of international oil and gas industry experience covering a wide range of engineering disciplines and has been in Egypt since the end of 2006 in her current role as Engineering Manager for Centurion Petroleum Corporation.

Gonzalez's presentation tackled two very different reservoirs where horizontal/high angle wells may have application. Reservoir “A” represents a producing Miocene formation in an onshore Nile Delta field, Field “A”. The “A” Field is a low yield gas condensate field situated in the Nile Delta at a depth of 2800m. In this area the reservoir 1 is characterized by thin interbedded sand, silt, shale sequences in fluvial marine system. Well#A1 was drilled as a near vertical well in 2006 and encountered 22m of net pay in a 100m+ gross section. Reservoir “B” represents Formation “B” of the “B” Field. The “B” Field is a producing oil field in Upper Egypt. The oil gravity is 37 deg API but with high wax content leading to a pour point of 38 – 42° C and an in situ oil viscosity of around 10cP. The reservoir is found at a depth of 1175m and is a fluvial channel system with a high silt content leading to a relatively low permeability which gives low well productivity in vertical wells. Well#B1 was drilled in 2007 and encountered around

30ft pay.

As for Masoura presentation, it revolved around West Dikirnis Horizontal Well; it was discovered in Qwassim formation in May-06. The first well West Dikirnis-1 was drilled in the gas cap and the development plan was conducted as gas reservoir. Fortunately, the second well West Dikirnis-2 penetrated the oil rim with oil thickness around 70 ft which proved that the reservoir is oil and the gas in well West Dikirnis-1 is gas cap. A Simulation Study based on structure map was conducted to West Dikirnis Field to study the impact of drilling a horizontal well in the oil rim between wells West Dikirnis-2 and 3 on the recovery factor and it showed that the recovery factor will increase by around 2% (1 MMSTB).

In addition to the on-site application, the workshop focused on case histories, which were given by Sam Metcalfe from Blackwatch Petroleum Services, in two presentations entitled “Case History of Subsea Horizontal Development Well in North Sea Field”. Metcalfe has a BS in Civil Engineering and a BA in Geology from Rice University, and an MS in Petroleum Engineering from the University of Texas. After obtaining his MS, he went to work for Chevron as a reservoir engineer in their global reservoir study group, and he spent five years there performing studies on various fields in the US, West Africa, Saudi Arabia, and Indonesia. From there, he moved into the well testing, completions, and stimulation operations support group at Conoco. He was involved in testing exploration wells worldwide, from the North Slope of Alaska and the Russian arctic to West Africa, Egypt, and the North Sea, and in reservoir redevelopment projects on aging assets in the Southern North Sea. In 1994, Metcalfe and several of his colleagues from Conoco formed Blackwatch Petroleum Services, a UK based consultancy specializing in reservoir studies, asset evaluations, and operations support, and acting as advisors to a wide range of clients.

The 76 delegates, who participated in the workshop, represented numerous petroleum organizations operating in Egypt; Al Amal Petroleum Company (AMAPETCO), Alamein Pet.Co.(APC), Arabian Oil Company, Ltd., Baker Hughes Inteq, Baker Oil Tools, BAPETCO, Blackwatch Petroleum Services, Centurion Petroleum Corporation, Egyptian General Petroleum Corporation (EGPC), Egyptian Natural Gas Holding Company (EGAS), Ganoub El Wadi Holding Petroleum Company (GANOPE), GeoMechanics International (GMI), Hellenic Petroleum S.A, Egypt Branch, Mansoura Petroleum Company, Offshore Shukheir Oil Co. (OSOCO), Petrobel, Petrogulf Misr, PETZED, PICO Energy Petroleum Integrated Services, PICO International Petroleum, PICO Oil, Sahara Oil & Gas (SOG), Schlumberger, Schlumberger Completions, Shell Egypt, Tenaaris and Ulterra.

Despite the tightened schedule of sessions and presentations, a lunch at Aboul Sid invited by PICO Energy Petroleum Integrated Services, an ice-breaker dinner and a Bedouin Night were offered to the workshop delegates, part of a social-activities program. The mix between the seriousness of sessions and entertainment was



Magdy Wedad  
Pico Petroleum Integrated Solutions



Refaat Zaki  
Centurion Petroleum Corporation



Steve Gauld  
Baker Hughes



Ramy Fakhry  
Schlumberger

an indispensable element to provide networking opportunities to participants. The Bedouin Night, held in the heart of Sharm El-Sheikh's spectacular deserts, featured Egyptian oriental shows and folkloric dances.

On behalf of all our team, Egypt Oil & Gas would like to thank the steering committee, chaired by Eng. Mohamed El-Baramawy, Chairman of OSOCO and hosted by Hesham Ibrahim, Marketing Director of PICO Energy Petroleum Integrated Services and speakers and participants for their stupendous contribution and support to achieve a successful workshop. We would like also to thank our partners of success; PICO Energy Petroleum Integrated Solutions (Platinum Sponsor), Centurion Petroleum Corporation (Gold Sponsor), Baker Hughes and Schlumberger (Silver Sponsors).





# Oil field developed with horizontal wells

**In a private seminar organized by Pico Integrated Solutions, Expert Sam Metcalfe, Blackwatch Petroleum Services discussed the case history of a North Sea oil field developed with horizontal wells**

During the seminar held in Cairo Capital Club (CCC) on the development of horizontal wells, Metcalfe illustrated the case history of a North Sea oil field, in England, developed with horizontal wells.

Concerning the Gamma reservoir solutions, horizontal wells were found to be the only viable option to effectively drain the Gamma reservoir whilst meeting corporate investment metrics. Gas lift, using gas supplied from the export side of the host facilities was found to be the best artificial lift option, providing long-term operability / high reliability. In addition, long horizontal wells maximise sweep and deliverability and minimise

drawdown (assuming they contribute along their entire length). A subsea multiphase flow meter, on a test header located on the subsea production manifold was determined to be the best option for monitoring production rates from individual wells. While the individual well list gas metering and lift gas rate control was installed on the subsea manifold to enable wells to be optimised for gas lift. Each well had a permanent downhole gauge installed to aid in well and reservoir management. As for the well depth relative to GOC, it is possible to steer up and down by more than 10 feet to avoid shales, without significantly impacting recovery.

## Well Placement Recommendations:

- The effect of contributing length is more important than skin or well depth.
  - Contributing length can be impaired by:
    - Not drilling and completing the full wellbore as planned.
    - Shale intervals along wellbore.
    - Poor clean-up zones along wellbore.
  - It is worthwhile to:
    - Make the best effort to drill and complete the wells as planned.
    - Geo-steer to avoid shale intervals.
    - Use good completion practices to ensure the best possible clean-up is achieved.
- Gamma development well objectives are lo-



cating well bores to avoid shallow gas hazards, suspending wells to minimise damage and in a condition to allow production start-up into sub-sea facilities and finally meeting host fluid entry specifications. The Gamma wells are designed to minimise the water coning, minimise attic oil, and to effectively drain the Gamma structures with the minimum number of wellbores.

Well placement (17ft below GOC) to mitigate gas and water coning. While steering decisions, the ROP should be low while making and carrying out decisions in order to give the BHA a chance to respond. And for reporting, better dissemination of information to the rig. Whilst, Periscope tool response in the thin beds cannot accurately resolve boundaries in them.

## Events and Conferences

### 12th Annual Gulf of Mexico Deepwater Technical Symposium

7-8 August 2008  
New Orleans, USA  
Organizer: SPE-Delta/NOGS/AADE  
Tel: 985-773-7163  
URL: [www.deepwaternola.org/](http://www.deepwaternola.org/)

This symposium showcases technical advances used by the petroleum industry to discover and produce hydrocarbons in the deepwater Gulf of Mexico. The theme of this year's symposium, "Resources to Reserves", will be the focal point of the technical case studies, keynote speakers, and management panel.

Technical sessions will cover:

- Well completions and interventions
- Reservoir and economics
- Geoscience
- Drilling technology
- Production systems
- HS&E/Regulatory
- Emerging technologies.

This symposium is a joint effort of the Delta Section of the Society of Petroleum Engineers (SPE), New Orleans Geological Society (NOGS), and the New Orleans chapter of the American Association of Drilling Engineers (AADE).

### 2nd Generation Energy Crops/Jatropha World Summit 2008

21- 22 August 2008  
Bali, Indonesia  
Organizer: Magenta Global Pte Ltd  
Tel: (65) 6391 2533  
Fax: (65) 6392 3592  
URL: <http://www.magenta-global.com.sg/jatropha>

Global energy demand in the midst of declining fossil fuel reserves has led to ever-increasing prices and concerns over security of supply. The search for sustainable alternatives have made the production of oil and energy from crops not only financially viable, but strategically important. An alternative energy crop that does not compete in the human food chain nor land use for food crop has gained the attention and dedicated efforts in cultivation from governments, agricultural communities and enterprises globally --The Jatropha Curcas, a non-food based Biodiesel feedstock that is being harnessed for its high seed oil content (30%-40%) is fast emerging as a highly viable biodiesel feedstock. Jatropha can yield about 1,000 barrels of oil per year per square mile, given the right cultivating techniques and processing methods. This timely international conference will focus on production, cultivation and commercialization of the Jatropha Curcas plant and explore genetic truths regarding its growth and development as a viable alternative feedstock. We are expecting about 100 senior executives from the biofuel producers, plantation owners, project directors, feedstock suppliers, oil processors, regulators, institutional investors, traders, biotechnology providers, engineering consultant and agriculture institutions.

### Shanghai International Petroleum Petrochemical Natural Gas Technology Equipment Exhibition (SIPPE) 2008

20- 22 August 2008  
China Shanghai International Exhibition Centre  
Organizer: Shanghai Pudong International Exhibition Corp.  
Tel: +86 21 65928673  
Fax: +86 21 65282319  
URL: <http://www.sippe.org.cn>

The event will attract more than 20 domestic and foreign countries and regions more than 300 exhibitors, but also more than 11,500 professional visitors. First Financial channel, Dragon TV, as well as more than 10 domestic media magazine will interview and report it. Shanghai government leadership, over 10 internally associations of CCPIT, and some business leaders are expected to attend the opening ceremony and participate in industry forums.

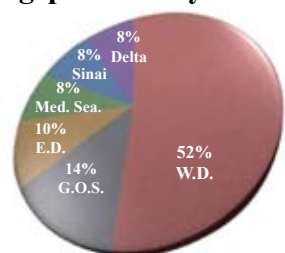




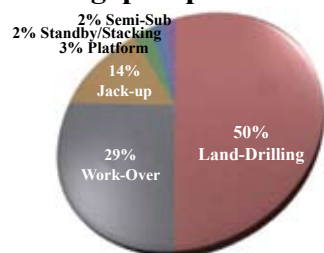
Table 1 Egypt Rig Count per Area -July 2008

Area	RIG COUNT		Percentage of Total Area
		Total	
Gulf of Suez		18	14%
Offshore	18		
Land			
Mediterranean sea		11	8%
Offshore	11		
Land			
Western Desert		68	52%
Offshore			
Land	68		
Sinai		11	8%
Offshore			
Land	11		
Eastern Desert		13	10%
Offshore			
Land	13		
Delta		11	8%
Offshore			
Land	11		
Total		132	100%

Rigs per Area July 2008



Rigs per Specification



Source: Egypt Oil &amp; Gas

Table 2 World Oil Supply<sup>1</sup> (Thousand Barrels per Day)

		United States <sup>2</sup>	Persian Gulf <sup>3</sup>	OAPEC <sup>4</sup>	OPEC <sup>5</sup>	World
2007 September	E	8,324	23,458	24,707	35,863	84,559
October	E	8,474	23,569	24,778	36,063	85,374
November	E	8,539	23,227	24,448	35,860	85,161
December	E	8,669	23,876	25,100	36,602	85,630
2007 Average	E	8,481	23,109	24,288	35,421	84,518
2008 January	E	8,624	24,990	25,144	36,605	85,518
February	E	8,625	24,219	25,373	36,897	85,803
March	E	8,664	24,230	25,385	36,795	85,599
April	PE	8,717	24,143	25,307	36,562	85,466
2008 4-Month Average	PE	8,658	24,144	25,301	36,713	85,594

<sup>1</sup>«Oil Supply» is defined as the production of crude oil (including lease condensate), natural gas plant liquids, and other liquids, and refinery processing gain (loss).

<sup>2</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Beginning in 1993, includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants. For definitions of fuel ethanol, oxygenates, and merchant MTBE plants.

<sup>3</sup> The Persian Gulf countries are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Kuwait-Saudi Arabia Neutral Zone is included in Persian Gulf production.

<sup>4</sup> OAPEC: Organization of Arab Petroleum Exporting Countries: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

<sup>5</sup> OPEC: Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

E=Estimated data. RE=Revised estimated data. PE=Preliminary estimated data.

Revised data are in **bold italic font**.

Source: EIA

Table 1 World Crude Oil Production (Including Lease Condensate) (Thousand Barrels per Day)

	Egypt	Libya	Sudan	Other	World	OPEC <sup>1</sup>	Persian Gulf <sup>2</sup>	North Sea <sup>3</sup>
2007 September	679	1,720	490	2,613	<b>73,180</b>	32,606	21,012	3,920
October	609	1,740	500	2,639	<b>73,801</b>	32,798	21,118	4,170
November	609	1,740	520	2,694	<b>73,516</b>	32,648	20,833	4,082
December	609	1,740	520	2,706	<b>74,121</b>	33,339	21,434	4,064
2007 Average	637	1,702	464	2,627	<b>73,200</b>	32,174	20,672	4,114
2008 January	609	1,740	520	2,712	<b>74,283</b>	33,320	21,538	4,004
February	609	1,740	520	2,722	<b>74,593</b>	33,605	21,763	3,980
March	609	1,740	520	<b>2,692</b>	<b>74,353</b>	33,495	21,768	<b>3,975</b>
April	609	1,718	520	2,727	74,080	33,263	21,682	3,932
2008 4-Month Average	609	1,735	520	2,713	74,325	33,419	21,686	3,973

<sup>1</sup> OPEC: Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

<sup>2</sup> The Persian Gulf countries are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Kuwait-Saudi Arabia Neutral Zone is included in Persian Gulf production.

<sup>3</sup> North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore. Revised data are in **bold italic font**.

Source: EIA

Table 4 OECD<sup>1</sup> Countries and World Petroleum (Oil) Demand (Thousand Barrels per Day)

	France	German	Italy	United Kingdom	OECD Europe <sup>2</sup>	Canada	Japan	South Korea	United States <sup>3</sup>	Other OECD <sup>4</sup>	OECD <sup>1</sup>	World
2007 September	1,929	2,600	1,651	1,763	15,544	2,313	4,860	2,027	20,385	3,291	48,419	NA
October	2,128	2,664	1,748	1,742	16,087	2,308	4,793	2,208	20,455	3,572	49,424	NA
November	2,063	2,547	1,724	1,779	15,851	2,410	5,206	2,350	20,708	3,482	50,005	NA
December	1,825	2,429	1,694	1,664	14,881	<b>2,291</b>	5,661	2,362	20,869	3,516	<b>49,579</b>	NA
2007 Average	1,937	2,467	1,678	1,764	15,279	<b>2,330</b>	4,972	2,207	20,698	3,456	<b>48,941</b>	<b>85,375</b>
2008 January	2,047	2,515	1,603	1,696	15,386	<b>2,306</b>	5,339	2,365	20,114	3,456	<b>48,890</b>	NA
February	1,978	2,506	1,647	1,806	15,345	<b>2,405</b>	5,851	2,340	19,782	<b>3,453</b>	<b>49,175</b>	NA
March	1,869	2,410	1,546	1,676	14,703	2,316	5,067	2,258	19,732	3,312	47,389	NA
2008 3-Month Average	2,964	2,477	1,597	1,724	15,140	2,341	5,409	2,321	19,878	3,380	48,469	NA

<sup>1</sup> OECD: Organization for Economic Cooperation and Development.

<sup>2</sup> OECD Europe consists of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>4</sup> Other OECD consists of Australia, Mexico, New Zealand, and the U.S. Territories.

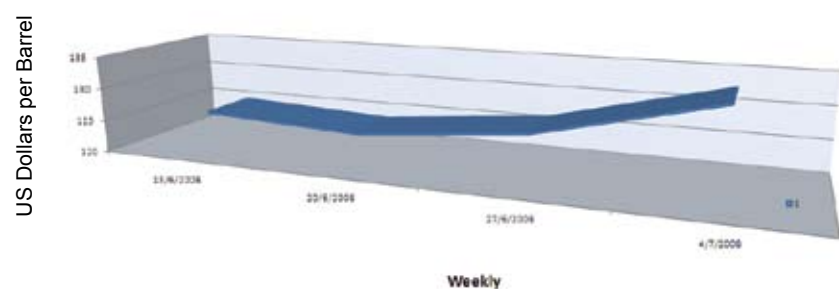
NA=Not available.

Revised data are in **bold italic font**.

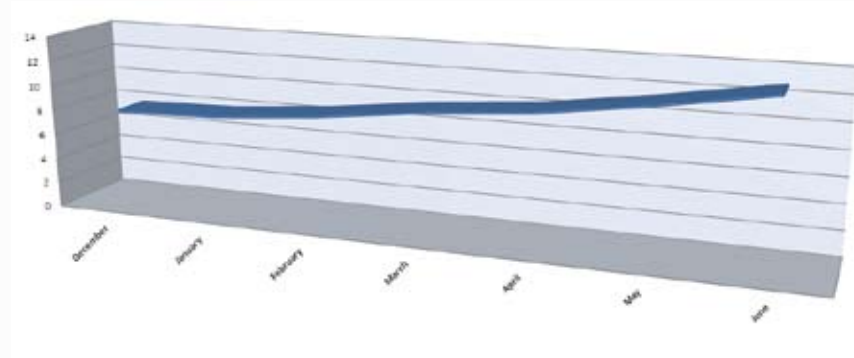
Notes: The term Demand is used interchangeably with Consumption and Products Supplied.

Source: EIA

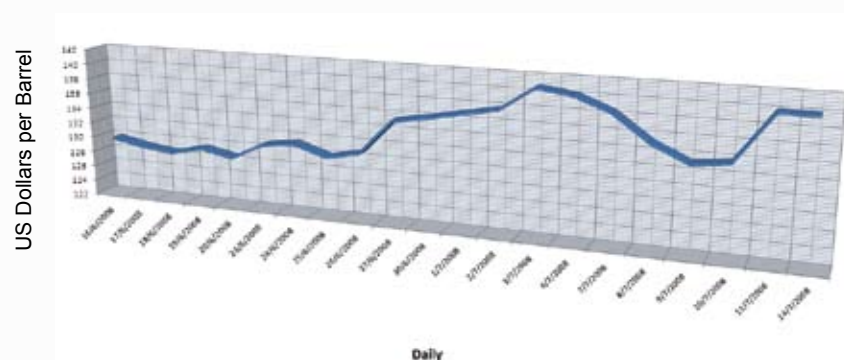



**Fig 1 Egypt Suez Blend Price**


Source: Egypt Oil &amp; Gas

**Fig 2 Natural Gas Price**


Source: Egypt Oil &amp; Gas

**Fig 3 OPEC Basket Price**


Source: Egypt Oil &amp; Gas

**Fig 4 IPE Brent Price**


Source: Egypt Oil &amp; Gas

**Table 5 World Natural Gas Liquids Production (Thousand Barrels per Day)**

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former U.S.S.R	United States <sup>1</sup>	Persian Gulf <sup>2</sup>	OAPEC <sup>3</sup>	OPEC <sup>4</sup>	World
2007 September	340	636	372	1,440	428	-	E 1,795	2,322	2,777	3,106	7,755
October	345	679	371	1,440	428	-	E 1,837	2,326	2,780	3,112	7,967
November	347	688	364	1,440	424	-	E 1,868	2,268	2,725	3,058	8,016
December	349	692	379	1,440	423	-	E 1,823	2,316	2,776	3,109	8,005
2007 Average	342	670	396	1,440	426	-	E 1,776	2,313	2,769	3,096	7,895
2008 January	350	695	366	1,440	421	-	E 1,783	2,325	2,790	3,131	7,980
February	352	695	368	1,440	421	-	E 1,830	2,330	2,796	3,138	8,032
March	353	700	367	1,440	420	-	E 1,847	2,332	2,800	3,142	<b>8,080</b>
April	355	709	370	1,440	418	-	PE 1,880	2,333	2,802	3,142	8,095
2008 4Month Average	352	699	368	1,440	420	-	PE 1,835	2,330	2,797	3,138	8,046

<sup>1</sup> U.S. geographic coverage is the 50 states and the District of Columbia. Excludes fuel ethanol blended into finished motor gasoline.

<sup>2</sup> The Persian Gulf countries are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

<sup>3</sup> OAPEC: Organization of Arab Petroleum Exporting Countries: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

<sup>4</sup> OPEC: Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

-- = Not applicable. E=Estimated data. PE=Preliminary Estimated data.

Revised data are in **bold italic font**.

Notes: Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Source: EIA

**Table 6 International Stock Prices Mid-June 2008 - Mid-July 2008**

International Stock	High	Low
Schlumberger [SLB] NYSE [US Dollars]	109.86	97.31
Halliburton [HAL] NYSE [US Dollars]	53.91	46.76
Exxon Mobil [XOM] NYSE [US Dollars]	88.62	82.19
Atwood Oceanics [ATW] NYSE [US Dollars]	124.34	51.99
Weatherford [WFT] NYSE [US Dollars]	49.59	40.26
Shell [RDSA] NYSE [US Dollars]	81.71	74.08
Apache [APA] NYSE [US Dollars]	143.93	117.94
Baker Hughes [BHI] NYSE [US Dollars]	89.56	79.77
BJ [BJS] NYSE [US Dollars]	33.49	28.89
Lufkin [LUFK] NYSE [US Dollars]	85.78	78.99
Transocean [RIG] NYSE [US Dollars]	154.66	144.75
Transglobe [TGA] NYSE [US Dollars]	5.48	4.53
BP [BP.] LSE Pence Sterling	583.25	524.25
BP [BP.] LSE Pence Sterling	1307.00	1089.00
Dana Gas [Dana] ADSM US Dollars	2.12	1.81
Caltex [CTX] ASX Australian Dollars	14.83	11.95
RWE DWA [RWE AG ST] Deutsche-Borse Euros	81.15	76.47
Lukoil [LKOH] RTS [US Dollars]	105.70	93.50

Source: Egypt Oil &amp; Gas

**Average Currency Exchange Rate against the Egyptian Pound (June / July 2008)**

US Dollar	Euro	Sterling	Yen (100)
5.328	8.320	10.506	4.906

**Stock Market Prices (June / July 2008)**

Company	High	Low
Alexandria Mineral Oils [AMOC.CA]	74.99	70.19
Sidi Kerir Petrochemicals [SKPC.CA]	21.49	19.62





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