

**A new technology for reducing the density of drilling fluids**

To keep up with the oil demand, new technologies are being developed that allow more efficient and effective recovery of hydrocarbons.

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**Falling Off Hubbert's Peak: A Tale of Earth, Wind and Fire**

Peak oil has become the term of the century. Governments deny it, producers await it, citizens fear it and economists do little to prove or disprove it.

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Surge of Petrol

Peak Oil

War

**A thaw in oil relations?**

Will the recent thaw in relations between Cairo and Tehran lead to prosperous cooperation in the oil and gas sector?

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# Egypt Oil & Gas Newspaper



July 2007 Issue 7

Published by Egypt Oil and Gas S.A.E

24 pages

## The art of bribery: What not to do

Since the early ages, gold and money have been one of the easiest ways to seduce people, and, as Shakespeare said, "There is gold for you, Sell me your good report," gold can buy everything, including people's professional ethics. The petroleum sector was struck by surprise after several cases of bribery and corruption were filed against a People's Assembly member and top officials over the past few months.

By Yomna Bassiouni

ONE of the major and most recent cases that traumatized the public opinion was the bribery and information leak cases filed against Egyptian General Petroleum Corporation (EGPC) members, businessmen and a member of the People's Assembly (PAM). The case goes back to last April when top EGPC officials were accused for releasing information and reports – classified as top secret – in return for money and gifts from clients who received special facilitations in the EGPC international bids over the last five years and acquired special drilling and exploration areas.

Six EGPC officials and seven businessmen and managers, including the former CEO of Alex Oil Co. and PAM Emad El-Gelda were involved in this case. According to investigations, El-Gelda gave a LE137,000 car to EGPC vice president for agreements and explorations, Mohamed Dahy.

In 2002, EGPC offered the south Gulf of Suez and north and west October areas for exploration and drilling in an international bid. Through Dahy, El-Gelda got confidential technical reports about the availability of oil in these areas. Dahy was the scene play maker, as by his status in the company, he employed other EGPC officials to provide him with the needed information.

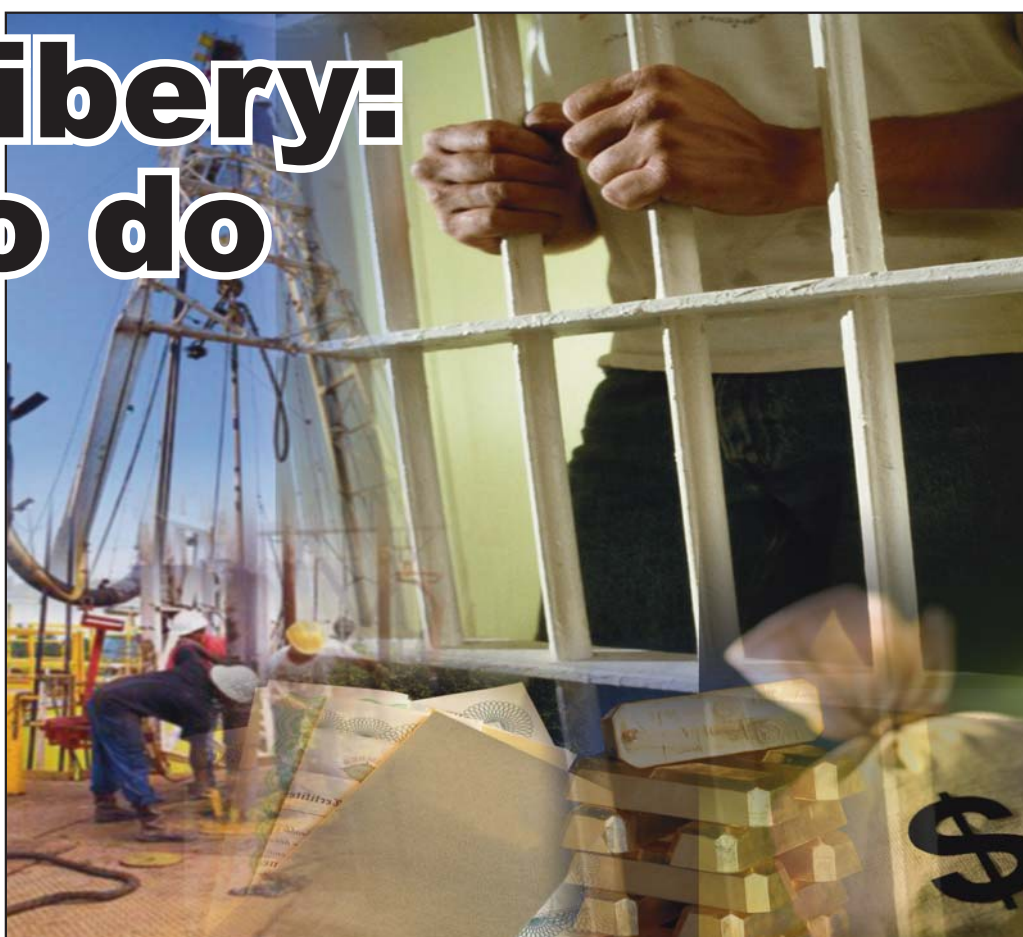
Last month, the court convicted 12 of the bribery charges and absolved one businessman who confessed. Sentences ranged from three to ten years of penal servitude. Six of the EGPC directors were suspended, fined \$233,000 and the car in which the bribery took

place was confiscated, in addition to \$71,000.

Charges included the robbery of approximately half a million dollars from EGPC's treasury through forged receipts and financial accounts of companies dealing with EGPC.

The first defendant, assistant to EGPC vice president for agreements and explorations was sentenced 10 years of penal servitude, three others including the assistant to EGPC's GM for Gulf of Suez Evaluation, EGPC GM for exploration supervision and EGPC economic analysis manager were sentenced seven years, another defendant was sentenced five years and the remaining eight defendants, including El-Gelda were sentenced three years. In its rationale, the court said "bats of corruption have flocked together and sold their souls before their wares."

EGPC's case was not the sole ground-breaker over the past six months, bankruptcy, bribery and illegal profiteering accusations were



filed against some employees at Petrogas, Al-Nasr Petroleum Co. and Petroleum Marine Services Co. (PMS).

The People's Assembly appointed a committee to investigate the case of importing foul gas valves by Petrogas which caused gas leaks and threatened citizens' safety. As a first response towards the case, six managers were exempted from their financial and managerial privileges till the end of investigations.

Concerning Al-Nasr Petroleum Co., the head of the labs and chemical research at the Suez branch faces the charge of asking for and receiving an LE2 million bribe from the chairman of Arab Office for Chemical Services and Rokin for Chemicals in order to get companies' pricing lists in eight bids offered by Al-Nasr and being chosen for supplying 88 chemical equipments to the company.

As for the PMS case, the assistant to Chairman, vice president, technical affairs managers at PMS in addition to marine administration manager at Rashid Petroleum Co. and 10 other owners and representatives of foreign and local petroleum companies were involved in the trial. PMS officials were paid off by companies' representatives in order to get reports about the high quality and efficiency of their equipments recommending the purchase or rental of these marine devices to PMS, or to acquire bids and contracts. According to the criminal court, the accused officials exploited their job duties and responsibilities to accumulate personal financial profit, which counted for more than LE2 million.

As a matter of fact, cases like these are found everywhere because work ethics are "intrinsic"; they come from within. Thus, even if managerial heads implant the traits of honesty, hard work, valuing what one does, having a sense of purpose and being a part of a greater vision in the working environment, still it greatly depends on each employee's personality to avoid bankruptcy and bribery. The previously discussed cases won't be the last, yet with more firm regulations set by managerial heads and tight supervision over employees and work flow, they can be to some extent eliminated.

## New promises, new challenges in the Shura Council mid-term elections



WITH 566 candidates competing for 76 contested seats, the Shura Council mid-term elections were held, with citizens

casting their votes to choose amongst three major groups; the ruling National Democratic Party (NDP, 109 candidates), independent runners and the ones belonging to the Muslim Brotherhood (MB).

In the governorate of Suez, the district of Al-Arba'in, the Egyptian Minister of Petroleum Eng. Sameh Fahmy competed under the NDP umbrella and achieved an "unprecedented victory." Fahmy attained more than 90% of the total votes in this district. The closest competitor to Fahmy, Alsayed Al-Abed (MB Member) garnered 1065 votes, which is 53% lower than Fahmy's 53861 votes.

In the first round, NDP candidates won 69 of 71 seats. As for the second round, a runoff for 17 seats, where no candidate won a majority, was held.

After the results were announced, Fahmy expressed his great appreciation for the Suez citizens and promised that all the plans he stated during his campaign will be fulfilled. Fahmy is to initiate more medical, social and residential services in the governorate.





On the Ground, In The Know

## Editor in Chief

Reem Mohy El-Din Nafie  
rnafie@egyptoil-gas.com

## Senior Staff Writer

Yomna Bassiouni

## Contributors

Mohamed El-Sayed  
Sarah Broberg

## Vice President

Laila Fayek  
lfayek@egyptoil-gas.com

## Researcher/Analyst

Diana Elassy

## Distribution Manager

Basma Naguib

## Business Development Officers

Amgad Madi  
Amr Hegazy  
Amr Youssef

## Administrative Manager

Marwa Madi

## Publisher

Mohamed Fouad

## Administrative Assistant

Sarah Rashdan

## Art Director

Mohamed Madany

## Assistant Art Director

Ahmed Ali

## Cartoonist

Ramy Ameen

## Webmaster

Ayman Rady

## Production Advisor

Mohamed Tantawy

## Accountant

Abdallah Elgohary

## Legal Advisor

Mohamed Ibrahim

## Newspaper Technical Advisors

Eng. El-Sayed Orabi - *EGPC*  
Geologist Magdy Wedad - *PICO*  
*Energy Petroleum Services*  
Dr. Mohamed Ghareeb - *Lufkin*  
Eng. Said Zaki - *Weatherford*  
*Middle East Cairo-Egypt*  
Capt Tarek Shawkat - *Maridive*  
& *Oil Services*

## Technical Advisor

Geologist Nasser Wali - *EGPC*

## Contact Information:

5 h2, Khedr St., Extension El-Laselky St. Ground Floor, Suite 2 New Maadi, Cairo-Egypt  
Tel: +202 5164776 +202 5192108 Fax: +202 5191487  
E-mail: info@egyptoil-gas.com www.egyptoil-gas.com

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## A final word

SEEING a project grow from scratch to a powerful product that has affected the market is definitely one of these rare opportunities that we rarely come across. This incident is a delight that I have had the chance of participating in. I started the *Egypt Oil and Gas Newspaper* from scratch and with the patient assistance of our Senior Staff Writer, Yomna Bassiouni, and Researcher, Diana Elassy, our product came to life and is now one of the best oil and gas newspapers in the Egyptian market.

Like any journalistic effort, we always aspire for change and improvement. Our passionate and regular readers will realize the additions in every month's issue and we promise you that there is more to come. However, due to health reasons, I will not be able to continue what I have started with the newspaper. Nevertheless, I assure you that my successor will take this product to higher skies and greater achievements. I encourage companies who have not cooperated with us to date, to contact us, whether to provide us with information or for us to assist them with their marketing campaigns in this thriving sector.

Egypt Oil and Gas will also be holding the International Brownfield Development and Production Optimization Conference and Exhibition in September, the first of many successful events organized by the company. I believe that those in charge will be able to make this event a memorable and informative endeavor for all its participants.

This issue is as usual packed with the most important information for company heads and decision makers. I hope that throughout the past seven months, I was able to provide our readers with a percentage of satisfaction felt towards our product. I will surely miss my time here, but I believe that this will, by God's will, turn out for the best. Wishing you all the best and hope this newspaper moves forward. My colleagues will be missed but I am confident that our relationship will span to beyond the workplace.

Finally, we thank our readers and remind you that your comments and suggestions are always welcome at info@egyptoil-gas.com.

*Reem Nafie*

Editor-in-Chief

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# Egypt

## Regal Petroleum, Apache update their exploration activities at East Ras Budran



REGAL PETROLEUM plc

Regal Petroleum announces that Apache East Ras Budran Corp. LDC as operator of the East Ras Budran Concession in Egypt has spudded exploration well ERB-A-1X.

Regal owns a 25% working interest in the concession which covers an area of 521 square kilometers onshore in the Gulf of Suez.

Based on the work program of the first exploration phase approved by the Egyptian General Petroleum Corporation (EGPC), this ERB-A-1X well is one of the two wells to be drilled during this year.

Since Regal farmed out a 75% working interest and operatorship in the concession to Apache in October 2006, Apache has completed the acquisition of a large aeromagnetic survey and a 3D seismic survey covering approximately 100 square kilometers of the concession.

The selection of the location for the second exploration well, ERB-B-1X, is presently under consideration using existing data and the results of both the 3D seismic and aeromagnetic surveys and is expected to be drilled back-to-back with the present well.

Well ERB-A-1X, which is planned to take 80 days to complete, is targeted to penetrate prospective reservoirs in the Thebes Limestone and will be drilled to a target depth of 13,622 feet.  
(Oil Voice)

## Melrose Resources provides Egyptian drilling update

Melrose provides update of the results of its continuing drilling program in Egypt.

The West Dikiris No.9 has been drilled and has successfully intersected 117 ft of gross hydrocarbon column in the Qawasim formation consisting of 49 ft of gas above 68 ft of oil. The well was flow tested over a 15 ft interval from 9,192 to 9,207 ft and flowed oil at 4,370 bopd and gas at 7.3 MMcfpd through a 42/64" choke. The rig will now drill the West Dikiris No.6, an appraisal well which is aimed at testing the southern-most extension of the West Dikiris field.

The West Khilala No.5 development well has been drilled to test the northern limits of the field. The well was logged with final results indicating a gross vertical pay interval of 54 ft with 45 ft interpreted as net pay in an excellent sand reservoir. A production test is currently being planned before the well is put on production. The rig will then move to drill the West Khilala No.7 (Deep) exploration/appraisal well close to the south-eastern limit of the West Khilala Field. This well will target an exploration objective in the Qawasim formation, deeper than the main West Khilala producing formation.

"Current production from the West Khilala field continues at 80 MMcfpd. The West Dikiris No.9 should be a good production well and we have now established production capacity in the West Dikiris field in excess of our target rate of 10,000 bopd. The West Dikiris development project is now over 65% complete, with first production scheduled for the end of September," said Robert Adair, Executive Chairman.  
(Oil Egypt)

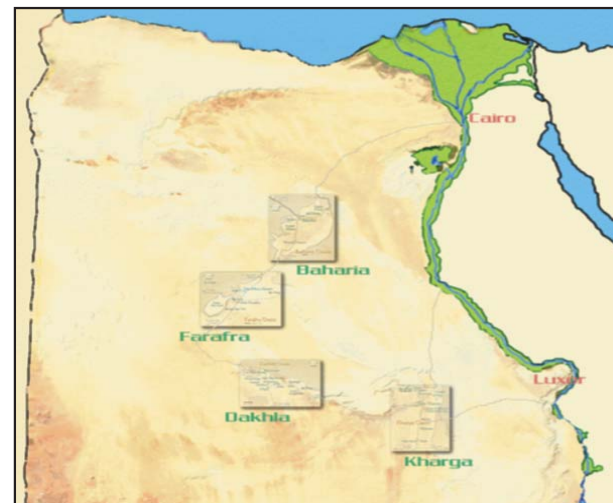
## PGNiG to operate in Egypt's Bahariya exploration concession

PGNiG SA reported that the bid, which was submitted by the company for the first time in Egypt, got accepted by the Egyptian General Petroleum Corporation (EGPC).

The company's bid is to carry on exploration activities in the Bahariya 3 Block, located approximately 200 km south-west of Cairo in the Western Desert area. The block covers around 4,414.4 sq. km.

It is worth mentioning that the Egyptian Western Desert has witnessed a series of significant discoveries over the past decade.

According to Egyptian regulations, the award of the Bahariya concession is subject to approval by the authorities of the Arab Republic of Egypt.  
(Oil Egypt & Upstream Online)



## Dana Gas achieves a new gas discovery from El-Wastani well

Dana Gas, the Middle East's first regional private-sector natural gas company, has announced a new gas and condensate discovery from its El-Wastani West-2 well (EWW-2).

The EWW-2, located approximately 800 meters from the company's El-Wastani Gas Processing Facilities, has been tested and flowed at a rate of 9.5 million standard cubic feet per day (mmscf/d) of gas and 1,022 barrels of condensate per day (bc/d) at 28/64" choke from the Qawasim sands, said the company in a statement.

The upstream division of Dana Gas, Centurion Petroleum Corporation executed the drilling process; the EWW-2 well was drilled to a total depth of 3,175 meters and encountered 8.3 meters of net pay over a gross pay interval of 24 meters.

"We are excited about this discovery as it enhances the prospectivity of the area west of El-Wastani field currently being explored," said Hany Elsharkawi, Dana Gas Country Director in Egypt.

In addition to the EWW-2, Dana Gas has been carrying out exploration and drilling activities in other wells, such as EW-12 and EW-8. This latter was spud on May 13, 2007 and is expected to be completed by end of June 2007.

This well will add to El Wastani Gas and Condensate production from the Abu Madi formation.

The new LPG extraction facilities at the El Wastani field have been operating in start-up mode since the beginning of 2007: "This is Dana Gas's first LPG production in Egypt and with the current international market prices for LPG, we expect this to have a significant positive impact on our revenues for 2007," added Elsharkawi.

Dana Gas is currently Egypt's 6th largest natural gas producer and the Company's Egypt Business Development team continues to pursue expansion projects and new business opportunities in North Africa.

The company plans to drill a total of 12 exploration wells in Egypt before the end of 2007.  
(Dana Gas Press Release)

## Fahmy inks five new agreements for EGPC



The Egyptian Minister of Petroleum signed five new petroleum agreements for the Egyptian General Petroleum Corporation (EGPC), in the areas of the Gulf of Suez, Eastern and Western Deserts with several nationalities; American, Canadian, British, Greek and Egyptian ones, with total exploration areas of about 9950 km and spending commitments of about \$96 million as well as drilling commitment of 27 wells and total signature bonuses of \$8.5 million.

After signing the agreements, petroleum companies' chairmen asserted that good oil potentials in Egypt contribute greatly to encouraging them to act in the domains of oil and gas upstream activities in the country.  
(MoP)

## Kuwait and Bahrain to invest \$3 billion in petroleum projects in Egypt

Joint Kuwaiti-Bahrainian investments are executing two oil refining and petrochemical projects in the governorate of Suez worth \$3 billion, announced Sameh Fahmy, the Egyptian Petroleum Minister, in a statement.

Concerning the two oil refining enterprises, the first holds a capacity of 100,000 barrels per day (bpd) in its first stage to reach 150,000 bpd in the next stage, with a \$1.8 billion investment.

As for the second enterprise, it holds 130,000 bpd, with investments of up to \$1.2 billion. It will also provide

petrochemical and oil products.

Fahmy expressed the ministry strategy to expand the usage of natural gas as a "vehicle fuel for the country's environmental benefit" in order to decrease the consumption rate of fuels and better use the growing gas reserves.

"Egypt is now among the world's top countries using natural gas as an auto fuel," said Fahmy, adding that up to 80,000 cars had been converted to the use of natural gas. The service is rendered by six companies and 112 stations.  
(Zawya)





## Egypt hosts the first factory in the Middle East to produce oil and gas pumps

With a joint Egyptian-German partnership, Egypt hosts the first factory in the Middle East to produce oil and gas pumps in the region, established in the city of Suez.

Eng. Sameh Fahmy, Minister of Petroleum, accompanied by General Seif El Din Galal, Suez Governor visited the LE 150 million-factory for producing oil and gas pumps at Suez city, with investments of about L.E. 150 million, in which the Egyptian Petroleum Sector's companies participate with 33%, while the German Ruhrpumpen Co. with the remaining 67% and will start production next September.

All engineering designs and implementation will be carried through the two Egyptian companies Enppi and Petrojet.

The factory's activities are not limited to pump production, as it will also provide maintenance services to all types of pumps utilized in Egypt, which exceed 6,000 pumps along with providing the required spare parts for them.

Eng. Yasser El Maghrabi, the company's managing director, pointed out that the factory's construction is divided into three phases; the first is in progress. The production of the 1<sup>st</sup> pump for Gasco will start by the end of September 2007 with a 25% of local manufacturing.

After the completion of the three phases, the factory's production capacity will reach 400 pumps annually, to meet the local demand and export to the Middle East and African countries.

(Al-Ahram)



## Europa gets share in Egypt's West Darag concession



Europa Oil & Gas (Holdings) plc signed a production sharing agreement covering the West Darag Onshore Concession in Egypt.

During the first two-year phase, the company's work tasks will include the reprocessing of existing seismic data along with geological and geophysical field investigations.

Europa will undertake this work with a 60% share as operator in partnership with Solaris Energy plc (40%). However, the activation of this deal is subject to approval by the Egyptian authorities of the assignment to Solaris.

An optional second phase of the concession will require 500km of 2D seismic acquisition and one well to be drilled in the three-year period.

Finally, a third period of a further three years, if exercised, will require a similar amount of seismic acquisition and two additional wells to be drilled.

Europa Oil & Gas focuses on the production and exploration of hydrocarbons in the areas of Europe and North Africa. It is currently producing oil from three fields in the United Kingdom. (Rigzone)

## Greek Hellenic acquires a drilling deal in Egypt

Hellenic Petroleum, the largest refiner in Greece signed a deal for oil exploration in Egypt over the coming seven years.

According to the terms of deal, the company will hold its exploration activities in West Obayed in an area covering approximately 1841 square kilometers, with a cost of \$26 million.

The Greek company controls over 70% of Greece's wholesale oil market and based on its strategy to expand its activities on the international level, it has won recently an exploration contract in Libya in addition to Egypt.

The area borders with the Obayed region where Shell is managing a natural gas find. (Upstream Online)

## Egypt to produce eight tons of gold next year



After the success of the 1st International Bid-Round for gold exploration in Egypt, which was offered in July 2006 and resulted in signing six agreements with international companies to explore and produce gold, the Egyptian Mineral Resources Association (EMRA) is currently finishing the procedures of offering new gold exploitation and mineral resources Bid-Rounds.

A report which Minister of Petroleum Eng. Sameh Fahmy has received from Hussien Hamouda, Chairman of the Egyptian Mineral Resources Association clarified that gold production has reached about 7 tons during the past century, whereas, the expected production next year will be about 8 tons which is more than what had been produced throughout the 20th century.

The report's reference to the expected increase in production is due to the new policy which is currently being executed in the Mineral Resources Sector, which made it an attractive sector for international companies and one of the basic sources to increase Egypt's resources of foreign currencies and providing new job opportunities.

(MoP)

## CARTOON

By Ramy Ameen







# International

## Pioneer achieves fourth discovery on Jenein Nord Block in Tunisia

Pioneer Natural Resources has made its fourth discovery on its operated Jenein Nord Block (50% interest assuming ETAP participation) in Tunisia. Multiple productive zones were tested in the Shaheen #1 well with gross rates totaling approximately 8,000 barrels of oil equivalent per day (BOEPD).

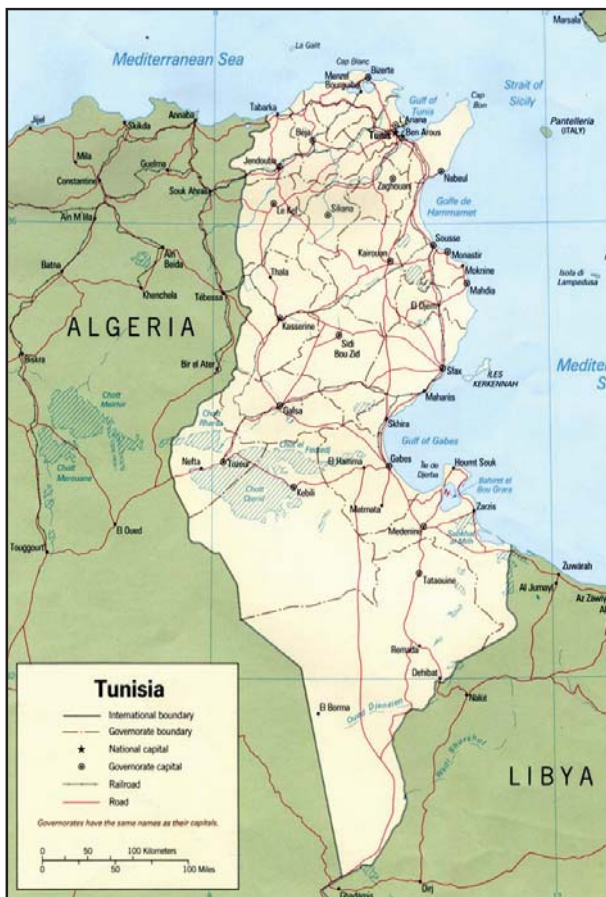
The four discoveries on the Jenein Nord Block have been tested at a combined multi-zone gross rate of approximately 30,000 BOEPD. The combined test rate was comprised of 85% oil and 15% gas and condensate.

Pioneer and other producers in Tunisia are working with the government to evaluate the opportunity to expand infrastructure to supply gas production from southern Tunisia to northern markets.

Pioneer and its partners have acquired approximately 1,200 square kilometers of 3-D seismic, and it has identified more than 30 prospects on its acreage, some with individual resource potential as large as 25 million barrels of oil equivalent.

Based on its drilling program for 2007, the company plans to drill up to four additional exploration wells on the Pioneer-operated Jenein Nord Block and an additional three wells on adjacent non-operated blocks.

"With an interest in approximately 3.9 million acres, a large and expanding inventory of seismic and other technical data and four years of local experience, we have laid a strong foundation for our new core area in Tunisia. We are excited by the excellent results of our Jenein Nord drilling program and look forward to delivering strong production and reserve growth for several years to come," stated Scott Sheffield, Pioneer's Chairman and CEO. (Rigzone)



## Urals Energy and Gazprom to cooperate in gas production and marketing

Urals Energy, a leading independent exploration and production company with operations in Russia, announced the signing of a Memorandum of Cooperation with Gazprom, the world's largest gas company.

According to the terms of memorandum, the two companies agreed to cooperate in the areas of production and marketing of gas from the Dulisma field owned by Urals Energy.

Urals Energy will be responsible for the development of the Dulisma field according to the company's plan and the activation of the commercial production in 2008-2009 as scheduled. When this occurs, Urals Energy and its affiliates or subsidiaries will sell natural gas from the Dulisma field to Gazprom.

The Dulisma field is one of Urals Energy's major assets with gas reserves of 1.9m tcf (condensate 46 mmbo and gas 323 mmboe reserves) all now fully booked as proved and probable.

The field also enjoys a 10 year tax exemption, due to finish by the end of 2016. This privilege is estimated to produce savings of approximately \$308 million over the 10 year period and further exemplifies the importance of this asset to Urals Energy. (Oil Voice)

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# SIEMENS

## Eni and OMV records more success in Pakistan



Eni and OMV have announced the achievement of new gas discoveries in Pakistan, which signal the success of their exploration activities in the country.

The two companies' latest success relates to the Tajjal 1 exploration well, which reached new gas within the Gambat Exploration Licence, in the Sindh Province. The Gambat Licence is based on a joint venture composed of Eni (30%), OMV (35% Operator), PPL (30%) and GHPL (5%).

This is an area where OMV has discovered two major gas fields, Miano and Sawan, which were brought on stream in 2001 and 2003. The new discovery by OMV (Pakistan) Exploration GmbH, a 100% subsidiary of OMV, is the second this year after the announced Latif discovery in March.

Moreover, Eni has recently drilled the Kadanwari 18 well, finding a gas-bearing formation at a depth of approximately 3,400 m, in a rock formation independent from the main field. Eni, with an 18.42% share, is the operator of the Kadanwari Production lease (with Premier Kufpec Pakistan 31.58% and OGDCL 50% as partners).

Eni has been present in Pakistan since 2000 and has since substantially expanded its presence. Eni now has an interest in 7 producing fields, all with growth potential, and in 12 onshore exploration blocks, 5 of which are operated. Recognising the high potential of this area, Eni has recently acquired 3 offshore exploration blocks in the Indus Delta.

OMV is also considered as one of the biggest international natural gas producer in terms of operated volumes in Pakistan.

As the operator of the Sawan and Miano gas fields, as well as the Kadanwari processing facilities, OMV is now responsible for operating more than 100,000 boe/d (600 mn scf/d) covering approximately 16% of Pakistan's demand for natural gas. The total daily net production of OMV in Pakistan amounts to approximately 19,100 boe/d (115 mn scf/d).

(Oil Voice)





With the first half of 2007 behind us, Egypt Oil and Gas relays the most lucrative acquisitions and mergers in the oil and gas field this year

### Schlumberger acquires Insensys Oil & Gas Ltd.

Last may, Schlumberger announced the acquisition of Insensys Oil & Gas Ltd, a UK-based pioneer in the provision of non-intrusive fiber-optic measurements, for application in the integrity surveillance of subsea production systems.

This acquisition enables existing Schlumberger fiber-optic measurements and subsurface surveillance domain knowledge to be integrated with Insensys Oil & Gas non-intrusive fiber-optic subsea integrity surveillance solutions, creating unique product offerings that will provide customers with the integrity assurance capability that reduces technical risk in deep-water subsea developments.

As for Insensys Oil & Gas, this will further advance the company's measurements and sensor technology "to provide robust subsea technical integrity surveillance systems."

### Eni purchases ConocoPhillips' shares in the Czech Refining Company

Eni signed with ConocoPhillips Central and Eastern Europe Holdings B.V. an agreement for the purchase of 16.11% of the share capital of the Czech Refining Company (CRC); the leading refining company in the Czech Republic and one of the most important in Central Europe.

CRC is a joint venture between Unipetrol with 51% and the remaining divided equally between Shell, ConocoPhillips and Eni; 16.33% each.

With this agreement, Eni increased its share to 32.4% and it will almost take its refining capacity in the country to 2.6 million tons per year (54,000 bpd), thereby enhancing its integrated marketing and industrial activities.

### Anadarko reveals sale of production assets in Qatar for \$350 million

Anadarko Petroleum Corporation announced its consent to divest 100% of its interest in Anadarko Qatar Energy Company LLC and Anadarko Resources Company (collectively "Anadarko Qatar"), which together holds a 92.5% interest in Blocks 12 and 13 in Qatar, to a subsidiary of Occidental Petroleum Corporation for \$350 million.

Anadarko's production operations in Qatar are represented in Al-Rayyan Field, in Block 12, which is operated by Anadarko Qatar.

According to the terms of agreement, Anadarko will retain its exploration interests in Qatar in Blocks 4 and 11.

The transaction is subject to customary closing conditions and adjustments and the approval of Qatar Petroleum. Anadarko's transaction advisor for this sale is Tristone Capital Inc.

Currently, the company's net production of oil from Al Rayyan Field counts for nearly 6,000 bpd.

### Total acquires 45% in two Angolan blocks

Total has finalized the agreements for its entry into two exploration blocks; 17/06 and block 15/06 in the deep offshore Angola in the framework of the licensing round 2005/2006 organized by Sonangol E&P.

Total takes a 30% interest, as operator, in the block 17/06, alongside Sonangol P&P (30%), SSI Seventeen (27.5%), Falcon Oil (5%), ACR (5%), and Partex (2.5%). Sonangol E&P is the concessionaire of block 17/06.

Block 17/06 consists of the relinquished areas of the block 17, in Lower Congo Basin South Zaire River, on which, Total, as operator, made 15 separate discoveries corresponding together to more than 3 billion barrels of recoverable oil.



# Acquisitions & Mergers

Total also enters into the block 15/06 which covers an area of approximately 4,200 square kilometers, through taking an interest share of 15%, alongside Eni (operator, 35%), Sonangol P&P (15%), SSI Fifteen (20%), Falcon Oil (5%), Statoil (5%) and Petrobras (5%). Sonangol E&P is the concessionaire of block 15/06.

Moreover, Total announced the completion of the concession to Sonangol of its 27.5% share in Block 2/85 and its 55.6% in the Fina Petroleos de Angola (FPA) company.

### Leni signs agreement to acquire interest in offshore asset located between Malta and Libya

Leni Gas & Oil plc (LGO) signed a "Farm-in Agreement" with Malta Oil Pty. Limited (MOL) a subsidiary of Mediterranean Oil & Gas plc (MOG) to acquire an initial 20% interest in four oil and gas exploration blocks known as Area 4, located within Maltese waters between Libya and Malta, covering an area in excess of 5,000 km<sup>2</sup> with water depths of around 400m.

Area 4 is an under-explored petroleum area which directly relates to the extension of the offshore hydrocarbon zones in Tunisia and Libya where several oil & gas majors (e.g. Exxon, Woodside, Petrobras and Gazprom), operate and have recently won exploration licenses.

### Dana hits another strategic acquisition

Dana Petroleum plc's wholly owned subsidiary, Dana Petroleum (E&P) Limited, has signed an agreement with Devon Energy Corporation to acquire Devon's entire upstream petroleum business interests in Egypt spanning eight companies and eight Production Sharing Contracts ("Devon Egypt").

Through this \$375 million deal, Dana is to gain approximately \$67 million of working capital in Devon Egypt as of the effective date. Dana will pay the net consideration of approximately \$308 million in cash via a newly arranged banking facility with ABN AMRO Bank.

During 2006, Devon Egypt had working interest production of approximately 12,300 barrels per day, and USGAAP operating profits of approximately \$53 million. At the end of 2006, gross assets were approximately \$242 million.

### Eni signs MoU with Sonangol for acquisition of Angola LNG Ltd stake

Through its affiliate Eni Angola Exploration B.V., Eni and Sonangol signed a Memorandum of Understanding (MoU) for the acquisition of a 13.6% stake in Angola LNG Limited Consortium (A-LNG).

A-LNG is responsible for the execution of a \$4 billion project to construct a LNG plant in Soyo, 300 km north of Luanda, with a yearly capacity of 5 million tons.

According to the terms of agreement, Sonangol will own 22.8%, Chevron 36.4%, Eni 13.6%, Total 13.6% and BP 13.6%. Around 220 billion cubic meters of gas expected to be developed through this investment in addition to the production of 128 million tons of LNG, 104 million barrels of condensate and 257 million barrels of LPG.

The finalization of the MoU is part of the strategic cooperation for the development of gas resources established between Sonangol and Eni with the Gas Agreement signed in December 2006.

### Dana Gas purchases Centurion Energy International

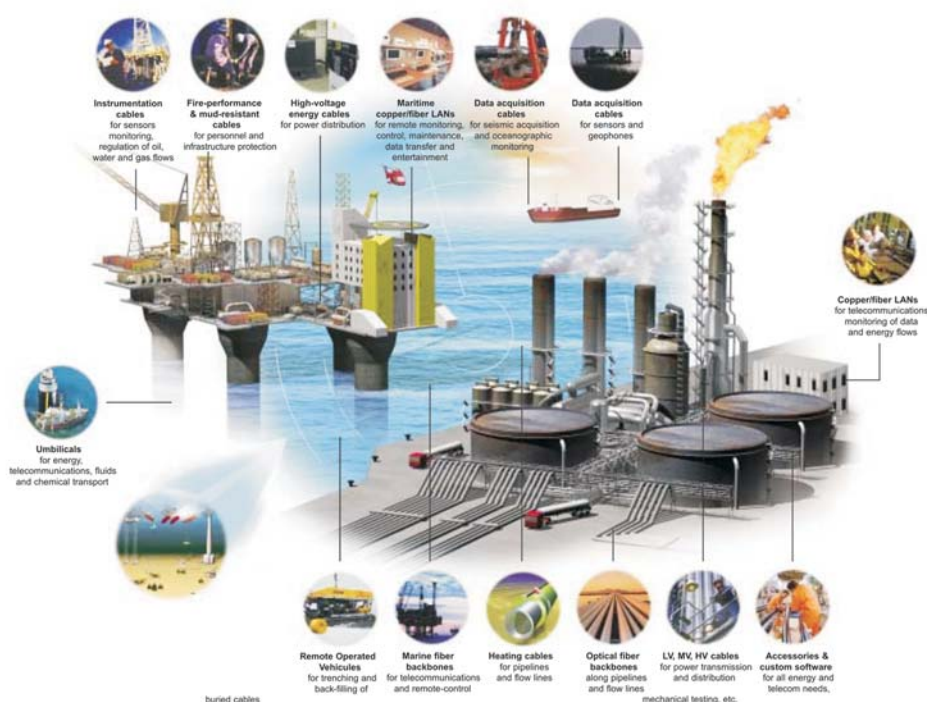
Through a \$950 million deal, Dana Gas PJSC, the first regional private-sector gas company in the Middle East announced the acquisition of Centurion Energy.

Centurion Energy, which will become a wholly-owned subsidiary and the upstream division of Dana Gas, is currently engaged in exploration and production operations from 10 development leases and 4 exploration licenses in Egypt, Tunisia, and offshore West Africa. With offices in Calgary, London, and Cairo, Centurion ended 2006 with estimated 2P gas reserves of almost 100 million boe, production of over 31,000 boe/day, expected revenues of approximately \$165 million and expected operating cash flows of approximately \$85 million.

The new acquisition will expand the company's presence in North Africa, and in particular Egypt, where the past decade has seen the country's natural gas and LNG operations attract the attention and focus of many international oil & gas firms. With proven reserves of 70 trillion cubic feet and growing, Egypt is already among the top ten LNG producers in the world.

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# 3M Specialty Materials

## A new technology for reducing the density of drilling fluids

Arnold Wong  
3M Canada

M. J. Arco  
3M

MORE than a century of extensive drilling throughout the world has left many oil fields in advanced states of depletion. The oil is still there, in great abundance, but the pressure levels necessary to force the oil and gas to the surface are lacking. This has the potential to leave large amounts of product resting below the surface, untapped.

Regardless of the reservoir pressure, economic demand necessitates that operators continue to sink new wells to maintain their current production volumes.

To keep up with that demand, new technologies are being developed that allow more efficient and effective recovery of hydrocarbons. One such technology is underbalanced drilling (UBD). Utilizing underbalanced drilling techniques allows new wells to be drilled in mature, low-pressure reservoirs.

The UBD technique is a complete 180° turn from conventional drilling theory, which calls for the dynamic hydrostatic head pressure to be higher than the formation pressure. This prevents oil and gas from exiting the well before producers are ready to pump it. UBD is used when the formation is either damaged, or there is a real danger of damage. The hydrostatic head is intentionally set at a negative pressure differential. As a result, underbalanced drilling allows a well to flow oil and/or natural gas to the surface.

This technique is typically employed when the reservoir pressure has fallen below about 8.3 pounds per gallon. Drilling is then conducted with lightweight fluids possessing a specific gravity less than 8.3 ppg.

### The advantages and disadvantages of underbalanced drilling

The benefits of underbalanced drilling extend far beyond a producer's ability to utilize previously hard-to-harvest oil and gas. Among other things, UBD helps to minimize damage to underpressurized hydrocarbon pools or formations prone to lost circulation; increased drilling rates have been observed with certain rock types; bit life may be extended; reduced chip holddown occurs, allowing the bit to continuously cut new rock which is then swept away by the drilling fluid; and, oftentimes, well stimulation can be eliminated, further protecting damage-prone formations.

It is important to realize that underbalanced drilling is not a miracle technique; as practiced most often today, it is a complicated process that, in general, increases the overall production risk. Hole instability, well control issues and detection of kick need to be considered when choosing to utilize underbalanced drilling.

Drillstring vibrations are often more pronounced, higher drag and torque will be experienced, and there is often a general attenuation of the conventional MWD mud pulse signal. Surface cleaning equipment must be made available and may have to accommodate a complex mixture of fluids and cuttings.

One of the most common methods of creating low density drilling fluids is through aeration.

Aeration can create additional, unique problems apart from those typically associated with underbalanced drilling. Aerated drilling fluids are compressible in nature, which gives them a complicated and demanding hydraulic profile. Compressors will need to be rented, considerably increasing the daily drilling cost.

And, if air is used to aerate the drilling fluid, an explosion potential exists due to the formation of hydrocarbon/oxygen mixtures and the frictional sources of ignition downhole. In addition, air in contact with steel drillstrings is a corrosion risk.

### An innovative technique for creating low density fields

Field tests have shown that the use of 3M™ Scotchlite™ Glass Bubbles—a low density additive that has been used as a polymer filler for years but is still relatively new to the oil and gas industry—can help alleviate many of the risks attendant with aeration.

3M™ Scotchlite™ Glass Bubbles are high strength, low density, hollow glass microspheres. Made from soda-lime-borosilicate glass, they are unicellular; chemically inert except in the presence of hydrofluoric acid; and have high water resistance, temperature resistance and pressure resistance.

Scotchlite glass bubbles have been successfully used as engineered fillers in many other industries, including aero-space and automotive, where their high strength-to-weight ratio is beneficial. They are also used in buoyancy modules for undersea risers. These hollow glass spheres range in average true density from 0.38 g/cc to 0.60 g/cc, with isostatic crush strengths from 4,000 psi to more than 18,000 psi.

This combination of properties—strength under pressure and low density—makes them ideal candidates for demanding downhole conditions, particularly as density-lowering additives for drilling fluids. Scotchlite glass bubbles have the ability to create a lightweight yet incompressible fluid that can overcome some of the limitations associated with aerated fluids in underbalanced drilling applications, while retaining the benefits of UBD:

- They can successfully and predictably reduce the density of drilling fluids
- They can survive demanding downhole conditions and are compatible with standard surface cleaning equipment and pumps
- In concert with calcium carbonate, they can help stem fluid filtration loss
- They will not adversely affect the rheology of a fluid
- They can help reduce formation damage
- Reducing the friction of drilling fluids, they help lubricate the drillstring and reduce the casing wear
- They are reusable

### 3M™ Scotchlite™ Glass Bubbles vs. Aeration

The advantages of using Scotchlite glass bubbles to reduce the density of drilling fluids begin and end with simplicity. Fluids made with hollow glass spheres are singlephase, meaning they are virtually incompressible with simple, hydraulic behavior. Aerated fluids are typically multiphase, yielding a mixture with complex hydraulics. Also, there is no need for a compressor when using Scotchlite glass bubbles. The product is easily added to drilling fluids using only a venturi hopper.

Scotchlite glass bubbles can allow producers to use near balanced or balanced drilling when appropriate. Because drilling fluids made with Scotchlite glass bubbles have such predictable performance at depth, the hydrostatic head pressure can be tuned to a pressure just above that of the formation. This helps prevent oil or gas from flowing out of the well while also not damaging the formation. Well control or well stability is also less of a problem when using Scotchlite glass bubbles.

### Reducing the density of drilling fluids

Scotchlite glass bubbles can be added to virtually any type of existing fluid system to reduce its density, including fresh water, brine, diesel or any other base. The density reduction of a drilling fluid is directly proportional to the concentration of these hollow glass spheres. Increasing the concentration of Scotchlite glass bubbles decreases the fluid's weight. Scotchlite glass bubbles are independent of the nature of the liquid and basically extend the density window of a liquid into ranges only achieved by aeration.

There are practical limitations to the use of these materials, however. Every grade of Scotchlite glass bubble has an upper limit as to how much of a weight reduction can be attained. For the most part, these limitations are governed by the viscosity of the glass bubble-filled fluids and vary only slightly for different bases. As a general rule, the upper limit concentration of Scotchlite glass bubbles is 50% by volume. Above that level, viscosity grows exponentially, although thinning additives and similar products may be used to increase the concentration above 50% by volume.



### Performance

The mechanical integrity of Scotchlite glass bubbles is of course one of the most important factors to consider when thinking about using them to lower fluid density. Because of that, 3M has conducted several experiments to determine their survival rate in a variety of process equipment and drilling applications. Initial testing at the Drilling Research Center (Houston, Texas) determined the fate of glass bubbles immediately after they exited bit nozzles. These tests showed that glass bubble breakage was minimal, and limited to a very small percentage.

Beyond this experiment, testing of the effect of nozzle impact has been limited, but proper selection of certain parameters will ensure the maximum survivability of the glass bubbles. Nozzle outlet diameter and the standoff are the parameters that can be selected to optimize the integrity of Scotchlite glass bubbles for the most common bit nozzles. In some nozzles, adjusting the angle of the velocity vector around the exit circumference is also effective.

While mechanical integrity is undoubtedly of paramount importance (the bubbles must survive the nozzles to function properly), they must also survive the pressures at depth. For every density of glass bubble, there is a corresponding collapse pressure. Some grades can tolerate very high pressures, in excess of 18,000 psi, making them ideal for use in very deep wells.

Because there is a danger of collapse, the choice of glass bubbles grade should take into account its pressure rating and the largest expected dynamic bottom hole pressure. When sufficiently high pressure ratings are chosen, Scotchlite glass bubbles can work very well. Experiments have shown that the compressibility ratio of glass bubbles/water mixtures is practically identical to the compressibility of pure water—suggesting that Scotchlite glass bubbles are virtually incompressible.

The final test of the mechanical integrity of Scotchlite glass bubbles is likely to be on-site pumps. Drilling fluids incorporating glass bubbles are compatible with centrifugal pumps and with triplex pumps. Tests indicated no change in drilling fluid density, indicating that the glass bubbles were not damaged by either pump.

### Rheology

The rheology of various systems incorporating Scotchlite glass bubbles is very similar to conventional fluids. Table 1 shows the results for systems using Scotchlite glass bubbles with a true density of 0.38 g/cc in different quantities to achieve high and low density limits. The data were acquired via a standard API test procedure with a Fann 35 viscometer.





Table 1. Rheological properties of Scotchlite glass bubbles-based fluids

Fluid Type	Density ppg	Plastic Viscosity, cP	Yield Point lbs/100-ft <sup>2</sup>
Polymeric/Viscoelastic	8.0-6.8	17-42	34-48
100% Oil	6.8-5.6	19-30	10-18
60/40 Oil/Water Emulsion	7.2-6.1	27-43	15-24
Microbubble	7.8-6.2	5.7-15	15-30

#### Fluid filtration loss

The spherical shape and incompressibility of Scotchlite glass bubbles do not make them good fluid loss control or lost circulation agents. By themselves their influence is minimal. In combination with primary agents, however, glass bubbles can play a synergistic role in preventing fluid loss and lost circulation.

That's because of their large particle size distribution. With a large population of particles in the 10-74 micron range—all at low density—they can act in concert with a primary bridging agent like sized calcium carbonate. Together the two particles form a useful filter cake when the granulometric distribution is chosen according to the permeability and porosity of the reservoir. Recent testing has shown that the addition of calcium carbonate (15 ppb) plus Scotchlite glass bubbles (15 ppb) to an aqueous fluid reduced spurt from 5.8 cc/30 min to 2.2 cc/30 min, and the corresponding total filtrate from 10.4 cc/30 min to 5.8 cc/30 min at a pressure differential of 1500 psi. Scotchlite glass bubbles were also able to compensate for the density increase due to the addition of calcium carbonate, returning it to the level of the original fluid formation.

#### Reducing formation damage

The tight filter cake formed by calcium carbonate and Scotchlite glass bubbles also helps to reduce formation damage and restore the formation's original permeability. When a control fluid is used—devoid of glass bubbles or calcium carbonate—permeability returns of only 60% were obtained. In contrast, when the tight filter cakes were removed with low-pressure backflooding (< 10 psi), the formation exhibited a nearly 100% return to the previous permeability level.

#### Lubricity and casing wear

Solid plastic spheres are often used to reduce friction in highly-deviated wells. Scotchlite glass bubbles, because they are nearly perfect spheres, have been shown to help reduce casing wear and increase lubricity without the addition of solid spheres. Drillstring friction is reduced regardless of the base. When using a polymer mud base, the addition of 35% by volume of Scotchlite glass bubbles reduces the friction coefficient from 0.25 to 0.18. A casing wear study, with a water-based mud, showed a reduction in wear by 68% when glass bubbles were added.



#### Reuse and recovery

Not only are expensive compressors unnecessary when using Scotchlite glass bubbles as a density reducing agent, the glass bubbles themselves are reusable, greatly reducing potential costs. The small particle size of Scotchlite glass bubbles allows their use in surface cleaning equipment. Shale shakers and hydrocyclones have been successfully used with no ill effect to the glass bubbles. A mesh count larger than 100 but smaller than 200 should theoretically allow all the Scotchlite glass bubbles safely through the screen while trapping the cuttings. When a hydrocyclone is employed, the tendency is for the glass bubbles to remain in the fluid and travel on to the overflow discharge. Because of the low density of the glass bubbles, the inlet pressure needs to be monitored closely so that the separation is optimal. If the correct procedures are followed, however, the bubbles are once again ready to head into the borehole.

Recovery is slightly more complicated, but not overly so. Experience has shown that reclamation with conventional shale shakers or hydrocyclones are not efficient methods. Recovery is best accomplished by making use of the product's low density.

Less dense than water, all Scotchlite glass bubbles can be expected to float, especially if the rheological properties of the fluid are destroyed by the addition of additional water. Experiments have shown that the separation of Scotchlite glass bubbles from a water-based fluid by means of dilution is possible. The test sample, a water-based fluid containing 10 ppb bentonite, 35% by volume glass bubbles, and 2% sand, reached a separation plateau of 84% after 30 minutes and 88% after 24 hours. Other samples were recoverable up to 95% with different dilution rates. More experiments and field trials need to be done, but it is clear that floatation is a potentially viable and economical method of reuse.

#### Conclusion

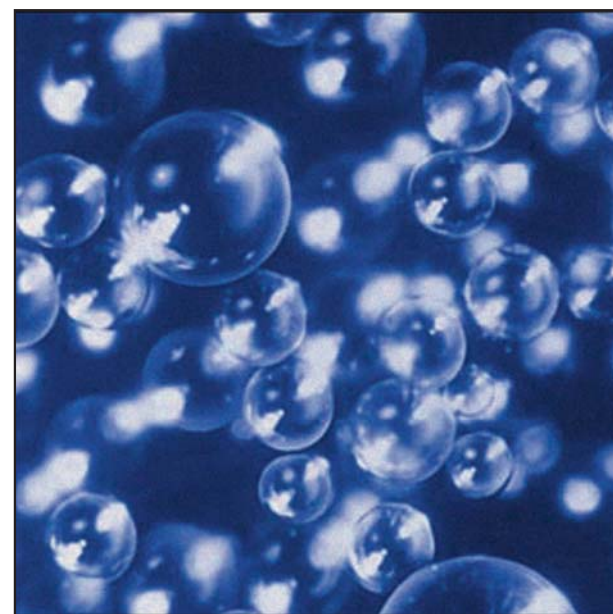
3M™ Scotchlite™ Glass Bubbles are an ideal alternative to aeration in creating low density drilling

fluids. Using glass bubbles provides an incompressible, single-phase fluid—one with simple, predictable hydraulics, able to survive pressures higher than 18,000 psi. Drilling fluids made with glass bubbles are so predictable, in fact, that at balance or near balanced drilling can be used in even sensitive strata without significant danger to the formation.

Glass bubbles are compatible with conventional solids control equipment and pumps. They require no compressors and are readily field mixed. Explosion potential is reduced when using drilling fluids made with Scotchlite glass bubbles because air is never in contact with any petroleum or natural gas products. For the same reason, drillstring corrosion is greatly reduced.

Field trials have been conducted in re-entry and inclined wells in many areas of the world, including depleted reservoirs and geologically-fractured formations. Scotchlite glass bubbles have performed well, successfully meeting the challenge.

For more information on Scotchlite glass bubbles for low density drilling fluids, please contact Frank Williamson at 281-412-4704, or visit us at



[www.3m.com/oilandgas](http://www.3m.com/oilandgas) on the internet.

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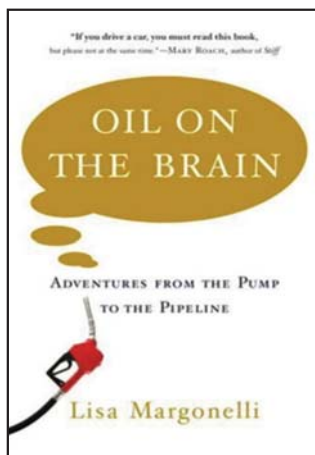




## Oil on the Brain: Adventures from the Pump to the Pipeline

Author: Lisa Margonelli  
Date of Publication: January 2007  
Published by: Nan A. Talese  
Price: \$26

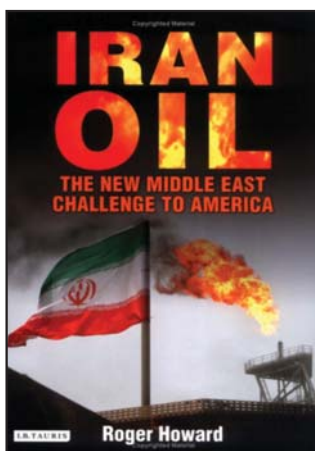
How oil is created and drilled, how gas stations compete, what actually goes on in a refinery, where the U.S. government stores roughly 700 million barrels of oil in underground salt caverns on the Gulf Coast of Texas... these questions and much more have been answered by Margonelli, who also examines some of the key patches in the oil industry's geopolitical quilt: source countries like Chad, where promises of real local growth fall hopelessly short. Or China, which, "by 2025, perhaps, will import as much crude oil as the U.S. does now." Margonelli criticizes corruption in places like Nigeria, while expressing her "love of hydrocarbons" for the "unlikeliness of their formation and the ingenuity required to extricate them. This is an original, open-minded look at a subject about which everyone has an opinion."



## Iran Oil: The New Middle East Challenge to America

Author: Roger Howard  
Date of Publication: January 2007  
Published by: I. B. Tauris  
Price: \$39.95

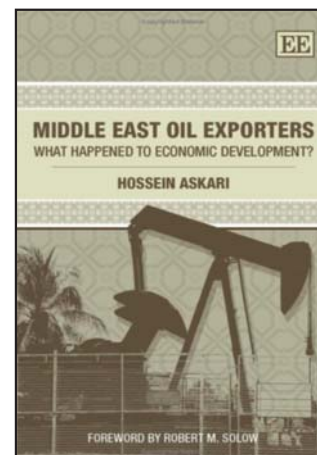
Iran has been represented as a challenge to the US, since the invasion of Iraq. But, as Roger Howard argues in this provocative new book, by attempting to isolate Iran, the US may in fact be undermining its own power. For if the US forces the rest of the world to choose between Iran and America, Iran has a "trump card to play": some of the largest deposits of gas and petroleum on the planet. With global energy demands at an all-time high and supplies becoming increasingly inaccessible, Iran's oil and gas have already started to lure former US allies such as Pakistan and India away from American influence. Concerns have been intensified over Iran's energy supplies and its ability to reshape security in the region and the diplomatic relationships of Asia and the Middle East. Also, due to the restrictions and sanctions imposed by the US on Iran, competitors like China are initiating more economic ties with the Iranian government, which allow them to use and get huge benefits from the Iranian energy reserves and hence, acquire more power in the region compared to the U.S. "By pursuing such a hostile agenda to a country with so much petroclout, America is, according to Howard, writing its obituary as the world's only superpower."



## Middle East Oil Exporters: What Happened to Economic Development?

Author: Hossein Askari, Iran Professor of International Business and International Affairs  
Date of Publication: February 2007  
Published by: Edward Elgar Publishing  
Price: \$155

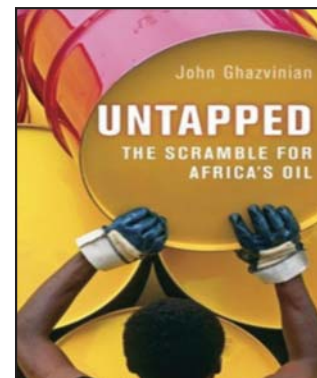
This publication reflects Middle East Oil Exporters' analysis of the economic structure and a critical survey of the recent economic performance of the Middle East. In addition to the small oil producers in this region, there is more focus on the large oil-exporting nations. Professor Askari sheds light on "how oil has become a crutch to avoid reforms, destroying the work ethic of the region, fuelling corruption and poisoning the social and cultural fabric of society to keep unpopular governments in power." Askari argues that "economic and social failure in the oil-exporting countries of the Middle East is a result of much more than simply shortcomings in economic policies". He analyzed some factors, such as religion, corruption, instability, wars and foreign interference as reasons affecting the region and offers solutions that incorporate Islamic teachings, regional peace efforts, market-oriented economic policies, sound institutions and unselfish policy support from the West.



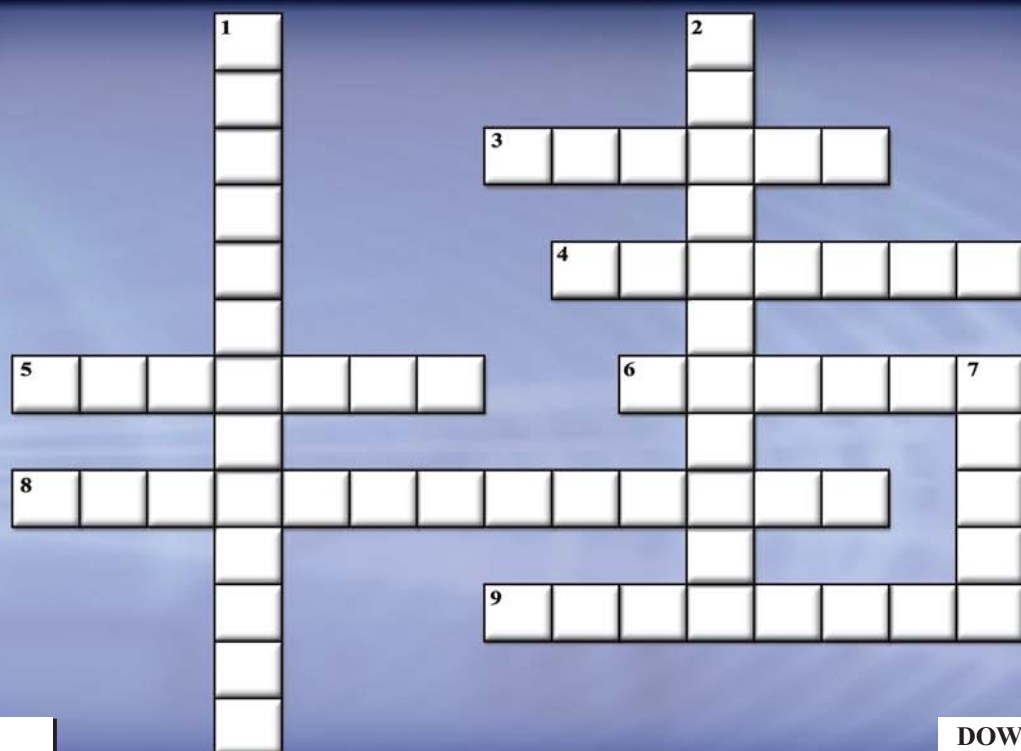
## Untapped: The Scramble for Africa's Oil

Author: John Ghazvinian  
Date of Publication: April 2007  
Publisher: Harcourt  
Price: \$16.50

The book tackles the nowadays role of the African continent as a great source of oil. Africa has been classified as a mean for world's major powers to redirect their interests to this area as a way out of their independence on the Arab World. This new approach raises questions about the potential of this continent closely associated with despair and human suffering. Moreover, a historical overview is provided by Historian Ghazvinian who draws back the topics of oil extraction from both Nigeria and Angola, the major oil producers in Africa to date. He explores the relationship between these two nations with the major oil companies, the unsettling ethnic conflicts and imbalances in economic development, and the countries with lesser but active oil production, including Gabon, Republic of Congo, and Cameroon. He also explores China's readiness to play an aggressive role in Africa to assure access to these potential oil reserves, and the broader implications for competition with the West."



## Oil & Gas Crossword



### ACROSS

- 3 Metal pipe inserted into a wellbore and cemented in place to protect both subsurface formations (such as groundwater) and the wellbore
- 4 Natural gas containing hydrogen sulfide
- 5 A percentage interest in the value of production from a lease that is retained and paid to the mineral rights owner
- 6 A unit of measure for oil and petroleum products
- 8 The injection of water into an oil reservoir to push additional oil out of the reservoir rock and into the wellbores of producing wells
- 9 A term used to describe tools, equipment and instruments used in the wellbore

### DOWN

- 1 Natural gas produced with crude oil from the same reservoir
- 2 A term used for several processes to enlarge old channels, create new ones, in the producing formation of a well designed to enhance production
- 7 A legal document conveying the right to drill for oil and gas

## Oil & Gas Trivia

1. What was the institute out of which today's Society of Petroleum Engineers International evolved?

A. The American Institute of Mining & Metallurgical Engineers (AIME).

2. In what year did the U.S. Bureau of Mines set up its Petroleum and Natural Gas Division?

A. 1914.

3. What grand historical event triggered the initiation of the American Petroleum Institute?

A. World War I.

4. What is considered by many to be the first oil well in history, named after the man who is said to have "discovered oil"?

A. The Drake well, drilled by Edwin L. Drake.

5. In what year was oil discovered in Egypt?

A. 1886.

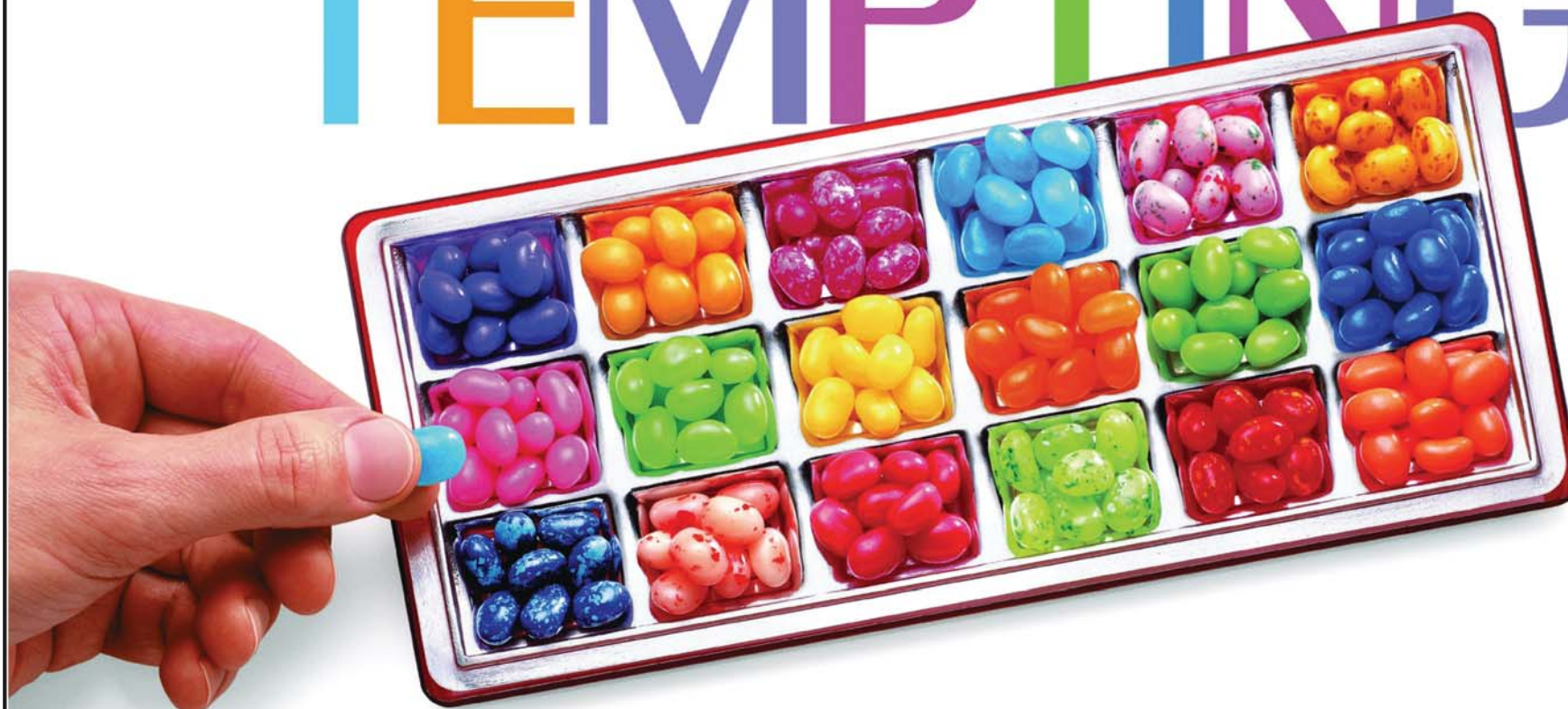
Answers: 1. Associatedgas 2. Stimulation 3. Casing 4. Sourgas 5. Royalty 6. Barrel 7. Lease 8. Waterflooding 9. Downhole





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# Peak oil has become the term of the century. Governments deny it, producers await it, citizens fear it and economists do little to prove or disprove it.

By Diana Elasy

IN 1956 Marion King Hubbert proposed a theory to the American Petroleum Institute, which generated much skepticism from its audience. In his presentation, entitled “Nuclear Energy and the Fossil Fuels,” Hubbert concluded that “if the world should continue to be dependent upon the fossil fuels as its principal source of industrial energy, then we could expect a culmination in the production of coal within about 200 years. On the basis of the present estimates of the ultimate reserves of petroleum and natural gas, it appears that the culmination of world production of these products should occur within about half a century, while the culmination for petroleum and natural gas in both the United States and the state of Texas should occur within the next few decades.”

“This does not necessarily imply that the United States or other parts of the industrial world will soon become destitute of liquid and gaseous fuels, because these can be produced from other fossil fuels which occur in much greater abundance. But it does pose as a national problem of primary importance, the necessity, both with regard to requirements for domestic purposes and those for national defense, of gradually having to compensate for an increasing disparity between the nation’s demands for these fuels and its ability to produce them from naturally occurring accumulations of petroleum and natural gas.”

Today, not only is his theory etched in the minds of most professionals and academics, but it stands as a stanch warning to the people of the world. Hubbert’s theory was simple: based on the fact that world oil reserves are finite, oil reserves will follow a curvature life-line. Hence, after initial exploration and the intensification of infrastructure, oil production will increase reaching a peak point after which oil depletion will begin.

For the world, it was found that global oil reached its peak in 1960, meaning that if Hubbert’s theory is correct, and the United States as a case example is appropriate, oil depletion will become a reality 40 years following its peak, which is unfortunately now.

However, at the end of the day, no one really knows how much oil is available under the earth’s surface, nor do they know how much can be produced because technological advancements are occurring at such a rapid speed that what we couldn’t produce yesterday we can produce today.

There are essentially four types of oil measurement: ultimately recoverable resource; these are estimations based on partial information and which are constantly changing due to the changes in technology. In this sense, mature fields and what they can produce can fall in this category, where technology, specifically Enhanced Oil Recovery methods (EOR), is making it possible to produce more out of those fields than was possible a decade ago.

The second category is proved reserves. Proved reserves are a more conservative estimate of oil in any given reservoir. In fact there is a numerical cut-off to this estimation of 90% meaning that there has to be more than a 90% chance of oil recovery for it to be proven. Probable reserves follow the same estimation scheme of proved reserves for the exception of the cut-off percentage to accuracy. Probable reserves have to have at least a 50% chance of being recovered. Finally, possible reserves still have significant reserve estimation, but it lies below 50%.

With the above information in mind, one can begin to understand the controversy surrounding the peak oil theory. On the one hand, on a very theoretical and general level, a reservoir can and in fact by nature of it being a non-renewable resource, must follow a curvature life-line. However, since the initial knowledge of reserves is unknown and measured due to educated estimates, the peak of this curve is quite difficult to predict. But production levels do not lie. Production at some point reaches a peak after which it declines, but it can be once again stimulated based on technological advancements.

Until these advancements are not only discovered, which several optimization methods have been, but also implemented, the threat of peak oil and absolute depletion are still looming. With this being said, one may begin to

further analyze the threat, its causes, and possible solutions.

## The Problem: Oil Based Consumption

The importance of the peak oil theory is not solely based on the fact that oil will at some point deplete, it is based on the fact that this depletion will undoubtedly present several challenges to nations that rely heavily on the resource. Thus, it is over consumption piled with depletion that equate to an unsure future.

But what exactly is consumed? How is oil consumed in such mass amounts? Petroleum does not solely produce the gasoline by which your cars run. Oil is used to make everything from epoxy paint, to upholstery, to lipstick, to tires and tennis rackets. Oil is gasoline for your car, it’s petrochemicals, it’s plastic, it is the small household items that you use in your daily lives. Oil is also the food that you eat, since in some countries food is transported long distances, thousands of miles to be precise, before it is delivered to the consumer.

Due to oil’s obvious interconnectedness in the daily lives of so many people, the depletion of this resource will sound alarm bells in the minds of world citizenry and not just one or two nations; the depletion of oil is an international pandemic and not a regional or state ailment. Nor are there states that are exempt from the fear. Even oil producing states find it difficult to meet domestic demand while also exporting, especially if they are also attempting to industrialize as is the case with so many of the oil exporting countries, since industrialization is closely tied with oil consumption.

The point of industrialization is an interesting one because most of the countries or regions seen as the world’s savior when it comes to oil are usually categorized as underdeveloped, such as the African region or the Middle East region. These are regions that at the moment are attempting to develop their infrastructures and their economies in order to survive in the highly competitive world economy. And as has been previously mentioned, development, which certainly includes industrialization, needs oil to succeed.

## The Players: Consumers

So, which countries are currently the most consumptive when it comes to petroleum? At this point, the United States is by far the world’s most consumptive nation when it comes to oil. Its declining domestic production can barely cover 50% of its consumption and so it opts for importation as do many other nations.

China follows the US when it comes to consumption. In 1993 the world’s most populated country became a net importer of oil and now competes for the title of



# Falling Off Hubbert’s Peak: A Tale of Earth, Wind and Fire



7,274,000 bbl/d for China to 1,627,000 bbl/d for Iran.

The top 15 net importers of oil in 2006 from highest to lowest were: United States, Japan, China, Germany, South Korea, France, India, Italy, Spain, Taiwan, Netherlands, Singapore, Thailand, Turkey, and Belgium. Their respective imports range from 12,220,000 bbl/d to 546,000 bbl/d.

In fact, very few countries are actually producing enough oil to meet domestic demand, and even fewer are able to export their production. The United Kingdom is one of those nations that can cover its domestic needs while barely exporting some resources; however it is not clear for exactly how long it can persist in this endeavor.

One of the problems with the depletion of oil or even the mere threat of it is that it has a negative effect on pricing. Since oil will be more expensive to retrieve in the later stages of well maturity, this expense will undoubtedly be delivered to the end-user. And while oil prices are skyrocketing, so are the prices connected with everything that has to do with oil.

## The Players: Producers

According to the *Oil & Gas Journal*, which is cited by the EIA, for 2005, the largest reserves in the world were found in the Middle East region with 729,34056 billion barrels of oil.

That figure was then followed by the US with 214,771 billion barrels. However, the EIA has differing opinions from *Oil & Gas Journal* by ranking Russia as the world’s second top producer with 9,668,000 barrels per day.

This discrepancy could be due to the fact that *Oil & Gas Journal* ranks according to region, while the EIA ranks according to countries.

The EIA lists the top 15 producers in the year 2006 from the most productive to the least as follows: Saudi Arabia, Russia, United States, Iran, China, Mexico, Canada, United Arab Emirates, Venezuela, Norway, Kuwait, Nigeria, Algeria, Mexico, Libya, Iraq, Angola, Kazakhstan, and Canada. Their respective imports range from 8,651,000 bbl/d to 1,071,000 bbl/d.

With the above information in mind, a few realities are made clear. First, some of the top consumers are also some of the top exporters, such as Saudi Arabia, Russia, Canada, and Iran. These producers who are also mass consumers will not be able to meet domestic demand and also export for long. In fact, literature has been written depicting some of the looming problems of oil depletion that are facing some of these nations, namely Saudi Arabia, which was undertaken in an academic endeavor by Matthew R. Simmons in his book *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy*.

In essence Simmons fixes a suspecting eye on Saudi’s enthused attitude towards its own oil fields, bearing in mind that Iran’s reserves peaked in the 1970s and the reserves of Kuwait, Syria, Oman, Iraq, and Yemen have all passed their peak output.

Another reality is that some of the world’s top producers are also importers, such as the United States and China. The two nations provide excellent examples of oil-dependent nations and oil-developing nations, respectively. The US is an oil-dependent nation. The daily life of its citizens depends on oil directly and indirectly due to consumption. China is an

oil-developing nation, meaning that the development of the nation depends on oil, as mentioned earlier; this dependence is primarily due to industrialization.

## What About OPEC?

The Organization of Petroleum Exporting Countries (OPEC) provides the following types of oil according to their country of origin: Saharan Blend (Algeria), Minas (Indonesia), Iran Heavy (Islamic Republic of Iran), Basra Light (Iraq), Kuwait Export (Kuwait), Es Sider (Libya), Bonny Light (Nigeria), Qatar Marine (Qatar), Arab Light (Saudi Arabia), Murban (UAE) and BCF 17 (Venezuela). Some of these countries were mentioned above in the lists of top exporting countries and of top producers.

OPEC produces about 43 per cent of the world’s crude oil and has over 78.4 per cent of the world’s oil reserves. The organization claims that it can guarantee the world’s oil supplies for the future by expanding production to meet growth in demand. However, this expansion is contingent on producers’ willingness to invest in the industry.

In spite of the organization’s optimistic view of their reserves and production for the future there are still quite a few discrepancies that must be mentioned. These discrepancies can be portrayed through case examples of some of the organization’s members. Saudi Arabia has already been discussed with Simmons’ book, which casts a doubting gaze on the country’s reserves and ability to maintain production.

The second country of concern is Indonesia, which in 2004 became a net importer, not a good sign from one of the members of the organization which claims to have the ability to maintain future oil security. Nigeria is another country that is not at a loss of oil, but is marred with socio-political and economic instability. Iran, which has the world’s second largest oil reserves following Saudi Arabia, is also surrounded by controversy, not only politically, but economically. The hastily industrializing nation is consuming most of its oil for domestic purposes, which is its inherent right as an independent state, but nonetheless leaving a question mark on the future of its presence as a major exporter.

## Looming Doom or Fate to Alternate?

In 1993, Richard C. Duncan wrote a paper entitled “The life-expectancy of industrial civilization: The decline to global equilibrium.” In his paper he statistically backed a theory which he had originated in 1989. This theory was the Olduvai theory. The Olduvai theory, named after the Olduvai Gorge (what is referred to as the “The Cradle of Mankind”), essentially professes that industrial civilization, which is defined by per capita energy consumption, has a life expectancy of an average of a hundred years; meaning that industrial countries, which basically flourished in the 1930s will reach their decline in 2030.

The theory is based on the fact that exponential growth of energy production ended in 1979 and that the beginning of the 21<sup>st</sup> century marks the start of energy growth becoming piercingly negative. The theory lays out a three phase plan for the decline of the industrial civilization. The first phase, “The Olduvai slope,” which spans the years of 1979-1999 witnessed the decline of energy per capita at a rate of 0.33 % per year. The second phase, “The Olduvai slide,” which spans the years of 2000-2011, witnesses the rise in warfare in the Middle East and the peak of world oil. The third and final phase, “The Olduvai cliff,” which spans the years of 2012-2030, begins with temporary blackouts and then the beginning of the end. The collapse of the industrial civilization will transgress the value of per capita energy production to the levels of the 1930s and will be characterized by worldwide permanent black-outs from high-voltage networks of electricity.

Many have stated that Duncan’s theory compliments Hubbert’s theory. A bit pessimistic maybe, but the two theories do have a common basis of empirical data. The theories are also being proven by time, the most accurate of indicators. Hubbert’s theory has manifest before the eyes of many operators when their wells begin to decline after reaching a certain peak in production. Duncan’s theory is also manifesting and has somewhat already manifested. The decline of energy per capita did occur following the oil shock of the 70s; warfare is currently rising in the Middle East with conflicts reaching international proportion in Israel, Palestine, Afghanistan, Iraq, and a big question mark hanging over Iran. Finally, while a bit ahead of its time, the “Olduvai cliff” was slightly witnessed with the California blackout that took the nation by shock and surprise.

However, the theories, and especially Duncan’s theory does not predict the future after the depletion of oil because





that is the only course that man can take. The theory is based on oil-dependent nations. It is the dependency and not the loss of oil which matters. As with any situation, the glass can be seen as half full or half empty.

If nations remain attached to oil and its by-products they will undoubtedly have to face the world of transgression that Duncan predicts; a world of war over resources, which to a certain extent we are already seeing, where oil prices are as effected by production as they are by political instability. However, several countries have come to the realization that steps must be taken to wean their societies and their economies off of their oil addiction.

During February of this year, the United States Government Accountability Office (GAO) conducted a study entitled *Crude Oil: Uncertainty about Future Oil Supply Makes It Important to Develop a Strategy for Addressing a Peak and Decline in Oil Production*.

The study analyzes peak oil production, America's dependence on oil, and suggests strategies for the future. Among the suggestions made by GAO were: ethanol from corn, advanced vehicle technologies, and hydrogen fuel cell vehicles.

Nonetheless, nations need to think of short term and long term strategies that will complement each other. In the short term, governments should be encouraging companies to pursue optimization and EOR methods in order get the full benefit of mature wells and not just aggressive drilling where a well is used to produce the cost efficient high production of easy oil while leaving behind the burden of heavy oil, oil sands, and oil shale to some-one else. For the long term, governments should be pursuing a two-fold strategy: research and development of alternative energy and societal education towards energy conservation. Several steps have been taken in terms of alternative energy, Germany has led the way with wind power; for solar power, BP Solar is one of the world's leading solar companies.

In short, the future without oil does not have to bleak. This is our world and our future and we should command it. We have the power to secure our life without oil in the long term and to conserve and accommodate what oil is still left in the short term. Governments across the world should use the short term oil conservation and optimization to smoothly transition into the next era of alternative energy. This should be a continuing mission.

### What Peak Oil Means to Egypt

The oil and gas industry in Egypt has played and will continue to play an ever-growing role in the country's development. However, while there are certain aspects of the industry that have presented the nation with optimism for the future, such has the growing exportation of liquefied natural gas (LNG), which began in January

2005, there are other aspects which impart a menacing reality. In 1996, Egypt reached its peak point of oil production which essentially equated to 922,000 barrels per day (bbl/d). This in effect caused a decline in the country's net exports of crude oil and petroleum products.

In 2006, Egypt's crude oil production averaged 658,000 bbl/d; a startling 40 percent decrease in production since its peak point more than a decade ago. Estimates place the country's proven oil reserves at 3.7 billion barrels, which is approximately 0.3 percent of world reserves, while its more recent above-mentioned daily production average equates to less than 1 percent of world production.

In 2004, it was estimated that Egypt's domestic oil consumption stood at 594,000 bbl/d while its exports stood at 134,000 bbl/d.

In essence, consumption is swiftly rising while production is steadily declining. In fact, Egypt is expected to become a net importer of oil by the year 2015. And the answer to this dilemma cannot be solely found in natural gas, because in short natural gas cannot wholly replace petroleum and petrochemicals. Furthermore, while alternative energy is undoubtedly the next step to be taken in the long term for the world's energy crisis, for the short term, there are three key efforts that must be addressed. The first is redundant and thus will not be discussed in detail, suffice to say that conservation will always have to be on the government's to do list.

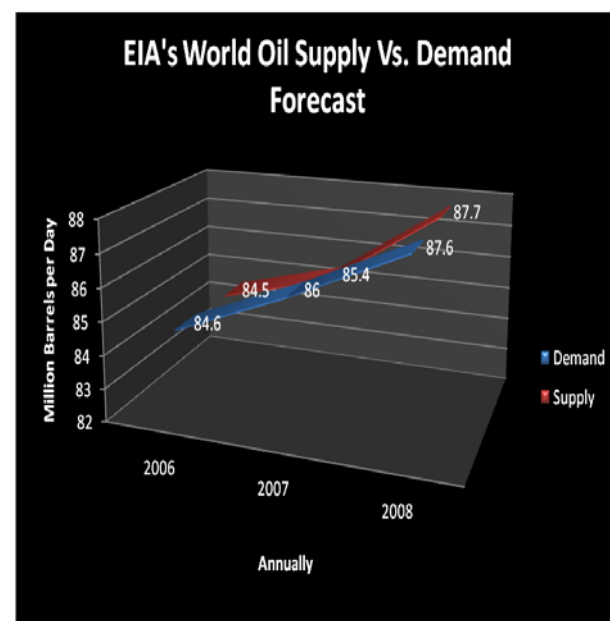
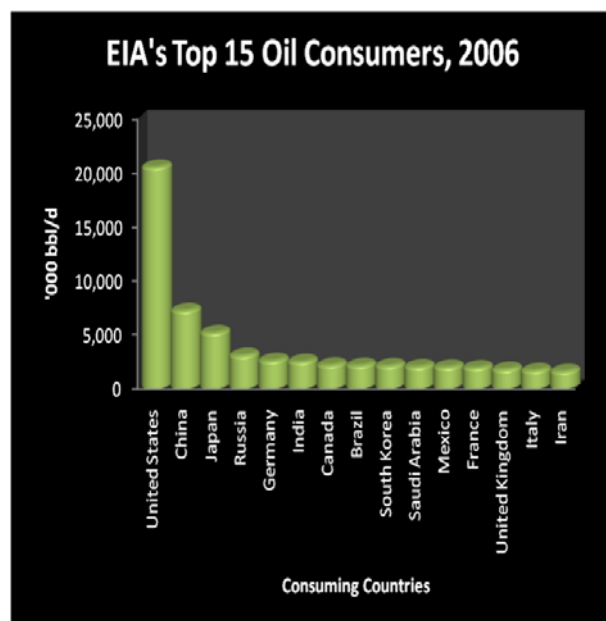
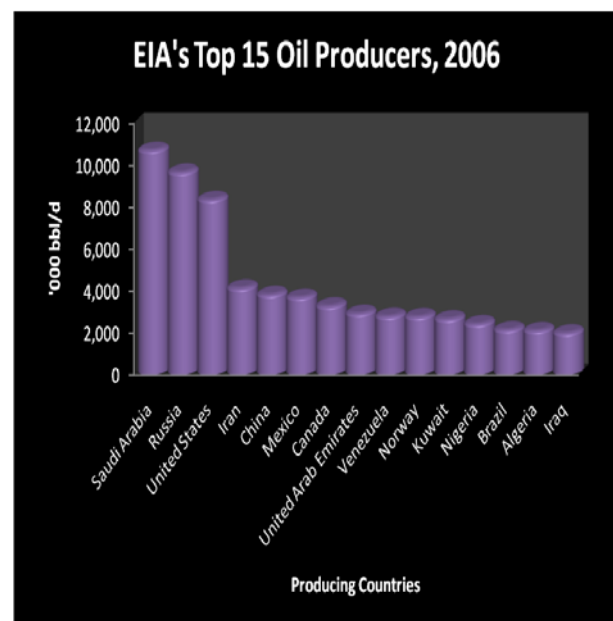
second means of boosting oil production is new-discoveries through exploration. There are a few problems with this approach however. The first and foremost problem of exploration is cost. Oil companies find exploration to be an expensive operation especially if exploration is pursued offshore. Deep-sea drilling is by far one of the most expensive endeavors world-wide, due to the incredibly high prices of equipment needed for offshore drilling. Secondly, while there have been recent discoveries made in the industry none have been major.

increasing oil production in a country, whose production has waned in the past few years, and also the most economic method, is to utilize what is already there. And this is where the story gets a little more interesting...

Increased production, greater investment, more job opportunities, higher exportation, enhanced fulfillment of domestic consumption, transfer of knowledge for advanced technologies, all this and so much more encapsulated in just one word: brown-fields. For now, and for Egypt, this is the answer to the fears that are resounded with the words "peak oil."

In a nutshell, Egypt has options and quite a few of them, but they must be pursued with the help of a concerned and responsive government. Initiatives to conserve, to search for alternative energy, to engage in exploration, and to optimize the production of what is already found are all options and better yet, opportunities.

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# “Energy Efficiency” Do we have a choice?

IT is rather peculiar that we do not get our energy priorities in the right order; it would make sense to attend to the most affordable, accessible energy source, then move on to the next. Instead, almost all our efforts are directed towards more production of fossil fuels, while we neglect the cheapest cleaner source of them all; energy efficiency.

In a world of scarce depleting fossil fuel resources, where population grows by about the size of the U.S.A. every year, we have no choice but energy conservation, energy efficiency and commercialization of renewable sources. It is not a question of “whether”, but rather a question of “when”.

Assuming continuation of the same world energy consumption trend (1.6% annual increase), it is expected that consumption would drastically increase by two thirds in 2030 ( 16.5Billion T.O.E)<sup>1</sup>. On the investment side, the funds available for investing in energy by then would not be sufficient to meet the potential demand, when more than seven Saudi Arabia(s) would be needed to satisfy that demand.

Considering different energy sources, energy efficiency turns out to be the cheapest source of energy supply after energy conservation. Not only does energy efficiency expand the lifetime of existing fossil resources but also reduce the need for energy imports. From an investor perspective, short payback periods (3 months to 2.5 years) and opportunities of green energy trade and green certificates (CDMs) would be a tempting drive. Pollution reduction and mitigation of greenhouse gases are also among the important factors supporting the adoption of energy efficiency. Even with the increasing role of renewable energy, the need for energy efficiency still exists, as global emissions of carbon dioxide are expected to grow slightly faster than energy demand throughout the coming decades.

From Table (1) below – Energy Efficiency Savings (1995-2004) – we can see that the countries which experienced the most benefits from energy efficiency were the U.S.A. and China.

Table : Energy Efficiency Savings Over [1995- 2004]

Country	Energy Quantity Savings	Economic Savings	CO2 Savings	Economic Value of CO2 Savings
	Billion T.O.E	Billion US\$	Billion Ton of CO2	Billion US\$
U.S.A.	2,719	956	8,50	680
Germany	0,249	87,42	0,78	62,13
Turkey	-0,021	-7,22	-0,06	-5,13
Tunisia	-0,005	-1,91	-0,017	-1,35
China	2,599	914	8,12	649
India	0,499	175,53	1,56	124,75

Everyone can easily relay why the USA supercede other countries, but what's really impressive, is China's ability to save around 1.5 trillion US\$ from energy efficiency on the economic and environmental levels collectively. China, by

effectively implementing energy efficiency programs, succeeded to make impressive achievements in energy efficiency while at the same time experiencing the world's fastest economic growth.

For developing countries, energy efficiency is not an alternative any more, instead it is a **Must** given the fact that developing countries will represent 75% of the world future demand increase of energy.

Despite the above a number of challenges that hinder the effective implementation of energy efficiency programs pose a number of questions that still need to be addressed. On the top of these challenges are lack of government incentives, existence of no price differentials between different energy sources, and the difficulty of removing subsidies on petroleum products or applying a pricing structure based on actual energy cost.

Other challenges include; lack of awareness to most energy efficient tools and technologies as well as the slow pace of technology transfer to those developing countries which raise many questions as to who is going to fund energy infrastructure and technology investments relevant for effective energy efficiency implementation.

Pursuing the challenge Egypt can save around \$370 million or 1.5 million metric ton annually by only improving its energy efficiency by 3% annually.<sup>2</sup> One way to achieve this is through enhancing the House Keeping Programs (which is the first level of any energy efficiency program). Proven by numbers, let us all seize the opportunity of energy efficiency aiming at a cleaner and greener world of prolonged energy supply.

<sup>1</sup> Arab Oil and Gas Directory-2006

<sup>2</sup> Based on 2005/06 Egypt's energy consumption of 50 million Metric tons.

#### References:

- Energy Information Administration Studies
- International Petroleum Encyclopedia, 2005.
- “Energy & Climate Change: The Way Forward” 2007, WEC Papers.
- Ministry of Energy & Mineral Resources Annual Report, 2005, Jordan.
- Egypt Energy Report 2006, PICO Energy R&A.

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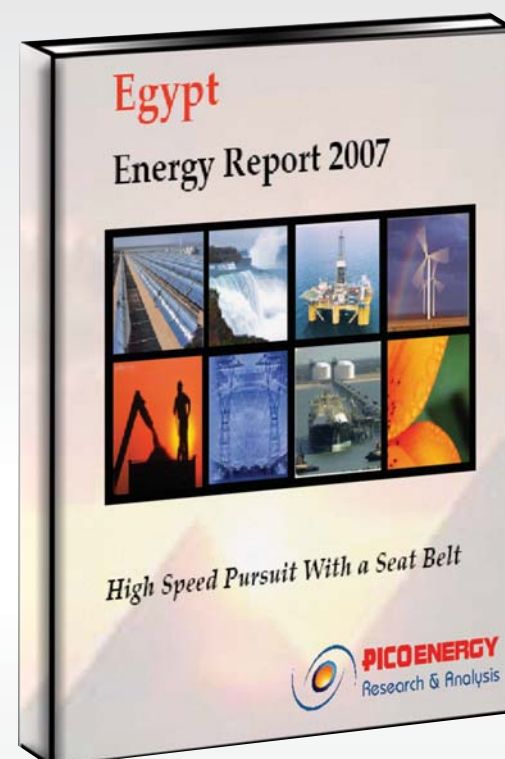
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Not only does the report covers fossil fuels, but also includes renewable energy sources, which are becoming a necessity rather than a luxury for Egypt. It points out the environmental impacts of each energy source through its life cycle and recommends mitigation measures.

“Egypt Energy Report 2007” - your ultimate guide for investing in the Egyptian Energy Sector



The report is planned to be published by August 2007.  
**For more information, please contact:**  
 Roba Said, R&A Manager  
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 Email: ra@pico.com.eg



# A thaw in oil relations?

## Will the recent thaw in relations between Cairo and Tehran lead to prosperous cooperation in the oil and gas sector?

By Mohamed El-Sayed

IT has been a quarter of a century since the relations between Egypt and Iran were severed. The diplomatic ties between the two countries were cut off because Iran rejected the Egyptian-Israeli Peace Agreement signed in 1979 to end decades of military struggle between the warring countries. The Iranian leadership went as far as naming one of Tehran's main streets after the assassin of late President Anwar El-Sadat—Khaled El-Islambolli.

Despite the occasional thaw in relations between the key regional players, especially during the past few weeks, their bilateral relations were never resumed. The Iranian President Mahmoud Ahmadinejad announced last month that his country was ready for the resumption of the ties between the two countries, and the opening of the Egyptian embassy in Tehran. On his part, Egypt's Foreign Minister Ahmed Abul-Gheit retorted that "90% of the problems between the two countries can be solved if Tehran removed the name of Sadat's assassin from that main street in Tehran." After removing the name of El-Islambolli, Abul-Gheit added, "we can sit together and discuss future relations."

Politicians in the two countries put conditions before heading to the negotiating table to solve the decade-long problems between them. Ali Larigani, stressed that the road should be paved for the resumption of the relations. "But it is normal that each country has its own conditions before normalizing the relations," he pointed out.

Observers are for the opinion that there are some issues that need to be settled before the two countries

normalize relations. "The Iranian announcement is positive, yet it's not as simple as such," said Mohamed El-Said, of Al-Ahram Centre for Political and Strategic Studies. "There are some unsettled issues between the two countries that need to be discussed before resuming their bilateral relations," he added. "There is a difference in opinion concerning some issues between the two leaderships."

Mahmoud Farag, former Egyptian ambassador in Tehran, pointed out that "there are still a lot of obstacles in the way of resuming the Egyptian-Iranian relations. The resumption of these ties requires sort of transparency and tackling all files, especially that of security."

The resumption of diplomatic relations between the two countries, as a matter of fact, is a prerequisite to the resumption of economic ties between the two countries. Although ministers of oil in the two countries met in international events many times during the past few years, a tangible boost in the cooperation in the oil sector hasn't been achieved yet. In 2004, Egyptian Minister of Petroleum Sameh Fahmi met his Iranian counterpart in a natural gas conference and agreed on setting up a number of common petrochemical projects. Having decided to establish joint companies to market oil products, the two ministers said they would cooperate in exploring oil in the two countries' fields.

Nevertheless, no significant development occurred in this respect, proving that nothing could change without the resumption of diplomatic relations. Pundits also see that neither of the two countries will gain much in the oil field after resuming diplomatic relations.

"Neither side is likely to make major investment in the other country. So I doubt it would have energy implications," noted Herman Franssen, president of the energy consulting firm International Energy Associates and an advisor to the Washington-based Center for Strategic and International Studies. Iran, as a matter of fact, is in need of \$100 billion worth of foreign investment in its aging oil and gas sector over the next ten years, according to some estimations. These investments, however, are frightened away by economic sanctions imposed on Tehran by the United States and some European countries.

Despite being one of the main producers of natural gas, Iran is importing a lot of its gasoline, which is offered at a significant subsidized price. Egypt, which is also one of the main producers of natural gas, is providing gasoline for its citizens at subsidized prices. Both countries are in the same situation — sniffing for huge foreign investments in the oil sector. Therefore, both countries, in case the two countries resumed bilateral relations, don't have a lot to offer for each other in this regard, observers say.

While Iran adopts oil policies that make foreign companies take all the risk, Egypt might offer encouraging incentives for investors. Still, Egypt has far less oil reserves than Iran, a matter that makes Iran a promising field for foreign investors.

Abul-Gheit is expected to meet his Iranian counterpart during the coming few weeks. Perhaps after this meeting, the frozen relations might be resumed between the two countries, and hence the future of any cooperation in the oil field will unfold.

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# Harbingers of the fall season

## The end of the 2006/2007 National Football League was a prelude to the shape of the competition next season

By Mohamed El-Sayed

PERHAPS no other stage in the National Football League was more telling of the shape of the 51<sup>st</sup> version of the league to start in the fall than the 30<sup>th</sup> and last week of the 59-year-old championship. With the defending champions' performance taking a downturn by the end of the competition, their arch-rivals and runners-up Zamalek got back on track with an impressive winning streak during the second half of the competition, and with a convincing comeback of the usual third challengers for the prestigious championship Ismaili, the scene will be, without any shadow of doubt, different in 2007/2008 season.

Having secured the title three weeks before the end of the competition, Al-Ahli, widely known as the Red Devils, finished on top of the table with 73 points, five ahead of second placed Zamalek. In the last stage, the Red Devils were dealt the second defeat in a row at the hands of third-placed Ismaili. Playing with their second string players, without their head coach Manuel Jose, who took a leave after securing the title three weeks before the end, Al-Ahli lost 1-0 in Ismailia.

The two consecutive losses at the hands of Zamalek and Ismaili in the last two phases melted the icing on the championship cake. Yes, the red fans clapped for their powerless substitute's team during the Zamalek and Ismaili encounters, yet the two games prevented them from properly celebrating its third consecutive winning of the most prestigious title and the 32<sup>nd</sup> in its history. While some observers argued that playing with the substitutes was a good decision to assess their suitability, or lack of it, to continue with the team next season, other pundits saw it an uncalculated adventure that tarnished the team's image by the end of the league.

In fact, the last two defeats Al-Ahli was dealt signaled a downturn in the performance of the team. Having achieved a series of unconvincing wins during the second half, the team finished only five points ahead of their archrivals. In the last

two versions of the championship Al-Ahli finished on top of the table with a total of points that was a far cry from that of its challengers. Hence, critics say that the next season will witness a hard-fought and breathtaking competition between top-notch clubs and that Al-Ahli's mission to defend the title will not be easy.

On the other side, Zamalek put a marvelous performance that made it the best team in the second half of the league. Although the team was knocked out of the Arab and African champions leagues, it maintained its outstanding performance in the local championship. Having garnered 68 points, it crowned its stupendous performances with a 2-0 victory over its traditional foes Al-Ahli. And crushing Masry of Port Said 3-0 in Cairo in the last game came to tighten its grip on their favourite second place, with one point ahead of the third-placed Ismaili.

Zamalek is now focusing on Egypt Cup competitions to make up for this season's string of failures. Scheduled to meet Assiut Petroleum in the semi-final stage of the competition on 27 June, Zamalek is a stone's throw away from the final of the competition. Being sure of cruising past the oil company team, Zamalek players will sit and watch the Ahli-Ismaili encounter on 28 June to know which team they are going to meet in the final.

Ismaili's performance this season is considered by many critics the best since it last won the title in 2002. Having been on the top of the table throughout the first half of the competition, Ismaili could have been the winners this season if they didn't lose two easy encounters with relegated Tanta and Enppi.

The coastal city club scored as many as 64 goals, equaling the number of goals scored by winners Al-Ahli. Ismaili was also the only team that beat Al-Ahli home and away (1-0 and 3-0). Theirs was an astonishing performance, but it will go down in history books as a mere footnote, for history remembers only those who win the title, not those who played well.

The team is now pinning its hope on the Egypt Cup and the African Confederation Cup. They will enter into a



backbreaking encounter with Al-Ahli in the semi-final of the Egypt Cup, hoping to achieve their third consecutive win over the title holders. They also qualified to the last-eight stage in the African Confederation championship.

Oil company teams Petrojet and Enppi maintained their positions in the middle of the table (the seventh and ninth with 40 and 35 points). Assiut Petroleum's surprising win over Enppi in the last-eight stage of the Egypt Cup came like a thunderclap to many observers. In fact, this was their only achievement this season.

As expected since the very beginning of the tournament, Tanta, Assiut Petrol and Olympic team of Alexandria were relegated. Baladiyet El-Mahalla, Etisalat, and Aluminum of Upper Egypt were promoted to play in the premiership league next season.

### Statistics about the 50<sup>th</sup> National Football League:

- 528 goals were scored in 240 matches (average 2.2 goals per match)
- Al-Ahli and Ismaili have the most successful attack line, having scored 64 goals each
- Al-Ahli has the most successful defense line, having conceded 17 goals only
- Ismaili achieved the highest two scores, having crushed Olympic and Ittihad of Alexandria 6-0 and 5-0
- Flavio Amado of Al-Ahli is the top goal-scorer with 17 goals, his teammate Emad Miteh is runner-up with 16 goals, Mohamed Fadel of Ismaili in the third place with 15 goals

Standings										
	Team	P	Home	Away	W	L	D	GF	GA	Points
1	Al-Ahli	30	15	15	23	3	4	64	17	73
2	Zamalek	30	15	15	21	4	5	58	23	68
3	Ismaili	30	15	15	20	3	7	64	23	67
4	The Army	30	15	15	11	8	11	31	29	44
5	Harras Al-Hodoud	30	15	15	12	10	8	36	39	44
6	Ghazl Mahalla	30	15	15	12	12	6	33	28	42
7	Petrojet	30	15	15	9	8	13	36	39	40
8	Arab Contractors	30	15	15	9	11	10	21	30	37
9	ENPPI	30	15	15	8	11	11	21	26	35
10	Masri	30	15	15	9	13	8	23	33	35
11	Suez Cement	30	15	15	9	15	6	25	40	33
12	Tersana	30	15	15	6	11	13	26	28	31
13	Ittihad of Alexandria	30	15	15	7	13	10	27	40	31
14	Tanta	30	15	15	5	14	11	20	37	26
15	Assiut Petroleum	30	15	15	4	16	10	22	44	25
16	Olympic of Alexandria	30	15	15	5	18	7	22	53	22



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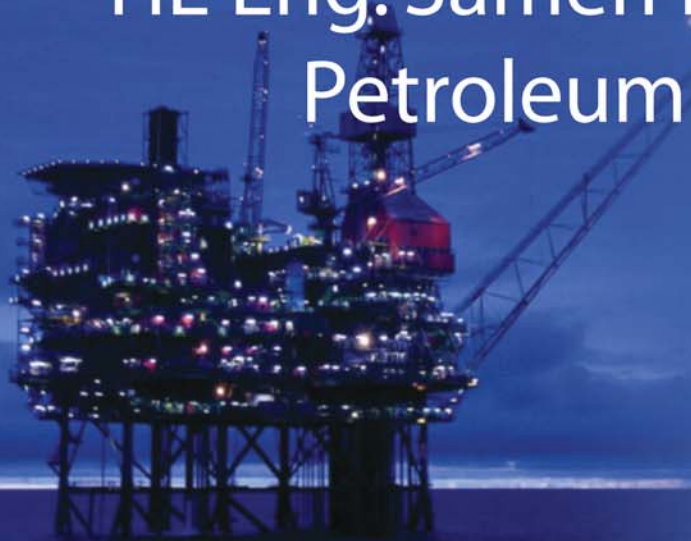


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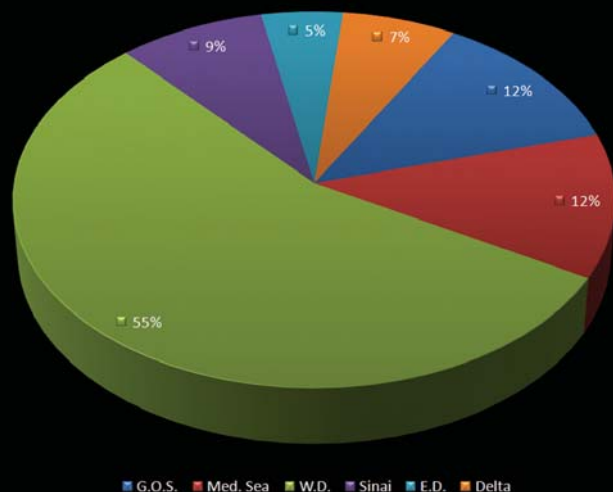


**Table 1**

**Egypt Rig Count per Area  
May 2007**

Area	RIG COUNT		Percentage of Total Area
		Total	
Gulf of Suez		13	12%
Offshore	13		
Land	0		
Mediterranean Sea		13	12%
Offshore	13		
Land	0		
Western Desert		58	55%
Offshore	0		
Land	58		
Sinai		9	9%
Offshore	0		
Land	9		
Eastern Desert		5	5%
Offshore	0		
Land	5		
Delta		7	7%
Offshore	0		
Land	7		
<b>Total</b>		<b>105</b>	<b>100%</b>

**Rigs per Area June 2007**



Source : Egypt Oil & Gas

**Table 3**

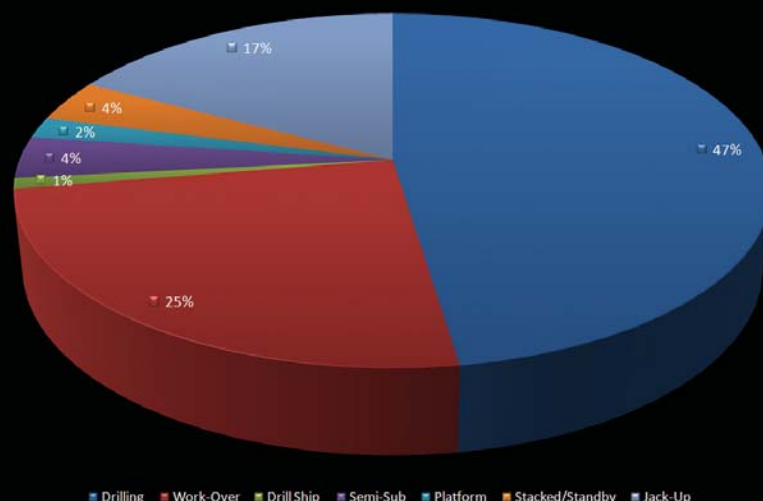
**World Crude Oil Production  
(Including Lease Condensate)  
(Thousand Barrels per Day)**

	Equatorial Guinea	Gabon	India	Indonesia	Iran	Iraq	Kazakhstan	Kuwait	Libya	Malaysia	Mexico	Nigeria
July	365	227	691	1,020	4,035	2,203	<b>1,386</b>	2,550	1,700	<b>602</b>	3,232	2,380
August	365	237	650	1,015	4,035	2,203	<b>1,327</b>	2,550	1,700	<b>599</b>	3,252	2,430
September	365	241	701	1,005	4,035	2,153	<b>1,227</b>	2,550	1,700	<b>614</b>	3,258	2,430
October	365	230	706	985	4,060	2,103	<b>1,359</b>	2,550	1,700	635	3,173	2,530
November	365	223	701	985	4,020	2,003	<b>1,399</b>	2,500	1,650	614	3,163	2,480
December	365	220	705	985	4,020	2,003	<b>1,435</b>	2,450	1,650	610	2,978	2,480
2006 Average	366	237	689	1,019	4,028	1,996	<b>1,313</b>	2,535	1,681	<b>607</b>	3,256	2,440
2007 January	373	240	699	988	4,040	1,753	<b>1,298</b>	2,450	1,680	<b>594</b>	3,143	2,480
February	377	240	712	984	3,900	2,003	<b>1,365</b>	2,420	1,680	<b>590</b>	3,148	2,480
March	381	238	707	969	3,900	2,053	1,405	2,420	1,680	590	3,182	2,275
2007 3-Month Average	377	239	706	980	3,948	1,934	1,355	2,430	1,680	591	3,158	2,409

<sup>1</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991 all production in the Neutral Zone was included in the data for Saudi Arabia. In February 2007, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 510 thousand barrels per day. Revised data are in **bold italic font**.

Source : EIA

**Rigs per Specification June 2007**



**Table 2**

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

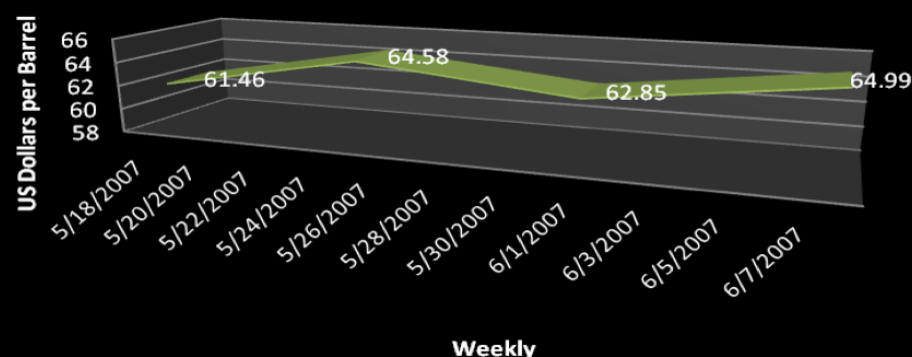
	Algeria	Angola	Argentina	Australia	Azerbaijan	Brazil	Canada	China	Colombia	Denmark	Ecuador	Egypt
July	1,805	<b>1,460</b>	709	490	660	1,725	2,512	3,716	536	344	543	620
August	1,805	<b>1,460</b>	701	470	710	1,703	2,543	3,670	534	348	544	630
September	1,835	<b>1,438</b>	717	500	680	1,733	2,601	3,659	527	260	533	640
October	1,835	<b>1,376</b>	715	510	690	1,762	2,602	3,658	528	353	519	660
November	1,805	<b>1,452</b>	660	470	780	1,766	2,658	3,682	528	350	511	615
December	1,805	<b>1,484</b>	694	473	700	1,787	2,669	3,710	518	327	515	619
2006 Average	1,814	<b>1,413</b>	697	429	640	1,723	2,525	3,686	531	342	536	639
2007 January	1,838	<b>1,584</b>	684	<b>453</b>	815	1,736	2,577	3,658	522	318	514	616
February	1,833	<b>1,600</b>	714	<b>510</b>	822	1,758	2,693	3,739	542	306	507	614
March	1,829	1,640	699	440	879	1,769	2,644	3,685	540	321	507	612
2007 3-Month Average	1,833	1,608	699	466	839	1,754	2,636	3,692	535	315	510	614

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

Source : EIA

**Fig 1**

**Egyptian Suez Blend Price**



Source : Egypt Oil & Gas

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

US Dollar	Euro	Sterling	Yen
5.68	7.66	11.25	4.68

**Stock Market Prices  
(May / June)**

Company	High	Low
Alexandria Mineral Oils (AMOC.CA)	80.83	75.51
Sidi Kerir Petrochemicals (SKPC.CA)	18.70	17.73





Table 4

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

	Norway	Oman	Qatar	Russia	Former U.S.S.R.	Saudi Arabia <sup>1</sup>	Sudan	Syria	United Arab Emirates	United Kingdom		United States <sup>2</sup>
July	2,571	726	855	9,240	---	9,300	370	412	2,702	1,453	E	5,171
August	2,430	727	885	9,330	---	9,300	380	400	2,702	1,202	E	5,155
September	2,338	720	885	9,350	---	9,000	400	400	2,702	1,354	E	5,188
October	2,380	730	885	9,450	---	8,800	470	400	2,702	1,482	E	5,195
November	2,466	724	845	9,320	---	8,800	400	395	2,602	1,504	E	5,149
December	2,508	721	835	9,420	---	8,750	380	395	2,602	1,472	E	5,275
2006 Average	2,491	738	850	9,247	---	9,152	378	406	2,636	1,490	E	5,136
2007 January	2,431	716	835	9,420	---	8,750	399	395	2,613	<b>1,510</b>	E	5,196
February	2,454	718	825	9,460	---	8,600	406	394	2,573	<b>1,654</b>	E	5,147
March	2,391	712	825	9,473	---	8,600	402	393	2,612	1,554	PE	5,227
2007 3-Month Average	2,424	715	828	9,451	---	8,652	402	394	2,600	1,570	PE	5,191

<sup>1</sup> Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991 all production in the Neutral Zone was included in the data for Saudi Arabia. In February 2007, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 510 thousand barrels per day. Data for Saudi Arabia include approximately 150 thousand barrels per day from the Abu Safah field produced on behalf of Bahrain.

<sup>2</sup> U.S. geographic coverage is the 50 states and the District of Columbia. --- = Not applicable. E=Estimated data. PE=Preliminary estimated data. Revised data are in **bold italic font**.

Source : EIA

Table 5

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

	Venezuela	Vietnam	Yemen	Other <sup>1</sup>	World	OPEC-12 <sup>2</sup>	OPEC-11 <sup>2</sup>	Persian Gulf <sup>3</sup>	North Sea <sup>4</sup>
July	2,440	337	355	2,666	<b>74,107</b>	<b>32,450</b>	30,990	21,680	4,383
August	2,490	342	370	2,644	<b>73,838</b>	<b>32,575</b>	31,115	21,710	3,994
September	2,490	362	364	2,624	<b>73,577</b>	<b>32,223</b>	30,785	21,360	3,964
October	2,490	342	351	2,570	<b>73,850</b>	<b>32,016</b>	30,640	21,135	4,225
November	2,490	342	389	2,597	<b>73,403</b>	<b>31,632</b>	30,180	20,805	4,347
December	2,490	332	407	2,605	<b>73,395</b>	<b>31,554</b>	30,070	20,695	4,344
2006 Average	2,511	344	375	2,651	<b>73,546</b>	<b>32,075</b>	30,662	21,232	4,343
2007 January	2,380	332	418	2,603	<b>73,053</b>	<b>31,392</b>	29,808	20,471	<b>4,287</b>
February	2,383	336	358	<b>2,642</b>	<b>73,486</b>	<b>31,281</b>	29,681	20,351	<b>4,435</b>
March	2,445	341	356	2,663	73,358	31,247	29,607	20,440	4,303
2007 3-Month Average	2,403	336	378	2,636	73,293	31,308	29,699	20,423	4,339

<sup>1</sup> Other is a calculated total derived from the difference between "World" and the sum of production in all countries listed in Tables 3, 2, 3, and 4).

<sup>2</sup> OPEC-12: Organization of the Petroleum Exporting Countries: Algeria, Angola, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. OPEC-11 does not include Angola.

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

Source : EIA

Table 6

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

	France	Germany	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
July	1,958	<b>2,589</b>	1,689	1,743	<b>15,287</b>	2,247	5,002	1,891	20,582	<b>3,344</b>	<b>48,352</b>	NA
August	1,875	<b>2,735</b>	1,556	1,756	<b>15,311</b>	2,337	4,850	2,086	21,322	<b>3,487</b>	<b>49,392</b>	NA
September	2,005	<b>2,911</b>	1,727	1,790	<b>15,914</b>	2,216	4,562	2,093	20,472	<b>3,341</b>	<b>48,598</b>	NA
October	2,055	<b>2,782</b>	1,667	1,759	<b>15,829</b>	2,176	4,799	2,044	20,757	<b>3,365</b>	<b>48,970</b>	NA
November	1,924	<b>2,766</b>	1,743	1,842	<b>15,797</b>	2,350	5,277	2,346	20,544	<b>3,499</b>	<b>49,813</b>	NA
December	1,901	<b>2,545</b>	1,663	<b>1,797</b>	<b>15,079</b>	<b>2,266</b>	5,976	2,521	20,697	<b>3,545</b>	<b>50,083</b>	NA
2006 Average	1,972	<b>2,653</b>	1,709	<b>1,816</b>	<b>15,489</b>	<b>2,220</b>	5,222	2,157	20,588	<b>3,445</b>	<b>49,121</b>	<b>84,562</b>
2007 January	2,044	2,328	1,592	1,813	<b>15,017</b>	<b>2,300</b>	5,274	2,375	20,559	<b>3,393</b>	<b>48,917</b>	NA
February	1,966	2,395	1,731	1,772	15,272	2,457	5,633	2,369	21,271	3,454	50,456	NA
2007 3-Month Average	2,007	2,360	1,658	1,793	15,138	2,374	5,444	2,372	20,897	3,422	49,647	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

Table 7

**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-12 <sup>4</sup>	OPEC-11 <sup>4</sup>	World
July	315	659	449	<b>1,439</b>	420	---		1,755	<b>2,269</b>	<b>2,679</b>	<b>3,016</b>	<b>2,992</b>	7,801
August	315	691	445	<b>1,439</b>	420	---		1,726	<b>2,269</b>	<b>2,679</b>	<b>3,016</b>	<b>2,992</b>	7,762
September	320	706	427	<b>1,439</b>	390	---		1,781	<b>2,269</b>	<b>2,684</b>	<b>3,021</b>	<b>2,997</b>	7,753
October	320	673	405	<b>1,439</b>	410	---		1,773	<b>2,269</b>	<b>2,694</b>	<b>3,031</b>	<b>3,007</b>	7,809
November	330	683	383	<b>1,439</b>	391	---		1,769	<b>2,269</b>	<b>2,704</b>	<b>3,041</b>	<b>3,017</b>	7,801
December	328	668	396	<b>1,439</b>	396	---		1,734	<b>2,269</b>	<b>2,707</b>	<b>3,039</b>	<b>3,015</b>	7,814
2006 Average	310	685	427	<b>1,439</b>	408	---		1,735	<b>2,268</b>	<b>2,668</b>	<b>3,001</b>	<b>2,978</b>	7,764
2007 January	341	662	411	<b>1,439</b>	396	---	E	1,670	<b>2,305</b>	<b>2,763</b>	<b>3,088</b>	<b>3,064</b>	7,817
February	340	703	405	<b>1,439</b>	397	---	E	<b>1,706</b>	<b>2,316</b>	<b>2,771</b>	<b>3,090</b>	<b>3,066</b>	7,902
March	340	679	416	<b>1,439</b>	398	---	PE	1,747	2,314	2,769	3,089	3,065	7,876
2007 3-Month Average	340	681	411	<b>1,439</b>	397	---	PE	1,708	2,311	2,768	3,089	3,065	7,864

<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.

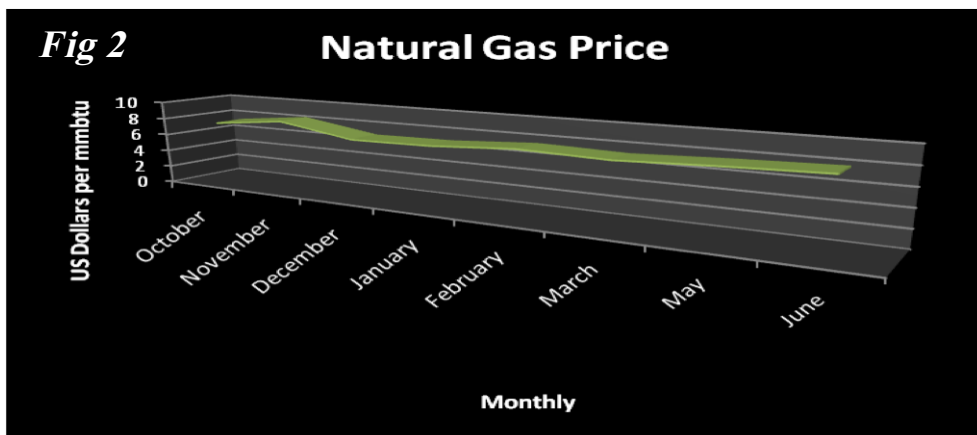
<sup>3</sup> OAPEC: Organization of Arab Petroleum Exporting Countries: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and the United Arab Emirates.

<sup>4</sup> OPEC-12: Organization of the Petroleum Exporting Countries: Algeria, Angola, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. OPEC-11 does not include Angola.

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

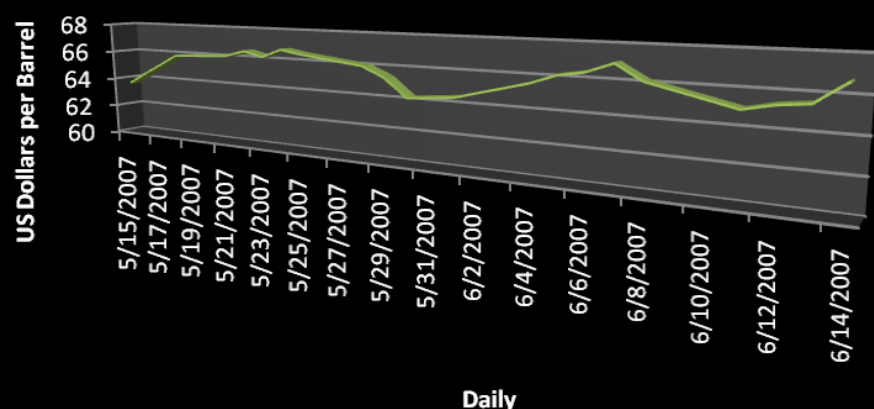
Revised data are in **bold italic font**.

Source : EIA

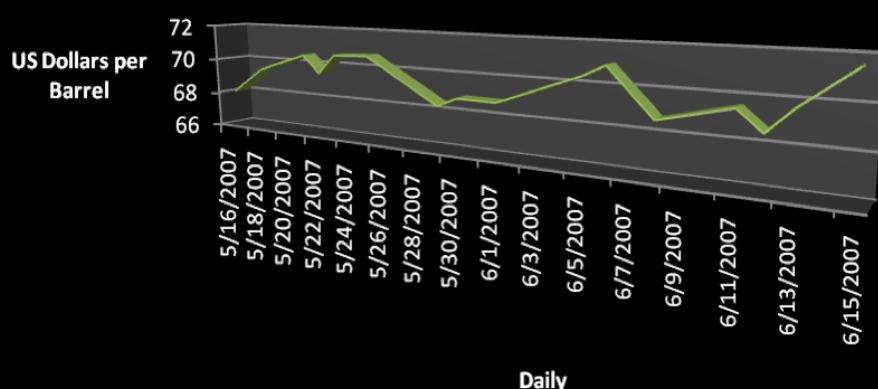


Source : Egypt Oil &amp; Gas



**Fig 3 OPEC Basket Price June/July**

Source : Egypt Oil &amp; Gas

**Fig 4 IPE Brent Price June/July**

Source : Egypt Oil &amp; Gas

**Table 8 International Stock Prices Mid-June-Mid-July**

International Stock	High	Low
Schlumberger (SLB) NYSE (US Dollars)	84.60	75.51
Halliburton (HAL) NYSE (US Dollars)	36.71	34.02
Exxon Mobil (XOM) NYSE (US Dollars)	85.94	81.13
Atwood Oceanics (ATW) NYSE (US Dollars)	67.78	61.21
Weatherford (WFT) NYSE (US Dollars)	57.78	52.50
Shell (RDSA) NYSE (US Dollars)	79.14	70.24
Apache (APA) NYSE (US Dollars)	87.30	73.60
Baker Hughes (BHI) NYSE (US Dollars)	88.01	79.86
BJ (BJS) NYSE (US Dollars)	30.78	28.36
Lufkin (LUFK) NYSE (US Dollars)	66.35	61.83
Transocean (RIG) NYSE (US Dollars)	102.84	90.21
Transglobe (TGA) NYSE (US Dollars)	4.06	3.81
GlobalSantafe (GSF) NYSE (US Dollars)	71.67	66.21
BP (BP.) LSE Pence Sterling	593	558.50
BG (BG.) LSE Pence Sterling	811	757
Dana Gas (DANA) ADMS US Dollars	1.88	1.39
Caltex (CTX) ASX Australian Dollars	27.49	25.15
RWE DWA (RWE AG ST) Deutsche-Borse Euros	84.24	78.85
Lukoil (LKOH) RTS (US Dollars)	78.50	71.70

Source : Egypt Oil &amp; Gas

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## The month in photos



The International Society of Petroleum Engineers (SPE), Egypt's branch in cooperation with the Egyptian Petroleum Association in coordination with Schlumberger International Co. organized a two-day workshop entitled "The Mediterranean Deep Water Technology Transfer," which was inaugurated by Eng. Sameh Fahmy, Minister of Petroleum.



Dana Gas signed a Memorandum of Understanding (MoU) for strategic cooperation and co-investment with the Arab Petroleum Investments Corporation (APICORP), which symbolizes "an ideal example of Public-Sector/Private-Sector Partnership (PPP)" that is being advocated globally as an important model for advancing economic growth.

From Right: Hamid Dhiya Jafar, Executive Chairman of Dana Gas, and Ahmad Al-Nuaimi, Chief Executive Officer and General Manager of APICORP during signing the Memorandum of Understanding (MoU) in Sharjah, United Arab Emirates.



Oil prices steadied above \$70 a barrel due to a powerful cyclone that hit Oman and briefly disrupted exports from the Gulf energy producer.

Cyclone Gonu, the worst to hit Oman in 30

years, stranded thousands of people from Masirah Island in the Arabian Sea and temporarily closed a terminal shipping 650,000 barrels a day of crude.

Supplies from top oil exporter Saudi Arabia, Oman's western neighbor, were disturbed as a result of this environmental phenomenon.

## SPE announces the Paper Contest winners

THE Society of Petroleum Engineers (SPE) Egypt revealed during its monthly seminar the names of winners for its Paper Contest for 2007, sponsored by Schlumberger. A technical paper followed by an oral presentation was the requirement of this competition, which resulted in the following winners:

**First Prize:** Mohamed Gaber and Mamdouh Farouk, Burullus Gas Company for his paper "Simian / Sapphire Development Controls Platform Case Study"

**Second Prize:** K.M. Mowafi, M.M. Shehata, Khaldia Petroleum Company for the paper "Enhancing Productivity of Moderate to Low Permeability"

**Third Prize:** Mahmoud Tymore, Moataz Dawood, Burullus Gas Company for the paper "Simian / Sapphire Development Subsea System Design and Installation Aspects"

SPE has also chosen three candidates' papers to receive an honorary acknowledgement:

- Online and Daily Data Monitoring and Reporting System (OLDDMARS), by Alaa AbdelSalam and Mohamed Baydoun, Rashid Petroleum Company Unconventional Reservoir Modeling Approach of a Gas Field in the Nile Delta, by Osama Hegazy and Yasser Hazem, Schlumberger
- Inflow Performance Relationship Correlation for Solution Gas Drive Reservoirs Using Non-Parametric Regression Technique, by Mahmoud Abdel Salam, Ganope Petroleum Company

These announcements came after a presentation given by Rick C Savoie, Sales Manager of Reda Free Zone - Egypt, entitled "Production Enhancement Technique for ESP producing wells." Savoie discussed the means to meet the continuous increasing need for oil, referring to the artificial lift as the solution nowadays not only to Brownfield development plans, but also to naturally lifted oil wells that have the potential for increasing their production.

Focusing on the ESP, Savoie highlighted that it is a complete methodology through which the operator is allowed to monitor and study the down-hole unit performance, the well performance and reservoir behavior.

## Exercise Ra Atum VI—September 2007—Port Said, Egypt—Mediterranean Sea

The Exercise Ra Atum VI, to be held in Port Said, Egypt, has been postponed to September 2007. The exercise is organized by PESCo, in association with the Egyptian General Petroleum Corporation (EGPC) and the Egyptian Environmental Affairs Agency (EEAA). The exercise aims to reflect a realistic response to a major oil pollution incident by conducting a "Major oil spill response exercise" in the vicinity of Port Said.

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