**Interview** 

With Mohamed Shoeib before leaving his post as EGAS Chairman

# **Bottomless Potential:**

**Venturing into the Depths of the Mediterranean** 

2.22

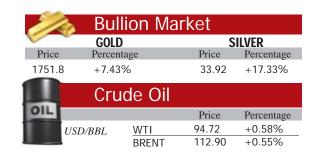


Infocus P.20

The Future of Natural Gas in the Mediterranean

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Toyo and ENPPI Ethylene Plant in Ethydco Complex





**HIGHLIGHT** 

Minsiter of Petroleum appoints new heads in the sector.

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November 2012

-Issue 71-

28 Pages

www.egyptoil-gas.com



**Political Review** 

### The Egyptian Natural Gas New Legal Challenges over the East Mediterranean Gas



Egypt, Israel, Lebanon, Syria, Cyprus and Turkey are expected to explore and exploit oil and gas in the East Mediterranean Sea. They plan to control these huge reserves which may change the world energy map and would have great influences on the economic status of the involved countries.

Mediterranean News

New section

# New Mediterranean Development Well by Rashpetco

Rashid Petroleum Company (Rashpetco) has concluded the drilling of a new developmental well in its concession area in the Mediterranean Sea, as part of its 2012-2013 development plan.



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# Ready..Steady..Revamp!

Do not follow where the path may lead. Go instead where there is no path and leave a trail. Harold R. McAlindon

First comes the passion, then comes the degree and finally you land the job. Managing Editor was never in the cards for me at least not the obvious ones. However thanks to a twist in fate and a certain high school buddy named Ayman Hussein, whom I now have the pleasure of working with, it became possible.

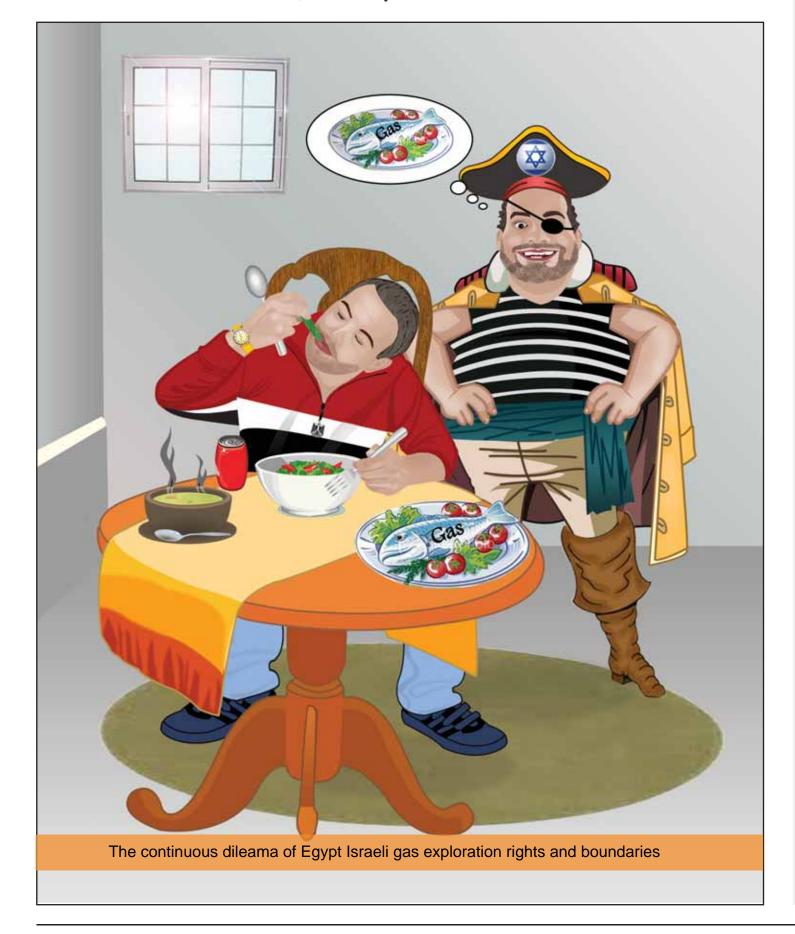
I've only been here a week, but I have to admit joining a magazine at the end of the month sums up the whole journey for me, it's crunch time. Eyes transformed into proofread scanners, if there was a faucet for fingertips they would flow with words dictating what the brain has in store and most of all dedication. The work environment, shall we say

friendly, no family-like. Comfortable to ask and express, patience to listen and share is the equation Egypt Oil & Gas goes by.

The field is dynamic, the information available is endless and the aim is to present the best. Many of us have grown up during a time when news was more of a monologue. Now, thanks to the interactive communication made available by advancing technology, there's been a real shift toward dialogue.

So on behalf of Egypt Oil & Gas I ask you to stay tuned for what is to come, because growing is what we will be doing, and most of all keep on reading. We will however ask you this question soon. Can you feel the difference?

Jermeen El Baroudy Managing Editor





Managing Editor

Jermeen El Baroudy

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With 30 years of experience in petroleum services, SAPESCO provides a myriad of cutting-edge solutions that caters to the growing demands of the industry. Our expansive presence in the MENA region, the Gulf and Kurdistan provides a pivotal hub that ensures an accessible, reliable and timely delivery of an unparalleled quality of services.

Well services Measurement Services Tool services Offshore services

**Industrial Services Exploration Services** 

### **Second Nile Delta Gas Discovery by RWE**

RWE Dea Egypt has announced the the Nile Delta region of Egypt. extension of its North Sidi Ghazy-1x discovery in the Nile Delta, reported in August 2012, by the drilling of the second developmental well, labeled SSG-1-2.

The well was drilled 1.3 km northwest from the discovery, to a total depth of 2,833 meters, expanding on the original discovery.

"The recent successful appraisal of the North and South Sidi Ghazy discoveries together with the North West Khilala Field have confirmed our reserve base and will contribute to the core production during the first phase of the Disouq Development," explained Dirk Warzecha, General Manager of RWE Dea Egypt.

Production from the Disouq project will supply gas to the growing Egyptian energy market. The Disouq concession was awarded to RWE Dea in July 2004. The block covers an onshore area of 5,375 square km within

RWE is a Hamburg-based oil and gas exploration firm that has been operating in the Gulf of Suez for 30 years. It owns a total of 12 onshore and offshore concessions in Egypt.



### **New developmental Well in Western Desert** by Norpetco



Norpetco Petroleum Company has concluded the drilling of a new developmental well in the company's fields in the Western Desert.

Egypt Oil and Gas has learned that the GANNA-3 well was drilled to a total depth of 8,250 feet, using the ECDC-2 rig. Drilling expenditure in the well amounted to \$2.164 million. The well has yet to be added to put on stream.

The company's production rates during the month of September 2012 stood at 576,060 barrels of crude oil and con-

Norpetco is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Sahari Oil Company.

### **Dana Gas Expands its Activities in Egypt**

Dana Gas Petroleum Company has announced a new gas discovery in the Nile Delta, Egypt. The discovery was at West Sama-1 in the West El Qantara

This new field discovery comes after the first successful drilling in the Komombo Concession earlier in the second quarter of the year. The new discovery is nearby to the Sama-1 and Sama-2 dry gas discoveries in the Abu Madi formation. The evaluated in-place resources for the West Sama-1 are between 4 to 6 Billion Cubic Feet (Bcf). The company is preparing a development plan for this discovery to be tied in to the nearby pipeline owned by Dana Gas. The West Sama-1 gas discovery will be tied in to the Company's nearby South El Manzala gas processing plant within a week.

The West Sama-1 well is the first significant dry gas discovery in the Kafr El Sheikh Formation by Dana Gas in 2012 and the twenty third as a result of the aggressive exploration drilling campaign that started in 2007 and will continue throughout 2013.

Mr Rashid Al Jarwan, Dana Gas Executive Director and Acting CEO, said "Our team in Egypt continues to deliver tremendous results. We are delighted that this exploration well has been successful. It builds upon Dana Gas Egypt's outstanding record of discoveries". Dr. Patrick Allman-Ward, Dana Gas Egypt General Manager commented, "The well is an excellent start to 2012 drilling in the Nile Delta. We still have a sizeable portfolio of drillable prospects and our exploration activity will continue throughout the year, as will our development activities."

Dr. Patrick continued: "The discovery at the West Sama-1 well represents a successful Dana Gas strategy of drilling shallow gas discoveries that can quickly help Egypt meet its growing demand for gas. We are delighted that our prospect generation efforts followed by an effective drilling program are continuing to produce positive results, which will boost even further the company's production starting from this year".

Dana Gas is currently the 6th highest gas producer in Egypt, and is among the world's top ten exporters of LNG. In 2007 Dana Gas made Southern (Upper) Egypt's historic first ever commercial oil discovery from its first exploration well drilled in the Komombo Concession. The Company is firmly committed to pursuing further investments, in partnership with the national Egyptian companies.

# **Agiba Completes New Western Desert Well**

Agiba Petroleum Company has completed the drilling of a new developmental well in the company's fields in the western Desert.

Egypt Oil and Gas has learned that the E.AGHAR-14 well, an oil-producing well located in the Bahariya Formation, was drilled using the PDI-147 rig to a depth of 6,500 feet. Agiba invested \$587,000 in its drilling.

The company's production rate of crude oil and condensates reached 1,523,649 barrels in September 2012, while its natural gas production stood at 51,998 barrels of oil equivalent during the same month.

Agiba is a joint-venture company that includes Eni with 28%, Lukoil Overseas with 12%, the International Finance Company (IFC) with 10%, and the Egyptian General petroleum Corporation (EGPC) holding the remain-

### Bapetco Drills a New Developmental Well in the Western Desert

Badr El Din Petroleum Company (Bapetco) has concluded the drilling of 2013 fiscal year.

The NEAG 2 E-2 ST-1 well is an oil-producing well located in the North

East Abu El Gharadiq development lease, Abu Gharadiq Basin. The well was drilled to a depth of 10,040 feet via the NAFTA-1 rig with investments totaling \$4.213 million.

Bapetco's production rates during the month of September 2012 stood at 1,147,190 barrels of crude oil and con-

densates while its natural gas production stood at 1,968,036 barrels of oil equivalent during the same month.

Badr El Din petroleum is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and Royal Dutch Shell.

a new developmental well in its fields in the Western Desert, in consistence with its development plan for the 2012-

**GPC's New Developmental Well** GPC Petroleum Company has concluded the drilling of a new developmental well, in the company's concession area in the

Eastern Desert; in the context of

the its 2012-2013 drilling plan.

Sources revealed that the GPG-1X developmental well, was drilled to a depth of 2,038 feet using the ECDC-6 rig.

The company's production rates during the month of September 2012 stood at 2,261,212 barrels of crude oil and condensates while its natural gas production stood at 254,627 barrels of oil equivalent during the same month.

### **Khalda Concludes Several Drilling Operations**

Khalda Petroleum Company has concluded the drilling of four new developmental wells, and an exploratory one. The drilling operations occurred in the company's fields in the Western Desert as part of its 2012-2013 development plan.

KHALDA-97H ST-1 is an oil-producing developmental well which entailed investments of \$4.733 million. The drilling operation was conducted using the EDC-41 rig to a depth of 10,127 feet. The well has yet to be placed on stream.

The UMB-200 developmental well, located in Umbarka field, Marmarica Basin, was drilled to the depth of 11,400 feet utilizing the ST-2 rig, attracting investments of \$1.720 million.

The W.RZK-91 well, another oil-producing developmental well, was drilled to a depth of 6,827 feet using the EDC-65 rig. Drilling expenditure in the well amounted to \$1.075 million. The well has yet to be put on stream.

The W.RZK-81 developmental well was drilled to a total depth of 6,822 feet via the EDC-65 rig, attracting investments of \$572 million.

Khalda also drilled the NEILOS-S-1X ST-1 exploratory well, located in Northern Egypt basin. Drilling expenditure in the well, which was abandoned as a dry hole, amounted to \$ 2.273 million. The drilling operation was conducted using the EDC-11 rig to a depth of 15,100 feet.

Khalda's production rates during the month of September 2012 stood at 4,288,417 barrels of crude oil and condensates while its natural gas production stood at 4,677,321 barrels of oil equivalent during the same month.

The company is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Apache Corporation.

# **Qarun Intensifies Western Desert Drilling**

A sizeable amount of drilling activity has been undertaken by Qarun Petroleum Company, as it has concluded the drilling of six new developmental wells and an exploratory one in the Western Desert as part of its 2012-2013 developmental plan.

Four developmental wells, labeled HEBA-133, HEBA-243, HEBA-455, and HEBA-249, were drilled by the company in the East Bahariya West development lease.

HEBA-133 was drilled to a total depth of 6,660 feet, via the EDC-17 rig and investments in the operation amounted to \$1.035 million.

HEBA-243 was drilled to a total depth of 6,950 feet using the EDC-63 rig, and investments reached \$950,368.

The well has already been placed on

HEBA-455, is an oil-producing well, attracted investments of \$751,000 It was drilled to a total depth of 6,694 feet, utilizing the EDC-63 rig.

HEBA- was drilled to a depth of 7000 feet, via the EDC-63 rig. The operation's investments reached \$988,261, and the well was put on stream as well.

The company also drilled the HAM-RA NE-19 and HAMRA NE-11 developmental wells, both located in the Abu Gharadiq Basin, Western Desert.

HAMRA NE-19 is an oil-producing well, drilled to a total depth of 5,650 feet via the PD-1 rig. The operation's investments reached \$875,000, and the well has yet to be placed on stream.

HAMRA NE-11 was also drilled utilizing the PD-1 rig, to a depth of 5,900 feet. It attracted investments of \$799,000 and was placed on stream.

Qarun also drilled a new exploratory well labeled FAGR-1X, which showed an initial flow rate of crude oil. It was drilled to a total depth of 8,743 feet, utilizing the EDC-49 rig. The operation's investments reached \$1.014 million. The well is still under appraisal.

The company's production rates during the month of September 2012 stood at 1,594, 203 barrels of crude oil and condensates.

Qarun is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Apache Corporation.

### New Oil Discovery in the Gulf of Suez by Kuwait Energy

Kuwait Energy announced a new oil discovery via the Ahmad-2 well, located in the company's Area A license in the Gulf of Suez.

The Ahmad-2 well encountered oil in the Rudeis formation for the first time in the Shukheir North West field and Ahmad area, and initial tests showed a production flow rate of 1,300 barrels of oil per day (bopd). This is the fifth exploration success in the Area A concession, and the 19th discovery in Egypt for Kuwait Energy since 2008.

Sara Akbar, Kuwait Energy's Chief Executive Officer said "We are delighted to announce yet another exploration success at the Area A concession, which follows the discovery of the West Ahmad-1X well earlier this year. Area A is now our largest producing oil asset in Egypt and we look forward to more successes."

The company, operates three oil blocks, Area A, Burg El Arab development lease and the Abu Sennan concession, and has interests in two other non-Company-operated blocks, namely the Mesaha concession and the East Ras Qattara development lease.





# **BP, RWE and EGPC Amend West Mediterranean** and North Alexandria Gas Contracts

British Petroleum (BP), German company RWE and the Egyptian General Petroleum Corporation (EGPC) have recently modified West Mediterranean and North Alexandria gas contracts.

The aim of the amendments is to increase Egyptian gas reserves to reach 5 trillion cubic feet of natural gas and 55 million barrels of condensates. The amendments are also meant to ensure daily production of gas supplies to the domestic market reaches an average of 900 million cubic feet gas per day and 10,000 barrels of condensates by October 2014 and remains on that level for 8 years. In addition, the amendments seek to prompt investments of around \$10 billion.

The two ccontracts (North of Alexandria and West Mediterranean) were issued under Act No. 15 of 1992 and Act No. 5 of 1999, wherein the price of the natural gas bought from the foreign partners was linked to that of the Gulf of Suez. In 2008 the two contracts were modified, raising the maximum price of natural gas to \$ 2.65 per million BTU during the first and second years of production, and \$4.7 per million BTU in the sixth year of production and throughout the duration of the agreement.

The essential modifications include obligating the foreign partners to deliver the produced gas to the EGPC with a price that matches the equation of average prices of Brent crude, Henry Hub, and NBP in Britain, with a minimum price of \$3 per million BTU and maximum price of \$4.1 per million BTU. Moreover, in the case of a crude oil discovery, production will be shared between



the foreign investors and the EGPC with 50% for each, while LPG will be 100% owned by the EGPC. The foreign partners will start produce from 1 July 2014 until 30 September 2014, with an average production of 200 million cubic feet of gas during operating tests. Furthermore, if the foreign partners fail to deliver the entire production, they will pay a fine of 30% reduction in the gas price.

The agreements' changes cope with the recent global variables and the nature of the region. They also designate huge amounts of natural gas to meet the needs of the local market. Moreover, the amendment is the first of its kind, wherein the petroleum sector does not support deep water drilling costs reaching around \$150 to \$180 million. Finally, the modifications achieve an appropriate economic return on the investments of foreign partners, which reached 8.6% instead of 5%.

## **Petroleum Sector New Appointments**

Mineral resources has revealed the names of those newly appointed to head petroleum sector, based on the decision of minister of petroleum Eng. Osama Kamal.

The appointments include: Eng. Sherief Hadara Vice president of the German Company for pumps-Chief Executive of the Egyptian general Petroleum Corporation.

Eng. Ashraf Zaki, Deputy Chairman of the Holding Company for

The Ministry of Petroleum and Natural Gas Operations- Chairman Eng. Mohamed Shouaib, EGAS's of GASCO.

> Eng. Khaled Abdelbadee, Chairman of GASCO- The Ministry of Petroleum gas affairs expert.

> Eng. Ibrahim Qenawy, Ennpi's IT Assistant Chief- EGAS's Vice President for Operations.

> Accountant Mohamed Kadry, EGPC's Executive Vice president for financial and economic affairs-GASCO's Vice President for Financial and Commercial Affairs.

Chairman- Assistant of the Minister of Petroleum and Mineral resources

Dr. Sherif Sousa, Bapetco's Chairman- EGAS's Chairman. Geologist Mahfouz El Bouny, the Ministry of Petroelum's first undersecretary for explorations and conventions- EGAS's Vice President for explorations and conventions.

### Petrodara Drills New Eastern Desert Developmental Well

Petrodara Petroleum Company has concluded the added to the company's overall production. drilling of a new developmental well in its concescontext of its 2012-2013 drilling plan.

The new E.ARTA-36 well was drilled in the Arta East development lease utilizing the ST-7 rig, to the depth of 5,252 feet, at a cost of \$720,305. The well has yet to be

Petrodara's production rates during the month of sion area in the Eastern Desert, which comes in the September 2012 stood at 367,405 barrels of crude oil and condensates.

Petrodara is a joint venture between the Egyptian General Petroleum Company (EGPC) and Dublin Petroleum Company.

### **Petrobel Continues Drilling in Sinai**

Belayim Petroleum Company (Petrobel) has concluded the drilling of a new developmental well in the company's concession area in Sinai, in the context of the its 2012-2013 drilling plan.

Sources revealed that the 11358-A- developmental well was drilled to a depth of 9,360 feet using the ST-11 rig. The operation's investments amounted to \$3.113 million and the well was placed on stream.

Petrobel's production rates during the month of September 2012 stood at 3,597,909 barrels of crude oil and condensates while its natural gas production stood at 8,608,914 barrels of oil equivalent during the

The company is a joint venture between the Egyptian General Petroleum Corporation and Italian com-

# **Choice Words**



The Mediterranean sea accounts for 67% of the total Egyptian gas discoveries. 13 exploratory wells were drilled in the Mediterranean during this year; with a production average of 6 billion cubic feet of sold gas per day

Eng. Mohamed Shouaib, Chairman of EGAS to Alyoum-7 Electronic Gateway



The concurrent domestic demand along with the increasing international prices; play an important role in intensifying energy subsidies, reaching about 114 billion Egyptian pounds, compared with 90 billion pounds in the previous year, which means that the rate of increase is almost 27%"

Dr. Hisham Qandil, the Egyptian Prime Minister to Al-Ahram newspaper.



Egypt has suspended gas exports to Spain and Jordan in light of a rise in domestic demand.

Eng. Osama Kamal, Minister of Petroleum and Mineral **Resources to AlWafd Electronic Gateway** 



The suspension of gas exports didn't displease foreign companies, since they fully comprehend the current Egyptian circumstances

99

Eng. Khaled Abd el Badee, GASCO's Chairman to the Live Information Electronic Gateway



The company is currently finishing the procedures of five agreements in the Eastern and Western deserts and in the Gulf of Suez; with investments amounting to 22 \$68 million

Eng. Sherif Ismail, Chairman of Ganope to Alyoum-7 Electronic Gateway

# Petrosannan's Production Indicators Show Relative Rise

Monthly production of crude oil and condensates for Petrosannan has witnessed a relative increase over the six-month period from April 2012 to September 2012.

During the designated analysis period, production was at its lowest point in the earliest month of April, at 38,851 barrels of crude oil and condensates. It then rose intermittently to reach its highest point in the analysis period in the latest month of September 2012, hitting 131,317 barrels.

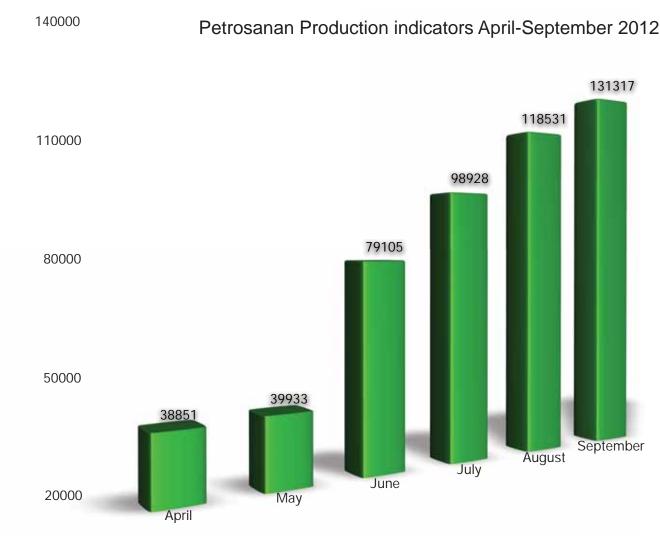
The company's production numbers during the specified period averaged 84,444 barrels per month.

In recent drilling activity, Petrosannan has concluded the drilling of a new developmental well in its concession area in the Western Desert, which comes in the context of its 2011-2012 drilling plan.

The new HG 34/8 was drilled using the ST-11 rig to the depth of 11,484 feet, at a cost of \$3.613 million. The well has already been placed on stream.

The company's production rates during the month of September 2012 stood at 131,317 barrels of crude oil and condensates.

Petrosannan is a joint venture between the Egyptian General Petroleum Company (EGPC) and Ukrainian company Naftogaz



Barrels of Crude Oil and Condensates

# **Steady Production by Petroamir**

Petroamir Petroleum Company has witnessed steady production numbers for the six-month period from April 2012 to September 2012.

company's crude oil and condensates production indicators reveals an average of 296,564 barrels per period.

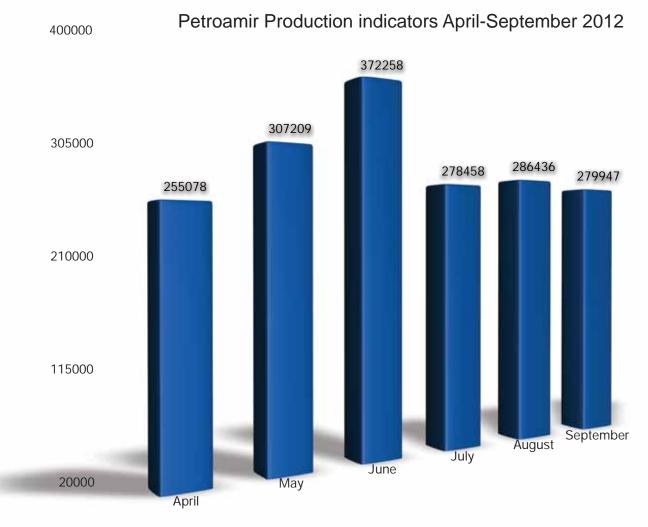
achieved during the analysis period was 372,258 barrels, produced in June, while its lowest production number was witnessed in the month of April, in which 255,078 barrels were produced.

In recent drilling activity, Petroamir has concluded the drilling of a new developmental well in its fields in the Eastern Desert, which comes in the context of the company's 2011-2012 drilling plan.

Egypt Oil and Gas has learned that the ALAMIR SE-12 ST-1 well was drilled in the Al-Amir Southeast field, Gulf of Suez Basin, to a total depth of 10,300 feet An assessment of the using the ST-9 rig. Drilling expenditure in the well amounted to \$5.817 mil-

The company's producmonth during the selected tion rates during the month of September 2012 stood at The highest production 279,947 barrels of crude oil and condensates.

Petroamir is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Greek petroleum company Vegas.



Barrels of Crude Oil and Condensates



### Ministry of Petroleum & Mineral Resources The Egyptian Natural Gas Holding Company (EGAS)



Complying with the strategy of Ministry of Petroleum to satisfy the Local Market demand for natural gas and minimize the use of liquid fuels (Gas oil, Fuel oil and LPG),

# The Egyptian Natural Gas Holding Company (EGAS) announces its intention to:

Issue approvals to qualified Egyptian or international companies to import Liquefied Natural Gas (LNG), establish a regasification terminal facility and market the imported gas to local consumers. Priority for issuing the approvals will be given to the earliest First Delivery Date (FDD), starting from May 2013. Selection of interested companies shall be in accordance with evaluation criteria, regulations and commercial basis set forth in the Terms and Conditions package that will be issued by (EGAS).

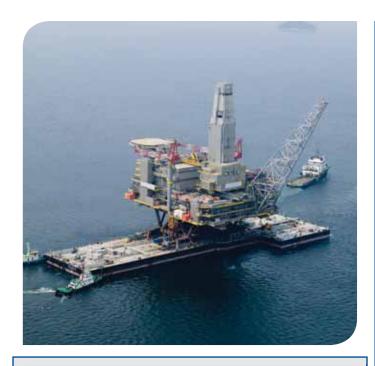
### Scope of work:

- 1. Import natural gas in the form of (LNG)
- Enter into service agreements to utilize one of the Egyptian ports along the Mediterranean or Red Sea coasts for establishment/rental of a marine jetty/ buoy mooring system.
- 3. Establishment of an LNG Floating Storage and Regasification Unit (FSRU)
- 4. Construction of all necessary facilities, equipment and pipelines to tie-in to the Egyptian National Natural Gas Grid (ENNGG).
- Marketing and selling the imported gas locally to consumers through the ENNGG in return for a transportation (and losses) fee in USD per Million British Thermal Unit (MMBTU).

Interested companies are required to contact EGAS with a formal request including expected FDD and previous experience before 22/11/2012. Accordingly, they will be invited to submit their technical and commercial offers including necessary marketing studies.

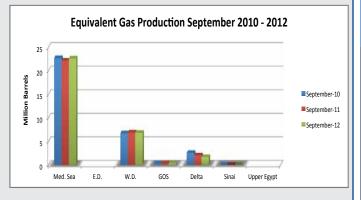
Formal requests to be sent by registered mail to the attention of:
Vice Chairman for Planning and Gas Projects-EGAS
85 EL Nasr Road, 1st District, Nasr City, Cairo, Egypt.
P.O. Box: 8064 Nasr City 11371

# **Mediterranean News**



# **Mediterranean Statistics**

Production							
Oil							
Barrel							
September-10	September-11	September-12					
N/A	N/A	N/A					
Condensate							
Barrel							
September-10	September-11	September-12					
1411821	1388383	1115749					
Equivalent Gas							
	Barrel						
September-10	September-11	September-12					
22648393	22128750	22574464					
Liquefied Gas							
Barrel							
September-10	September-11	September-12					
349489	387834	339575					



#### Mediterranean Rig Count 2012

<u> </u>					
Total	Percentage of Total Rigs				
8	8 %				

### New Mediterranean Development Well by Rashpetco

Rashid Petroleum Company (Rashpetco) has concluded the drilling of a new developmental well in its concession area in the Mediterranean Sea, as part of its 2012-2013 development plan.

Egypt Oil and Gas has learned that SAFRON-DLB, an oil-producing well, was drilled using the AMIRANTE rig to the depth of 6,180 feet. Rashpetco invested \$31 million in the drilling operation, and the well was placed on stream.

The company's production rates during the month of September 2012 stood at 7,755 barrels of crude oil and condensates while its natural gas production stood at 1,860,893 barrels of oil equivalent during the same month.

Rashpetco is a joint venture company that includes the General Petroleum Corporation (EGPC) with 50%, British Gas with 40% and Edison with 10%.

# **Petrobel Plugs Mediterranean Well**

Belayim Petroleum Company (Petrobel) has concluded the drilling of a new exploratory well in the company's fields in the Mediterranean Sea, in the context of its 2012-2013 drilling plan.

Sources revealed that Petrobel drilled the BARBO-NI NW-1 exploratory well to a depth of 6,890 feet using the AL QAHR2 rig. Drilling expenditure in the well, which was abandoned as a dry hole, amounted to \$11.606 million.

Petrobel's production rates during the month of September 2012 stood at 3,597,909 barrels of crude oil and condensates, while its natural gas production stood at 8,608,914 barrels of oil equivalent during the same month.

The company is a joint venture between the Egyptian General Petroleum Corporation and Italian com-



# **BG Mediterranean Exploratory Well Hits Dry Hole**

British Gas has concluded the drilling of a new exploratory well in the company's concession area in the Mediterranean Sea, in the context of the its 2012-2013 drilling plan.

The company drilled the HARMATAN D-1 exploratory well, located in the company's block 8b concession, to a depth of 8,534 feet using the SENUSRET rig. Drilling expenditure in the well, which was abandoned as a dry hole, amounted to \$17.797 million.

BG is Egypt's biggest natural gas producer, accounting for roughly a third of the country's overall gas production.

### **Gujarat Plugs and Abandons Mediterranean Well**

Gujarat State Petroleum Corporation has concluded drilling operations for the N.HAPY-6X exploratory well, which was subsequently plugged and abandoned.

The well was drilled in the company's concession in the Mediterranean Sea as part of the company's drilling plan for the 2012-2013 fiscal year, and was temporarily plugged and abandoned after encountering modest amounts of oil.

N.HAPY-6X was drilled to a depth of 4,511 feet via the N.P.RMNO rig, attracting \$22.240 million in drilling investments.

Gujarat is an Indian state-owned oil company with

operations in both the upstream and downstream segments of the global petroleum industry. It operates in India as well as Egypt, Yemen, Indonesia, and Aus-



# Mediterranean Fact

There were two wells drilled labeled Balteem Bahary-1 and Ras el Behar-1, however they were both abandoned as dry holes. In 1969, Philips Company discovered the first offshore oil field in

Abu Qir bay located North East of Alexandria. The company was not allowed to use the produced gas. Then, the field was developed by the Egyptian General Petroleum Corporation.

In 1977, ElTemsah field was discovered in the Mediterranean Sea by Mobil Company, however the company abandoned it. In 1978 Petro gas company was founded; then Petrobel company was established as a joint venture between the Egyptian

General Petroleum Corporation and the Egyptian International Oil Company "IEOC". During the period from 1970 to 1980; there were 9 wells drilled in the Mediterranean Sea.



# **Africa News**

# Galp and ENH Reach Agreement on Mozambique's Rovuma Basin

Portuguese company Galp Energia and Mozambique's publicly owned National Hydrocarbons Company (ENH) have signed an agreement for technical, operational and financial cooperation, seeking joint exploitation of natural gas in the Rovuma basin in Mozambique.

According to a press release issued by Galp Energia, the purpose of this agreement is to formalize and deepen cooperation between the two companies in managing their holdings in the offshore blocks Areas 1 and 4 of the Rovuma Basin, and to promote the training of Mozambican professionals in the field of hydrocarbons.

Galp Energia believes the agreement will lead to increased activity for both companies in the Rovuma

The agreement also covers the assessment and implementation of financing options, cooperation in the marketing and trading of natural gas, assessment of industrial development options, and optimizing costs and investments. Also included under the agreement are geological and engineering studies, as well as studies on developing hydrocarbon production, infrastructures, and logistics.

Furthermore, the agreement seeks to make room for cooperation in joint analysis and assessment of other investment opportunities that will help strengthen the sustainable presence of the two companies in gas exploration and production.

Currently, Galp Energia holds a 10 per cent stake in Area 4 of the Rovuma Basin, while ENH has holdings in all the hydrocarbon exploration blocks in the Rovuma Basin. It holds a 10 percent interest in Area, and a 15 per cent interest in Area 1.



### New Oil and Gas Discovery Offshore Cameroon by **Addax Petroleum**

Addax Petroleum has made a discovery on the Iroko Block offshore Cameroon in the Rio Del Rey Basin. The discovery was made with the drilling of the Padouk-1X exploration well, which hit both oil and

The well has logged 38.6 meters TVD net oil and 65.1 meters TVD net gas in six sands. Provisional contingent resources are 20 mmbbl of oil and 200 Bcf of gas from these reservoir layers.

Drilling commenced on the 10th of July and reached a total depth of 2,616 meters. The well was temporarily suspended on September 7, but a re-entry is possible and will be considered during the full development study already ongoing for Padouk-1X. More tests will be conducted and additional work at the prospect is needed to determine the extent and commercial viability of the discovery.

The company stated "Addax Petroleum and SNH remain focused on contributing to Cameroon's hydrocarbon resource and are pleased that the Padouk-1X discovery has added to this effort which supports the strategy of our joint efforts to stop the decline in production experienced in the mature assets of Mokoko Abana and to achieve long term increase in production by launching an important program of production optimization for existing assets but also an ambitious program of Exploration and Appraisal."

# **Chariot Buys Interest Offshore Morrocco**

Chariot Oil & Gas has announced that its wholly owned subsidiary, Chariot Oil & Gas Investments (Morocco), has entered into an agreement with Maghreb Petroleum Exploration (MPE) whereby MPE will transfer its 75% ownership and operational interests in two of its offshore licenses, Loukos and Casablanca/Safi, to Chariot. In exchange, Chariot will take on the work commitments and obligations of the initial exploration phase for each license. The transfer remains subject to the approval of the Moroccan authorities, and is currently under evaluation.

On approval, Chariot will hold a 75% equity interest in the Loukos and Casablanca/Safi exploration permits with the Office National des Hydrocarbures et des Mines (ONHYM) holding the other 25%.

The Loukos license covers 1,925km2, and extends from the coast to some 50km offshore with water depths between 5m and 110m. The Casablanca/Safi license is 3,500km2 in size and is similarly situated to Loukos, with water depths between 5m and 165m. Following approval, Chariot will be required to reprocess 835km of 2D seismic data within the Loukos license and 1,200km

of 2D seismic data within the Casablanca/Safi license, which makes for a total of 2,035km within a six month exploration period. Once complete, Chariot will have the option to move forward into further exploration phases which would involve the acquisition of 3D seismic data and the subsequent undertaking of exploration drilling activities.

It is Chariot's intention to apply modern exploration techniques to the results of previous exploration work carried out in these areas, with the aim of identifying substantial potential.

Paul Welch, CEO of Chariot, said "In line with our strategy, Chariot has continued to seek out underexplored, highly prospective opportunities with the intention of maturing them into drillable oil prospects. The Loukos and Casablanca areas have been of interest to Chariot for some time and we are pleased to have these additional assets, which we consider to hold significant potential, as part of our broader West African portfolio. We look forward to evaluating and developing this valuable acreage alongside our new partner

# EInternational News

### **Dana Gas and Crescent Petroleum Kurdistan Production** Reaches 80,000 bpd on 4th Anniversary

Dana Gas and Crescent Petroleum Company have announced that total production drom their gas operations in the Kurdistan Region of Iraq in the Khor Mor field has reached 80,000 barrels of oil equivalent per day. The announcement coincided with the 4th anniversary of production. Total investment to date is close to \$1 billion and total cumulative petroleum production has exceeded 67 million barrels of oil equivalent so far, making it the largest by the private sector in Iraq's oil and gas sector.

Daily production includes 340 million cubic feet of gas per day and 15,000 barrels per day of condensate liquids, and there are plans for further expansion. In total, over 279 billion cubic feet of gas and 13 million barrels of condensate liquids have been produced by the companies since the start of production in October 2008, with the gas supply to local power stations enabling 1,750 MW of new electricity supply locally.

This has ensured almost continuous power supply for 4 million people in the Kurdistan Region, in contrast to the electricity crisis in other parts of Iraq, and provided \$5.4 billion of savings in fuel costs for the government, with annual savings of \$2.5 billion going forward and major environmental benefits in cutting greenhouse gas emissions. It has also boosted the economic and social development of the entire region.

Mr. Majid Jafar, CEO of Crescent Petroleum and Member of the Dana Gas Board of Directors, said "We are proud to be the largest investors in the Kurdistan Region's oil and gas sector, and the highest petroleum producers since our first production four years ago, which enables electricity supply for millions of Iraqis and billions of dollars of ongoing fuel savings for the government. We are working with the KRG Ministry of Natural Resources on the next phase of development and expansion, to grow our operations and enable further progress and prosperity for the local community."

On the fourth anniversary of continuous production by the partners, Mr. Rashid Al-Jarwan, Executive Director and Acting CEO of Dana Gas, said: "This important milestone has been achieved with the cooperation and support of the Kurdistan Regional Government (KRG), as well as our partners, contractors and local staff. In addition we are working with the KRG to improve and resolve the outstanding receivables, and are very encouraged by the recent announcement on the resumption of payments from the Federal Government."

Dana Gas is the first regional private-sector natural gas company in the Middle East, established with over 300 reputable founder shareholders. Crescent Petroleum is the oldest private exploration and production company in the Middle East, with over 40 years of experience as an international operator in numerous countries.

### **Mexico Hits More Oil in Deep Waters of Gulf**

Petroleos Mexicanos, Mexico's state-owned oil company, or Pemex, announced its second major crude-oil discovery in the deep waters of the Gulf of Mexico, President Felipe Calderon said.

He also added "With the new "Supremo" deposit, Pemex expects to book new oil reserves of up to 125 million barrels, using the broadest measure-(3P) reserves. The Supremo exploratory well is located 250 km east of the Gulf port of Matamoros on the border

with the U.S. and 40 km south of Mexico's maritime border with the U.S."

The well was drilled in 2,900 meters of water and is 1,100 meters below the sea floor, making it one of the deepest wells ever drilled in the Gulf of Mexico, the Mexican president added.

The discovery follows one of light crude unveiled in late August in the Perdido area of the Gulf, from which ment of proven, probable and possible Pemex expects to add between 250 million and 400 million barrels of 3P crude reserves.

### **SAPESCO Expands in the MENA Region**

Sahara Petroleum Services Compa- and Environment. ny S. A. E. (SAPESCO) is currently expanding its operations to encom- Abu Dhabi International Petroleum Expass the MENA region's most vital hibition and Conference, ADIPEC. areas, with special emphasis on Abu Gulf countries' abundance of hydrocarbon resources naturally renders their markets the most competitive in the region, providing a perfect milieu for SAPESCO's unique services to penetrate such aggressive market.

SAPESCO has been a remarkable player in the field of petroleum services for the past 30 years, providing a wide array of services that utilize the most innovative solutions for upstream and downstream operations in tandem with the highest attention to Health Safety

SAPESCO will be participating in the

ADIPEC has been closely linked with Dhabi, Kuwait and Kurdistan. The the growth of the Middle East's oil and gas industry. It is the largest oil and gas event within the region and the largest outside of North America, hosting 4,000 delegates and an exhibition that includes 1,600 exhibitors over 38,000 square meters of space.

SAPESCO Stand 10202 in Hall 10



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# **Downstream**

# \$200 Million Invested in Port Said by Sanmar

Indian company Sanmar TCI has announced its intention to invest an additional \$200 million in the industrial area of Port Said, after the allocation of a new piece of land. It has already started the new extension and the establishment of the necessary machinery.

Osama Saleh, Egypt's Minister of Investment, held talks with Sanmar's chairman, P S Jayaraman, to discuss the company's investment in Egypt and its expansion plans. The minister revealed that the coming period will witness an increase in the economic and investment cooperation between India and Egypt.

In March 2009 the Health and Environment Committee of Egypt's parliament decided to stop Sanmar's expansion plans and to move

Indian company Sanmar TCI has it out of Port Said, following allemounced its intention to invest an additional \$200 million in the insustrial area of Port Said, after the surrounding environment.

However, in 2010 the company concluded the first phase of its Vinyl Chloride Monomer (VCM) and Polyvinyl chloride (PVC) complex in Port Said.

Operations were interrupted by the Egyptian revolution in early 2011, and the company incurred great losses. In March of the same year the company restarted its caustic soda plant in Egypt. Shortly after the revolution, the company launched the second phase of a huge project that consists of doubling the capacity of the already existing PVC line and constructing an ethylene plant, according to

Plastemart.

Sanmar is the biggest Indian investor in Egypt, contributing more than \$1 billion in investments, and is one of the biggest foreign investors in the country's petrochemicals



# North Slope to international markets could cost between \$45 billion and \$65 billion, according to the companies pursuing the "mega-project." The estimate results from joint studies into the feasibility of a liquefied natural gas (LNG) plant to ship gas to

A pipeline and plant that would

ship natural gas from Alaska's

**Giant LNG Project** 

Asia conducted by Alaska's three major oil producers - ExxonMobil and partners BP and ConocoPhillips - and Canadian pipeline operator TransCanada.

The three oil producers agreed in March to work with TransCanada on the project, which seeks to find a market for gas currently stranded in the remote North Slope oil field. The cost estimate includes a liquefaction plant and shipping facilities to serve a fleet of 15 to 20 tanker vessels that would transport the LNG abroad, according to a letter sent to Alaska's governor, Sean Parnell.

The Canadian company said that the amount is in addition to the 1,290-km pipeline and a gashandling plant contained in a 2010 project proposed by Trans-Canada and estimated to cost up

to \$26 billion.

**Alaska's Main Oil Producers Contemplate** 

"Individually, each of these components would represent a world-class project," said the letter to Parnell, which was released by his office. "Combined, they result in a mega-project of unprecedented scale and challenge," it added

TransCanada and Exxon had previously been looking at a proposed \$41 billion overland pipeline project through western Canada to reach US markets, which have been facing a gas glut due to booming production from shale fields. BP said that after being unable to find buyers to the south, the focus shifted to potential LNG exports to Asia. The three big oil companies, in an October 1 report to Parnell, said that an Alaska LNG project would require up to 1.7 million tonnes of steel and 15,000 workers at its peak, and would create 1,000 permanent jobs. It would ship 3 billion to 3.5 billion cubic feet per day (bcfd), and while there is no estimated startup date, the entire process of approval and building could take up to a decade.

# West Bengal Official Inaugurates Refinery

West Bengal Chief Minister Mamata Banerjee has inaugurated the Rs 165 crore edible oil refinery of the JVL Agro Industries Limited - JVL Oil Refinery – at Haldia.

During the inauguration ceremony, Banerjee said, "On behalf of the State, we will provide all aids required for the venture and for extension of more such units to increase the infrastructure. If laborers and farmers work together, it will benefit industrial growth. There must be growth and more industries but not by selling the country."

In addition to being the first venture in the state, the plant is also the first port-based venture of Pan India aimed at reducing expenditure on imports of oil. "With nearness to port, we can unload the vessels directly and do the refining and packaging. We also plan to introduce two more plants in Gujrat and South India by 2014," said Managing Director JVL Agro Industries Ltd, S.N. Jhunjhunwala.

"The finished products of this plant would be sold across 10 states such as West Bengal, Orissa, Assam, Jharkhand, and other North East states while the company with complete range of vegetable oils solution already has a network of over 1,00,000 retail outlets spread over 17 states," he added. The new facility is likely to create close to 1,000 direct and indirect employment opportunities, with 80 per cent being hired from local areas.

# Vestas Acquires Canadian Wind Turbines Totaling 533 MW for 8 Power Plants

Vestas Global wind energy company has secured a 10-year service agreement with International Power Canda which covers 276 wind turbines at 8 power plants across Canada.

The service agreement totals 533 megawatts (MW), made up of 335 MW in existing power plants located in New Brunswick, Ontario and Prince Edward Island and 198 MW set to be completed in 2013 in Ontario.

Martha Wyrsch, President of Vestas-Canadian Wind Technology, Inc said "As a leader in service and maintenance in Canada, we are honoured to continue our partnership with International Power Canada. International Power Canada is a recognized innovator and driver in the Canadian wind market, and we are very proud to work with them."

By the end of this year, Vestas is set to have completed four new wind power plants in Canada which will total 308 MW, and six additional Canadian projects using Vestas turbines will be constructed in 2013.

# **Latin America's Largest Solar Power Plant Under Construction**

One of the leading solar energy companies in the world, Yingli Green Energy, recently announced that the company is supplying 40 MW of photovoltaic modules for a new solar power plant that will be the largest in Latin America when completed.

The solar plant the PV panels are being provided for was developed by Gestamp Solar and Solar pack in collaboration with local companies in Peru. The project is being built in two different locations: 20 MW will be in located Tacna and cover roughly 120 hectares, and the other 20 MW will be located in Moquera and cover around 123 hectares. The project is planned to begin operations towards the end of 2012.Once completed, it will be the largest solar power plant in Latin America. It is projected to generate enough electricity for more than 67,000 homes, and reduce emissions by around of 24,000 tons of CO2 each year.

Mr. Liansheng Miao, Chairman and Chief Executive Of-

ficer of Yingli Green Energy said "We are pleased to achieve this important milestone in Latin America. Peru is one of the most important emerging markets in Latin America given its strong solar energy potential. By supplying modules for this project and by leveraging our sponsorship of the 2014 FIFA World Cup in Brazil, we are paving the way for substantial expansion throughout South America."

Fernando Calisalvo, General Manager of Yingli Green Energy Spain, stated: "We are pleased to cooperate with Gestamp Solar and with Solarpack to complete the largest solar plant in Latin America. This project plays a very important strategic role for our continued success."

"We are very glad to partner with a leading solar brand such as Yingli Solar. This project reinforces our presence in Latin America as one of main pillars of our international expansion, and help us to become one of leading solar companies in the Latin American industry," said Mr. Jorge Barredo, Chief Executive Officer of Gestamp Solar.

# E. ON Building New Hydrogen Plant in Germany

Construction of E.ON's new pilot plant to enable power generated by the wind to be stored in the gas grid as hydrogen is now underway. The plant is being built at Falkenhagen, in north-east Germany.

The plant, described as "power to gas" facility by E.ON, is planned to take excess power generated by wind farms that cannot be fed into the grid and use it to produce hydrogen by electrolysis. This is set to begin in the year 2013.

About 360m3/h of hydrogen can be produced per hour. The hydrogen can then be treated like natural gas and fed into the regional gas grid.

Power-to-gas technology is particularly attractive because of the large storage capacity offered by existing gas infrastructure, says E.ON.

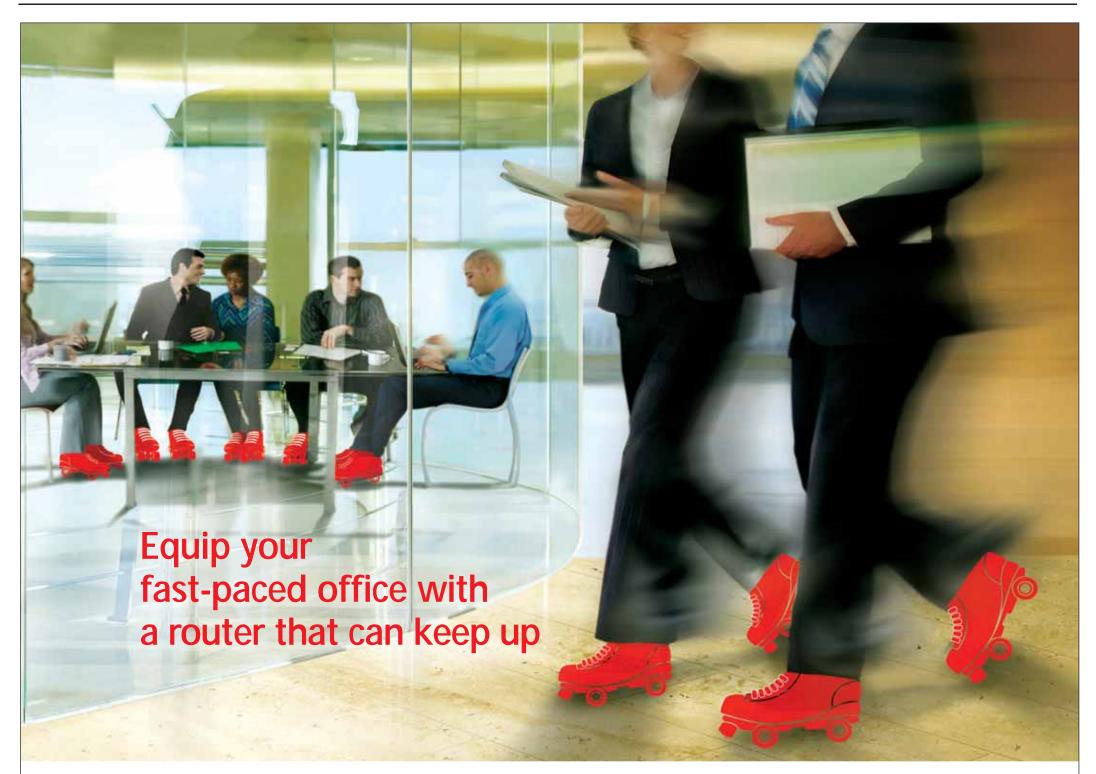
Due to gas regulations, only

a small amount of hydrogen gas can be fed into the gas infrastructure at the moment. To expand the energy storage potential, a possible next step could be to convert hydrogen into synthetic gas by methanation. Theoretically, this would mean that the entire storage capacity of the gas grid could be utilized.

With the Falkenhagen pilot project, E.ON intends to contribute significantly towards improving the efficiency of the entire process - including the integration of wind power and the injection of hydrogen into the gas grid.

Klaus-Dieter Maubach, member of the E.ON AG Board of Management responsible for technology and innovation, said: "If Germany expands the use of renewable energy sources in the coming years as planned, the power supply on very windy or sunny days will exceed demand more and more often, and by a bigger margin. This will increasingly bring the power grid to the limits of its capacity. E.ON is therefore investing in the development of technologies to store large energy volumes. In this respect, power-to-gas is a promising solution for the future energy supply system."





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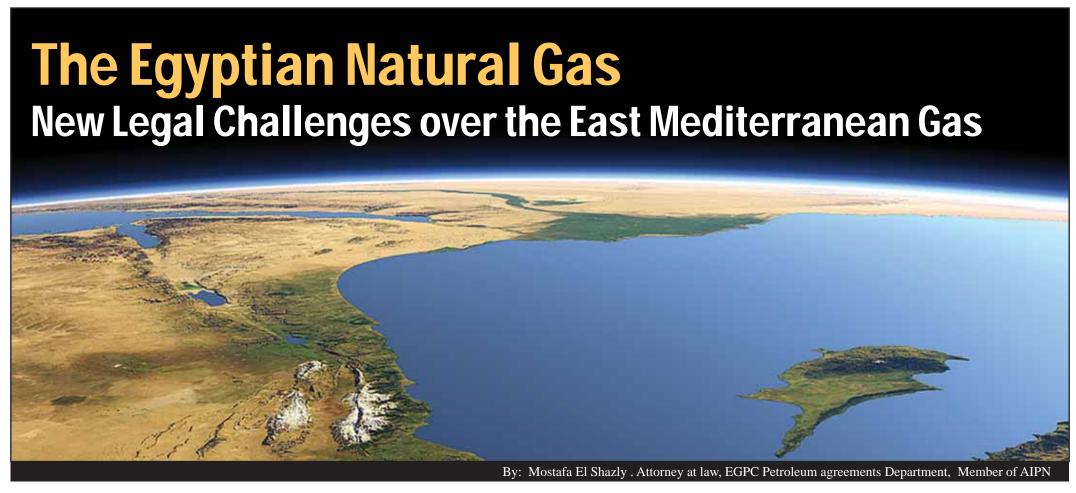
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### **HUAWEI ENTERPRISE A BETTER WAY**







o one can deny that natural gas plays a vital role in all aspects of our life today. This proved apparent especially after the great industrial developments witnessed by the international sector that based solely on non-renewable energy, as a means to satisfying their intensive industrial needs. Although most developed countries exert thier best efforts to find alternatives ways instead of traditional means, they failed to get rid of oil and gas as a main source of Energy. Consequently all countries are aiming at achieving progressive steps to explore petroleum resources throughout its national or foreign petroleum companies. The war today indeed has become a war over oil and gas.

#### New legal Challenges over the East Mediterranean Gas

The United States Geological survey has issued its report pertaining the undiscovered oil and gas in the Nile Delta region. It served as a part of a program aimed at estimating the recoverable oil and gas resources of priority basins around the world. The USGS estimated a mean of 1.7 billion barrels of recoverable oil and a mean of 122 trillion cubic feet of recoverable gas in the Levant Basin Province. The Levant Basin Province encompasses approximately 83,000 square kilometers of the eastern Mediterranean area.

The above mentioned area is bound to the east by the Levant Transform Zone, to the north by the Tartus Fault, to the North by the Eratosthenes Seamount, to the west and south west by Nile Delta Cone Province boundary, and to the south by the limit of compressional structures in Sinai.

This data about the estimated reserves of recoverable oil and gas may lead to a struggle between the adjacent coastal states of this region. Egypt, Israel, Lebanon, Syria, Cyprus and Turkey are expected to explore and exploit oil and gas in the East Mediterranean Sea. They plan to control these huge reserves which may change the world energy map and would have great influences on the economic status of the involved countries.

In 2003 Egypt signed a border delimitation agreement with Cyprus for the exclusive economic zone of both countries. The agreement stated that the Economic water of each country shall extend beyond the median

line where every point is equidistant from the nearest points on the baselines. The breadth of the economic water of each of the two states is measured consequently; hence there are no rights for any third country interference between Egypt and Cyprus.

Despite the redetermination agreement signed between the Egypt and the Cyprus, The latest has signed an agreement for Border determination with Israel In 2010. Israel announced a huge commercial gas discovery, 2500 meter in depth, in the East Mediterranean Area in the Well Leviathan. Despite the advisory results this well is at the same depth as that of the undeveloped Egyptian one drilled by Shell. Furthermore in April 30 2012 Israel announced a new commercial discovery for gas in Shamshon field at 1086 meter south Leviathan.

These discoveries are located in the south of Eratosthenes Seamount 235 km away from Israel and 191 km from the Egyptian coast. This case may raise a matter of interference and vagueness between the Egyptian side and Israel regarding natural resources in gas fields especially where there is no agreement for the determination of the maritime borders.

### Exploitation of natural resources according to the provisions of international law.

Digging deeper into the international relationship between two or more countries, we should bare in mind the provisions of international maritime law that ultimately govern the relationship between the countries with regards to the exploitation of their natural resources in the sea bed.

Furthermore in 1982 The United Nations Convention on the Law of the Sea signed the principal source of the international maritime legislation. This source clearly identifies the relationship of the countries' right to the exploitation of the maritime natural resources which include oil and gas resources. This convention is a codification of international practice and customs in the usufruct of seas and oceans and their exploitation. It is primarily based on equity and fair principles to ensure the safety of maritime environment.

Article 3, 4 of The United Nations Convention on the Law of the Sea stipulates that "Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from base lines determined in accordance with this convention. The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the base line equal to the breadth of the territorial sea".

Part V of the UN convention, Article 55 and subsequent articles, deals with the coastal states rights, authorities and obligations in the exclusive economic zone.

The exclusive economic zone is an area beyond and adjacent to the territorial sea in which the coastal state has sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources. The Exclusive Economic Zone shall not extend beyond 200 nautical miles from the base lines from which the breadth of the territorial sea is measured.

On March 30, 1982 Egypt signed The United Nations Convention on the Law of the Sea. The convention played a major role in the Egyptian internal legal system allowing Egypt to bear all liabilities and benefit from all the rights recognized by the convention.

Although Israel in context can be labeled as an "invader", it does takes full advantage and quick steps in monopolizing and controlling the petroleum reserves in the east Mediterranean zone.. However with no regard to adjacent countries this eventually may have a negative effect on the Egyptian economic rights in two aspects;

First: As long as there is no determination agreement between Egypt and Israel, and no obvious marks of the maritime borders between them thus the situation might be misused by Israel. Eventually leading to a violation of the Egyptian gas reserves throughout the exploration survey and production activities in the Egyptian exclusive economic zone.

Second: due to the existence of natural petroleum, the liquidity of petroleum does not respect man-made boundaries. It is highly mobile and has rightfully been described as a foreign figure emigrating from areas of high-pressure area to low-pressure. A consequence of such abnormality can lead to a dispute where landowners begin tapping and producing into one another's' land. Alternatively, joint development and trans-boundary unitization is designed, inter alia, to preserve the unity

of such deposits while respecting the inherent rights of Egypt.

On October 1974 The United Nations General assembly issued the decree NO 3018 regarding the establishment of an international economic regime based on equity between states and the permanent sovereignty of each state over its natural resources and wealth.

Accordingly, if any state begins exploitation of any petroleum field and extends its structure to any contingent state territory, such state will be held liable for any harmful effects that occur to the contingent state. Such transaction shall be considered an abuse of authorities which is a main principle of the current international law.

In order to protect our rights over the East Mediterranean gas, Egypt is adviced to move rapidly towards mutual cross border unitization agreement alongside any adjacent or contingent countries in case of interference of petroleum structures. Article 74 of the United Nations Convention on the law of the sea stipulates that "The delimitation of the exclusive economic zone between states with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution".

If no agreement can be reached within a reasonable period of time the states concerned shall resort to the procedures of international arbitration.

#### Recommendations

The Egyptian authorities must pay great attention to the situation and eventually form a solid domestic team whom shall study all legal and technical aspects of the maritime border determination with Israel. This determines accurately the Egyptian rights over its Exclusive Economic Zone and avoids any violations occurring directly by Israel. It also prohibits avoid Israel from the solely exploiting extended structure gas fields in the East Mediterranean area.

Furthermore, Egypt must urgently invite petroleum companies to participate in a competitive bid and present incentives for the foreign investor. Such incentives will help develop our gas wealth in these areas. I think this would be the best way to keep our wealth protected and to achieve sustainable development for our country throughout our natural resources.





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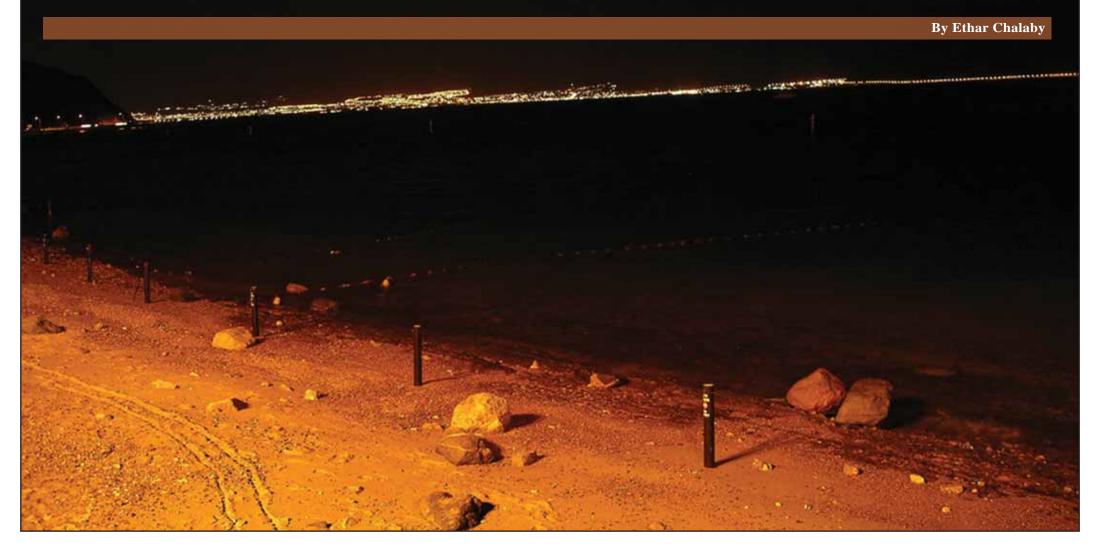
BAKER HUGHES

# **Political Review**

# **EGAS Refutes False Reports**

# Alleging Israeli Exploitation of Egypt's Offshore Resources

Several false reports have been circulating in the Egyptian and Arab-speaking media, suggesting that Israel and Cyprus had taken over three Egyptian natural gas fields in the Mediterranean Sea. The dilemma was instigated by Egyptian geologists Khaled Ouda and Engineer Khalid Al-Shafei, who claimed that Israel took the opportunity of the Egyptian official ineptness and commenced drilling operations within Egyptian territorial waters as early as April 2012.



uda stated that both wells claimed by Israel, Leviathan and Samsun, rest on top of \$100 Billion worth of natural gas reserves. He claimed that while the Leviathan well is located 19 km to the north of Damietta and 235 km off the coast of the Israeli port city of Haifa, the Samsun field is situated 114 km from Damietta and 237 km from the nearest occupied Palestinian coasts. Al-Shafei resorted back to what he described as ancient manuscripts dating back to the second century BC, documenting the scientific discoveries made by the ancient Alexandrian scientist Eratosthenes in the east Mediterranean, where he discovered an underwater mountain housing rare species of crustaceous creatures. He argued that this manuscript constitutes ample evidence that the territory comprising the underwater mountain, which

was named after Eratosthenes; historically belongs to Egypt's territorial waters. Thus Al-Shafei suggests that the Aphrodite natural gas well, falling within the same area, has been unlawfully been exploited by the Cypriots in defiance of the inherent Egyptian rights in controlling the surroundings of the Eratosthenes underwater mountain.

Geol. Moustafa El-Bahr, Vice-Chairman of the Egypt Natural Gas Holding Company (EGAS),

refutes such claims from another perspective, in an interview with Egypt Oil and Gas newspaper. As he explains, while Egypt possesses land and marine borders, the eastern land boundaries are being managed through the current international agreements, and enjoy special boundary-marking arrangements as opposed to marine boundaries. El-Bahr states that the presence of a certain line along the eastern boundaries does not necessitate

Some university professors, not necessarily specialised in the matter have contributed to the emergence of this debate on the surface, and caused a great deal of confusion

99

that this line extends in the same way through the sea. According to the Maritime Law, or in other words, the international regulations governing marine boundaries, the method of setting out marine boundaries completely differ from the means of setting out land borderlines. El-Bahr reiterated that the failure to make this distinction has caused several commentators, including even some with scientific background, to come up with erroneous conclusions. He said, "Some university professors, not necessarily specialised in the matter have contributed to the emergence of this debate on the surface, and caused a great deal of confusion. They might well be specialised in their own fields of study, but not in what others do. As such, they should not have fell into the trap of extensively analysing an issue that hardly represents their field of specialisation. By doing so, they have either presented false assumptions, or they have built conclusions on initially incorrect assumptions".

El-Bahr asserts that Egypt's northern maritime boundaries with Cyprus in particular, were agreed and signed between the Egyptian and the Cypriot governments in 2003, based upon the 1982 UN maritime border setting-out treaty. The maritime boundary lines separating Egyptian and Cypriot national waters were also presented before the People's Assembly, prior to gaining its approval. Henceforth, Al-Bahr condones that the maritime boundary between Egypt and Cyprus enjoys the consent and accord of both countries. In general, maritime boundaries are divided into two main components. First, there are the territorial waters, which fall within 12 miles from the shores. Second, there is the commercial boundary line, which extends up to 400 miles offshore. El-Bahr explained that the latter case is applicable in oceans, where the shoreline to shoreline distance between two neighbouring countries should be at least 800 miles, so as to allow a minimum share of approximately 400 miles per neighbour, while accounting for international waters in between. In the event where the shore to shore distance between two countries is less than 800 lines, the median line is typically taken as the commercial marine borderline. This case is identical with respect to Egypt's maritime northern boundary with Cyprus. El-Bahr states that eight geographical stations or points are located between Egypt and Cyprus in the Mediterranean Sea; one located to the west while seven to the east. From west to east they are numbered from 1 to 8, respectively, such that Point 8 represents the last maritime border spot between Egypt and Cyprus.

He recounts that, "Cyprus and Israel have been engaged in negotiations to define their respective maritime boundaries. The maritime border between Cyprus and Israel is defined by twelve points from north to south, such that the southernmost point, numbered 12, is the same exact Point 8 separating Cyprus from Egypt; both points possess the same coordinates".

Regarding Egypt's maritime boundaries with

Israel, although the borderline is undefined, El-Bahr stated that EGAS usually heads to the responsible authorities prior to letting any auctions or bids within this geographical area:

"We have corresponded with the Armed Forces, enquiring them about the exact locations of our eastern maritime boundaries. The Armed Forces provided us with the coordinates of 5 border checkpoints extending between Rafah and Point 8, which is the same easternmost point of the Egyptian-Cypriot maritime borderline".

El-Bahr states that EGas works with coordinates, taking maritime "admiral maps" as its reference, since they enjoy worldwide documentation and ratification. He rejects the concept of relying upon Google or any other statements made by unreliable sources. Further, by virtue of the nature of EGas operations, the company constantly follows all ongoing works in the Mediterranean Sea, in terms of exploration. El-Bahr denies the existence of something such as company refusing to announce its boundary coordinates. He confirms that EGas does not wait for others to declare their own borderline coordinates; and that the company possesses other sources to acquire the coordinates specifying the boundaries of exploration areas:

"Besides the company that undertakes the exploration works, another company typically owns the drilling rig. The practice of providing the drilling rig coordinates to all ships accessing within close proximity has been a worldwide habit, to avoid maritime accidents".

As such, these coordinates are well known, El-Bahr sees that if someone wants to possess them, he can surely do it. He relates the failure of those raising this dilemma to get the exact maritime boundary coordinates is that they are not specialised in the mining and exploration business.

"They failed to get the coordinates, and subsequently assumed that the other side refuses to reveal them. Their assumptions are explicitly false since we possess all of the field coordinates. When setting out the locations of gas fields, we utilise approved maps and not Google", says El-Bahr.

Consequently, El-Bahr reaffirmed that the company drew the northern maritime boundary, along with the virtual eastern maritime borderline. EGas then gathered the coordinates of all recently explored fields, whether to the east near Israel, or to the north near Cyprus. Such recent explorations included Aphrodite on the Cypriot side, and Leviathan and Samsun in Israel. It was then determined that the latter two fields fall outside of the virtual line on the eastern maritime boundary, whose coordinates were provided by the Armed Forces.

El-Bahr said, "Leviathan field is located 231 km north east of Damietta, 121 km from Haifa, and 180 km from Limassol, whereas the Samsun field is located 176 km north east of Damietta and 132 km from Haifa. Moreover, we found out that the Aphrodite field also falls outside of Egypt's northern boundary limit, which was agreed with the Cypriot



Geol. Mostafa El Bahr, Vice Chairman for Agreements and Exploration, EGAS

side in 2003".

Consequently, in El-Bahr's viewpoint, what is being propagated that Cyprus and Israel are exploiting billions of cubic metres of Egyptian gas in the Mediterranean Sea has little basis, and lacks a considerable amount of accuracy and precision. He considers such claims as deprived of any sort of scientific foundation on which a theory affecting Egyptian national security could be built.

"What happened is that some persons, honestly speaking, love being always under the spotlight. When I am a communication engineer, what do I have to say in exploration of oil and gas? This is completely irrelevant. I imagine a communications engineer discussing cabling, improvement of telecommunication methods, etc. but I can hardly imagine him discussing the exploration of oil and gas", said El-Bahr.

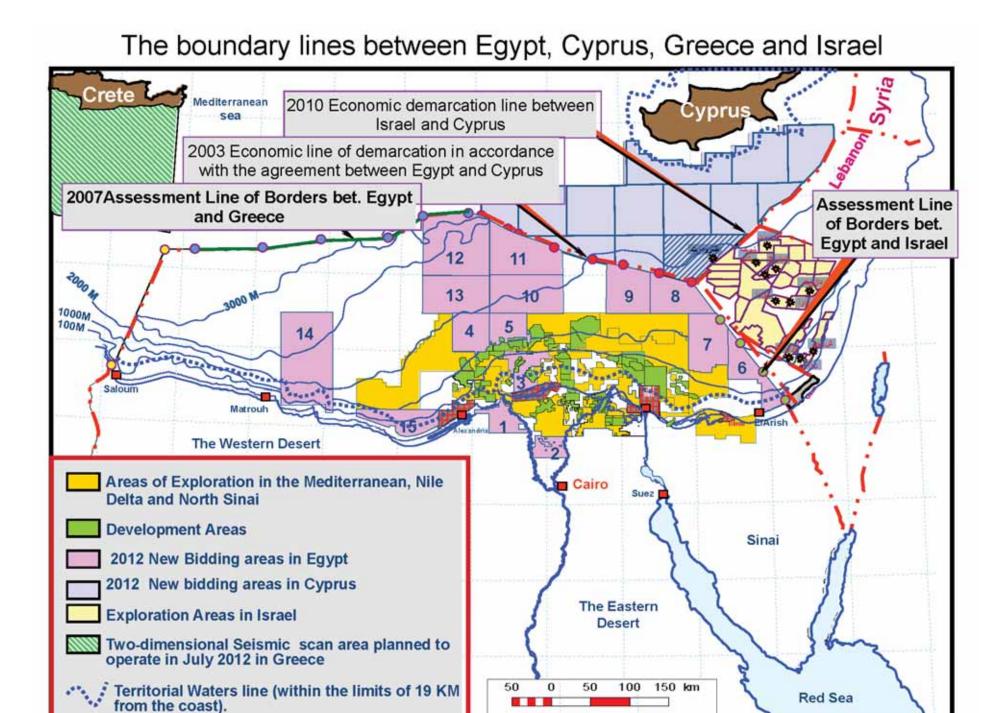
El-Bahr criticized the claims made by Al-Shafei, suggesting that Israeli submarines had intruded into the Nile embouchures and photographed the Nile bed. He reiterates that things like that are the sole responsibility of the Ministry of Defense, and not the responsibility of either Al-Shafei or the Ministry of Petroleum. Nevertheless, El-Bahr mentioned having contacted the Ministry of Defense, who confirmed that, "not even an ant had intruded into Egypt's maritime boundaries". He also states that the fact that Al-Shafei had presented a photograph showing the label "Nile Bank" does not negate the possibility of digitally-manipulated photography.

Commenting on the issue of the Eratosthenes underwater mountain, El-Bahr does not see that the manuscripts dating back to nearly 200 BC, and states that the underwater Eratosthenes Mountain defines Egypt territorial waters. He finds this story as completely irrelevant to the subject issue. He responds by saying that the fact that an Egyptian scientist studied this mountain and discovered rare crustacean creatures taking refuge inside it, does not mean that this mountain is our right.

"If this were to be the case, the entire American continent should have belonged to Spain, which sent the exploration campaign of Christopher Columbus," he said. If there were to be manuscripts suggesting that Egypt's boundaries are after the underwater mountain, and not before it; El-Bahr questions why Al-Shafei does not present it before the official responsible parties. On the personal level,

The Armed Forces provided us with the coordinates of 5 border checkpoints extending between Rafah and Point 8, which is the same easternmost point of the Egyptian-Cypriot maritime borderline

# **Political Review**



El-Bahr admitted having contacted the Bibliotheca Alexandrina and the National House of Manuscripts, asking for any documents addressing the issue of the Eratosthenes Mountain. He even corresponded with Dr. Khalid Ouda, through the head of the National Security Committee of the Shura Council, but never received any response. Only the House of Manuscripts phoned Al-Bahr stating that the term "manuscripts" is irrelevant to 200 BC. El-Bahr reaction came by saying,

"When I want to make a bubble, and attract the spotlights, for any particular reason; I may resort to a fabrication. Unfortunately, a broad part of the current media has now turned out its entire attention towards exciting public opinion without any calculation of the repercussions of such deliberate excitement, which can prove to be extremely costly".

El-Bahr sees that the media tycoon Mr. Yousri Fouda should not have brought the issue of the Israeli drilling rig for the first time ever in his widely viewed programme aired on ON TV, as such issues should be dealt with very sensitively, due to their close link to Egypt's national security. He believes that this issue should have been dealt with more professionally, while avoiding aggressive tone. El-Bahr advises media professionals of the need not to neglect that the other side is watching. He reiterates that revealing at this stage wide slogans uncovering our intentions to counteract either Israel or Cyprus,

they will prepare themselves well for that day. However, if the reaction is being quietly planned to without giving much attention to loud media speech, it might well be a lot more effective in meeting Egyptian national security objectives.

"In my opinion, the current media focuses more on excitement in lieu of the state's interests. There are absolutely no debates about this issue in either Israel or Cyprus", El-Bahr said.

On the question of the currently unofficial borderline between Egyptian and Israeli territorial waters, Al-Bahr states that according to the responsible authorities, the eastern boundary lines with Israel were not drawn in order not to impair the Palestinian rights to possess territorial waters. He recounts having attended a conference last month in London, where an Israeli official directly delivered to him the interest of his government to draw the maritime borderline between Egypt and Israel. His reply was, "there are no mutual maritime borders between both countries; and that such borders only exist between Egypt and Palestine". While there is no officially drawn borderline, there are virtual lines. "When having adopted the scientific method and respected international treaties while setting out this virtual eastern maritime borderline; there should not be an issue apart from the official signature", El-Bahr said. He sees that since both parties actually respect this virtual line, however, postponing the signature is based upon the preservation of Palestinian rights.

Commenting on the geographical location of the gas wells suggested by Dr. Ouda, where he stated that Samsun field is located 114 km offshore, El-Bahr said, "I am sorry to state that this talk can only be said by irresponsible persons, and should not be said by someone from a scientific background, being a false assumption". He affirms having at his disposal during the ONTV programme the British Navy map, on which the entire world depends, and which is only issued by a single source. He confirms having possession of the exact gas well coordinates set out both physically and on the map, only to be faced with the refusal of those in charge of the programme to reveal it before the cameras. "Henceforth, I sadly state that this directed media aims at exciting public opinion, and attracting viewership and ads, without giving much attention to the state interests", El-Bahr

It is to be noted that the Egyptian Natural Gas Holding Company has let an international auction for oil and gas exploration within 15 sectors; 2 land sectors and 13 maritime sectors, which are mostly located within the area enclosed by the eastern and northern maritime boundaries. Once the contract is signed, operations cannot commence without prior consent and approval of EGas, including any technical works, seismic survey, or field studies. EGas then acquires a copy of all information, documentation, and records produced by the companies operating in every sector.



# Ministry of Petroleum & Mineral Resources The Egyptian Natural Gas Holding Company (EGAS)

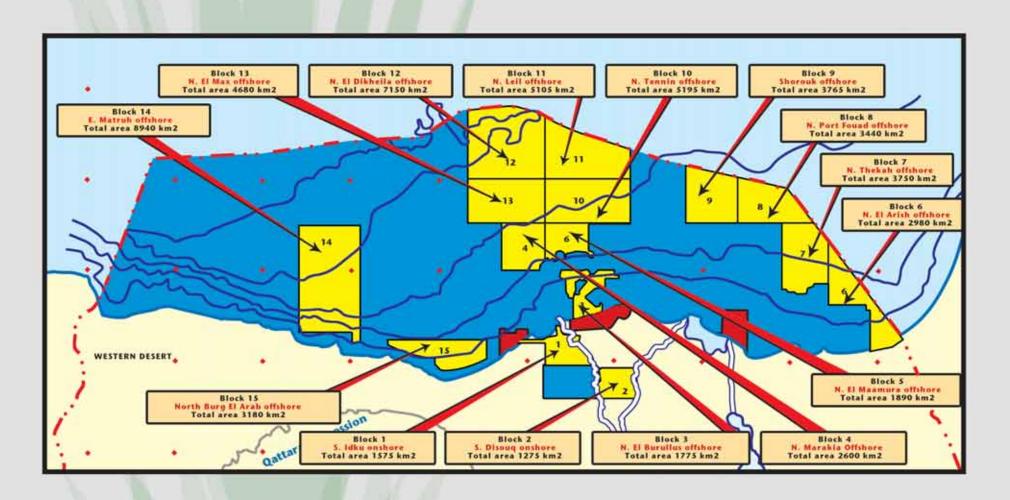


# THE INTERNATIONAL BID ROUND OF 2012 ANNOUNCEMENT FOR EXTENSION

Announces for Extending the closing date of Its International bid round 2012 (15 blocks) for 3 Months.

The offers should be delivered to EGAS premises on Wednesday 13th, February 2013

Before 12:00 – O'clock at noon (Cairo local time)



Data summary, coordinates, procedures, Terms & Conditions and the modified model Agreement can be obtained through EGAS website:

### www.egas.com.eg

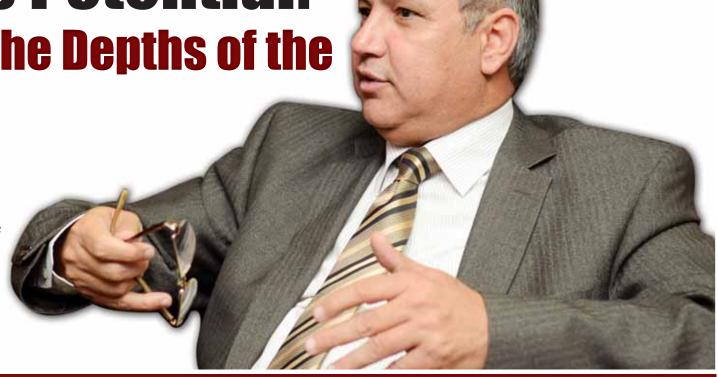
For further information, please contact:
Vice Chairman for Agreements & Exploration
Telephone: +202 24055830-31 Fax: +202 24055832

E-mail: bidround@egas.com.eg

Bottomless Potential: Venturing into the Depths of the

Mediterranean

Egypt Oil & Gas speaks with Mohamed Shoeib before leaving his post as EGAS Chairman about the Mediterranean's gas wealth, the challenges and opportunities facing the company, and the future of natural gas in Egypt.



By EOG

#### How do you see the future of natural gas in Egypt?

Natural gas is one of the cornerstones of Egypt's future. Gas is part of everything, if we use gas for petrochemicals, which is the best use for the gas, it can drive the growth of the entire country's economy directly and boost it to new heights.

#### What is Egypt's current production of natural gas?

Egypt's production of natural gas is at a sustainable level of 6 billion standard cubic feet (scf) per day which is good, especially when you consider that it is challenging to maintain production because we actually have an annual decline which averages 800,000 million scf in daily production, and so we must have new discoveries, developments and projects and tie them into production to make up for the decline.

To tie in and put in production a Mediterranean discovery is difficult and takes time, but most of Egypt's production now comes from the Mediterranean. It is a difficult challenge, but I hope we will be able to maintain this level of production for the next five years.

### Are current production levels meeting local demand?

In my opinion, our production exceeds our local needs of gas, but we are wasting our gas by burning it for electricity with low levels of efficiency. If we make better use of our resources we would be able to meet local demand. If, for example, power generation in Egypt was working at an efficiency of 60%, we would save at least 30% of our natural gas.

### What is the government doing regarding this issue?

We have highlighted the necessity of starting to fully utilize renewable sources of energy; it is very important in particular to begin using solar power generation. The costs of solar power generation have fallen by almost 90% in the last 10 years, and Egypt is one of the best 10 places in the world for electricity generation through solar power, so I think it is very important to develop that. Is local consumption of natural gas expected to increase in the coming period?

It is increasing, and that is actually good, it is a good indicator because it reflects development in the country. What is truly damaging us and depleting our resources is the inefficient usage of natural gas for electricity generation.

Do you see the current and expected production levels in the coming period meeting the demands of a possible wave of economic growth in the country? First of all, we hope that we do indeed witness a wave of economic growth in the coming period. Regarding energy, it is very important for economic growth, and we believe that our current levels of reserves and production will be able to meet the demands of economic growth, but we cannot count on new reserves in the newly offered blocks until the discoveries are actually made. Expectations for our Mediterranean area are high, and I believe the USGS estimated reserves in the area to be almost 223 trillion scaf, and if we find 50% of that amount it will be very good, but we cannot yet determine what will be discovered. We can only verify new reserves and production after the bid round is over and drilling begins

### What's your strategy for EGAS in the coming period?

Regarding upstream, the new bid round will be one of the tools to increase reserves, and we are also issuing a bid round for seismic surveying in all of the currently operational areas in order to acquire new data. My instructions to my people is to have a bid round every 18 months. We issued a bid round in June, and we have a bid round ready to be issued after that by 18 months, and so on. All of the bid rounds will be focused on the Mediterranean and the Delta area. We will pursue any development that is economical for us. We will also be looking at optimizing the utilization of our facilities and those of all of the operating companies, in order to reduce the period it takes to put discoveries in production, and also to maximize the use of existing facilities.

Regarding downstream, one of the main elements of our vision is to maximize added value projects by extracting derivatives such as butane, propane and ethane in order to utilize them in petrochemical projects and to meet Egypt's demand of LPG. Another goal we have set is to extend the gas grid so that it may reach every household feasible. In the last fiscal year, we connected almost 576,000 units, which is a record for Egypt, and the year before, we connected 550,000; the average for the five

years preceding that was 320,000. The plan for the current fiscal year is 750,000, which is a very big number, but we hope we will be able to complete it and aim for a million and more in the coming years.

### Do you believe that the new blocks offered in the most recent bid rounds will add substantial new reserves, particularly deepwater areas?

This is our expectation, particularly in light of the fact that our neighbors have made significant discoveries in the area and in the same formations, in different locations of course. The last bid round EGAS issued, in June 2012, included 15 blocks, 13 of which are in the Mediterranean offshore and 2 of which are onshore in the Nile Delta area. 6 of the offshore blocks are located in deepwater areas, in the North and Northeast of Egypt. A number of the blocks were issued on the boundaries of Egyptian economic waters, and so we hope that we will make discoveries in this area, which will boost Egypt's reserves and production rates of natural gas.

# What results has the new bid round produced so far? Is the participation mainly from newcomers or current operators?

Participation is mainly from current operators, the big companies, because costs of drilling a well in the deepwater Mediterranean may reach \$300 million, and so you have to have big contractors who have experience in deepwater drilling.

Is there possibility of legal disputes or conflicts arising with our neighbors over the blocks located in the border areas?

There are no legal disputes, and I do not see any disputes or conflicts happening in the future.

# Do you see a possibility for unitization with our neighbors in the Mediterranean?

If we end up producing from the same reservoir as one of our neighbors, the standard practice applied in this case internationally is to unitize. If it happens in the Mediterranean, we will unitize with Israel or with others,

We are always ready to welcome our partners to speak economically regarding any discoveries, any production possibilities, any one million BTUs we can produce

it is standard practice. We are not inventing the wheel. Is the current agreements model suitable for deepwater production in your view?

In the new bid round, we have offered new terms and conditions. It is the first time they are offered in Egypt, and we held some meetings to announce, discuss, and clarify the modifications with the investors. We are offering three options for the cost recovery and profit share of the contractor. One is to agree a gas price with us. There is no fixed gas price, it will be agreed in accordance with the discovery in terms of location, size of investment, facilities it will tie into, and other factors. The contractor is also given two other options; the first is to sell to the local market, and the second is to export. This will gives the contractor the advantage of being guaranteed a fair price, because it will create an open market with multiple buyers and sellers. It will also eliminate the problem of late dues because the contractors will be selling by themselves.

#### What mechanism will the contractor use for transportation of the gas if they choose to sell to the local market?

They will be allowed to use the national gas grid, as we stated in the bid round. They will pay a certain fee, and we will determine the fees in accordance with international standards.

### Deepwater exploration and production require highly advanced technologies which entail very high cost recovery. Do you see a problem arising regarding that?

Not really, because it is included in the cost recovery. When they need to use advanced technologies they will use them, and that cost will be included in the investments and the cost recovery. If we have a fair price for the discovered gas, there will be no problem.

The issue of debts to foreign partners is one that plagues the Egyptian petroleum sector, and one that the government is taking steps to amend. What is your take on this issue?

Let us say with complete transparency that this is one **Do you see any challenges facing you in this fiscal year?** of the major problems that we face, but I would like to take this opportunity thank our partners because they have supported us greatly during the last couple of years. We believe that they understand the circumstances of the transitional period and that they will continue to support us, and at the same time we acknowledge that we have to address the problem.

#### Does working under the new government present any new opportunities or challenges?

Our current plan was approved in January, before the new government was appointed. As a sector, we are continuing to do business, we are not inventing much.

#### Does EGAS have a plan for unconventional gas development?

We are always ready to welcome our partners to speak economically regarding any discoveries, any production possibilities, any one million BTUs we can produce, and we are open to discuss all terms and conditions. If the only way is to have new terms and conditions, we will do it.

We are now working on factories and commercial units as well as firms, restaurants, bakeries; we are attempting to tie in everything. This week we will be applying a CNG unit pilot project in one restaurant in order to see how we can utilize CNG in cases where the network is not physically nearby to the activities that require it.

#### Is there anything else you would like to add?

I would like to tell investors that Egypt offers very good opportunities for investments, particularly in oil and gas; Egypt is still one of the best locations in the world for stability and investment. I would like to assure our partners that their rights will be protected and as a government we will respect them. Our partners who have been working here for a long time already know the quality of the people working in this industry, and to newcomers I would like to say welcome, and I would like to assure them that they will find great cooperation and professionalism in the Egyptian petroleum sector.



Eng. Mohamed Shoeib, Former EGAS Chairman interviewed by Egypt Oil & Gas Newspaper Publisher, Mohamed Fouad and Managing Editor, Ahmed Maaty

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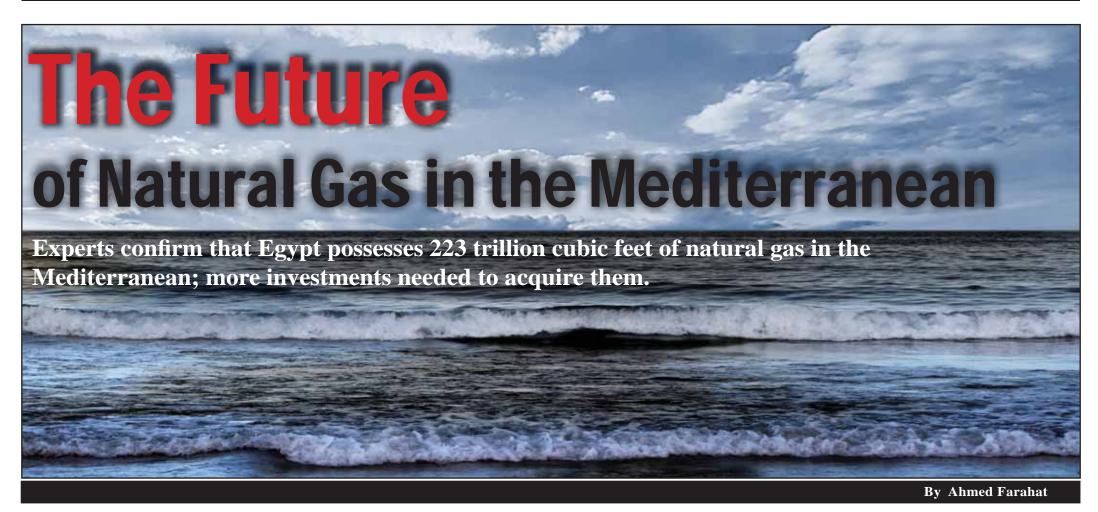
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# EInfocus



ince the dawn of history, the Mediterranean Sea has had a great impact on the history of the countries overlooking it. The Mediterranean has facilitated trade, industry and transport between these countries in the past, and is expected to provide enormous oil and gas resources in the future, resources which as it stands will be sufficient for more than the coming forty years.

According to several studies, the Mediterranean Sea's deepwater areas hold enormous oil and gas wealth, which will be highly beneficial to Egypt's future in meeting the country's natural gas needs.

The first massive natural gas discovery in the Mediterranean was made in 1967, when the natural gas field known as Abu Madi was discovered in the central Delta region, a discovery which ushered the beginning of major natural gas exploration in Egypt. It was followed by the discovery of the Abu Qir field in 1969, and the Abu El Gharadiq field in Western Desert in 1971. These early encouraging results led to the expansion of exploration in the Delta, the Western Desert and the Mediterranean.

Experts and industry leaders recognize the enormous potential that lies in Egypt's Mediterranean Sea reservoirs. Eng. Shamel Hamdy deputy chairman of Trident Petroleum for Operations and Projects, stated that the future of gas in Egypt is concentrated in the deepwater areas, adding that exploration activities in the Mediterranean are expensive and require a new perspective from the government in dealing with companies engaged in such activities.

"It is also very important that the government offer more deepwater areas for investors in order to discover more natural gas reserves, contributing to energy-saving in Egypt." Eng. Hamdy said.

Nader Zaki, BP Egypt's Vice President said "the deepwater area is promising and contains a lot of reserves. Moreover, international companies are interested in the current bid round proposed by EGAS."

He also stressed the importance of finding a new formula for agreements between the government and international companies exploring for gas. He claimed that the production sharing model is not necessarily the ideal model, because what is most important is guaranteeing profits for both parties. In this context comes the agreement of North Alexandria. In response to criticisms directed against the agreement, Zaki said: "The agreement would provide the opportunity for Egypt to import petroleum products costing \$50 million per day, with a gross amount of \$4 billion annually, which is a huge amount that would have been allocated to import alternative products."

Seeing as how oil prices are globally on the rise, reaching \$100 per barrel, the government would be facing many importation problems, in addition to the necessity of providing incentives to companies in order to increase their production.

Geol. Mostafa El Bahr, Vice Chairman for Agreements and Exploration at the Egyptian Holding Company for Gas (EGAS), said that the coming period will require an intensification of gas exploration activity, in order to boost Egypt's reserves. He pointed out that the amount of exported gas currently ranges from 20% to 25%, most of it being exported by the foreign partner, which is why EGAS gives priority to the local market.

In his speech during the seminar "Future of Gas in Egypt" organized by the Sadat Academy for Administrative Sciences in mid-May, Geol. El Bahr said that the Ministry of Petroleum and EGAS are reviewing all exportation agreements in order to increase the income of the Egyptian side. He revealed that the reason behind the termination of the commercial contract with the East Mediterranean Gas Company which provides Israel with Egyptian gas was owing to the company's violation of the financial conditions agreed upon with EGAS and the Egyptian General Petroleum Corporation, and not due to an intransigent attitude from the Egyptian government.

Touching upon the cost of production in the deepwater and the problems faced by companies operating in the Mediterranean, he explained that seismic scans in the Mediterranean usually face a technical problem due to layers of salt impeding data processing. He claimed that on this basis, new technologies are constantly neing pursued in order to overcome such problems.

As for the future of gas exploration in the Mediterranean's deepwater, Eng. Mohamed Shoeib, Chairman of EGAS, revealed that the June 2012 bid round offered 13 exploration blocks in the Mediterranean, from a total

of 15. Furthermore, He disclosed Egypt's natural gas production to be an estimated 6 billion cubic feet, with an average of 800 million cubic feet of gas per day.

Speaking about the role of the government in proposing new exploration blocks for the current year via the bid round, Shoeib said that gas prices have not been specified so far, but have been left to be determined post-discovery. This is because a fair price would depend on several factors, including the place of exploration, size of the discovery, and the equipment utilized in the drilling operation. He also added that in order to overcome the problem of delayed dues of the foreign partner, the contractor can either sell his share to the local market or export it abroad.

In conclusion, Egypt should recognize the full potential of its natural gas resources, much of which lies in the deepwater areas of the Mediterranean. If it does so, Egypt will be on its way to becoming a leading supplier of natural gas throughout the Mediterranean region.



Eng. Mohamed Shoeib, Former EGAS Chairman

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# Toyo and ENPPI Ethylene Plant in Ethydco Complex

By Eng. Ezz Eldin Alam Mohamed, EGPC's Reservoir Studies General Manager

President and CEO Yutaka Yamada) and ENPPI, an engineering company under the Egyptian Ministry of Petroleum, have been jointly awarded a contract to build a 460,000 T/Y ethylene plant and a 20,000 T/Y butadiene extraction plant as part of Ethydco's petrochemical complex to be established in Alexandria, the Arab Republic of Egypt, and owned by ETHYDCO (The Egyptian Ethylene and Derivatives Company), a newly established company under the investment law no. 8/1997 of Egypt. This will be TOYO's second ethylene plant in Egypt after 300,000 T/Y ethylene plant completed in 2001 for Sidi Kerir Petrochemicals Co. (SIDPEC).

Based on the most advanced ethylene technology of Lummus Technology of the U.S., TOYO and ENPPI will execute the EPC and Commissioning under a lump-sum turnkey contract. TOYO will lead the entire project execution, undertaking project management, basic engineering, a part of detailed engineering, and procurement of key equipment. ENPPI will be in



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In Egypt, RWE Dea and it's legal predecessor have been operating in the upstream segment since as far back as 1974 and, as an operator, can look back on more than three decades of oil production in the Gulf of Suez. The company made a number of major gas discoveries in recent years and boosted its activities considerably.

With the start of field-development of the operat ed Disouq and the non-operated West Nile Delta projects RWE Dea shows further commitment with long term investments serving the domestic energy needs. RWE Dea has a total of 12 onshore and offshore concessions in Egypt, across a concession area about 19.000 square kilometers.

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charge of joint project management, detailed engineering and procurement of other equipment and materials. Both companies will execute the construction and commissioning in collaboration with PETROJET, an Egyptian construction company, which will be participating as a subcontractor. The contract's value is approximately \$600 million and the plant is scheduled for start-up in early 2015.

This project is an addition to TOYO's brilliant track record as TOYO's forty first ethylene plant projects worldwide and the fifth project in Egypt. Reflecting growing demand for petrochemical products under economic growth in the country, the Egyptian Government announced its 20-year Petrochemicals Master Plan to develop the Petrochemicals Industry in 2001, under the sponsorship and supervision of the Egyptian Petrochemicals Holding Co. (Echem). Hence, this project is to be executed as part of the national Petrochemicals Master Plan. TOYO, through this project, will contribute to the development of the petrochemical industry in the country and aim to acquire a downstream plant of this ethylene complex.

Other projects include the Egyptian Ethylene and Derivatives Company (Ethydco) with capacities of

460,000tpa ethylene and 20,000tpa butadiene, which is scheduled to start in 2015. Sidi Kerir Petrochemicals (Sidpec) is planning to build a 460,000tpa ethylene plant in Egypt, which will take three years to complete. In 2015, Carbon Holdings is planning to bring onstream a polyethylene (PE) complex - with capacities of 900,000tpa ethylene and 400,000tpa propylene – and three PE plants, each designed for 450,000tpa, one high density polyethylene (HDPE) and the other two HDPE/ linear low density polyethylene (LLDPE) swing units. Other areas of expansion in Egypt include styrenics, polyester, polyethylene, methanol and fertilizers.

In the Middle East and Africa Petrochemicals Risk/Reward Ratings (RRRs), Egypt is ranked ninth with 44.5 points. It lies 4.0 points behind Turkey and 5.3 points ahead of Algeria. The score has downside risks, owing to the uncertain political environment following the overthrow of Hosni Mubarak. Protests have temporarily closed petrochemicals facilities and continued uncertainty could put potential investment, as well as growth in output, at risk. However, growth in capacity should remain stable, making Egypt more self-sufficient in petrochemicals and turning it into a net exporter in some segments.



### **Rental Services**

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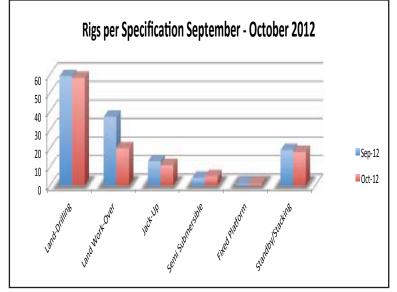
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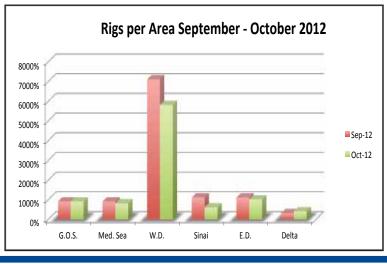
# Endustry Statistics

# **Egypt Statistics**

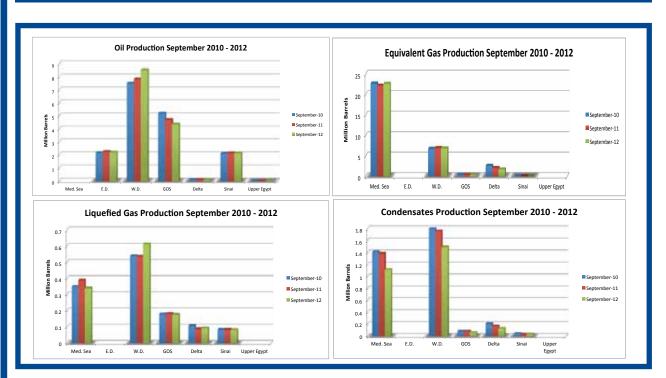


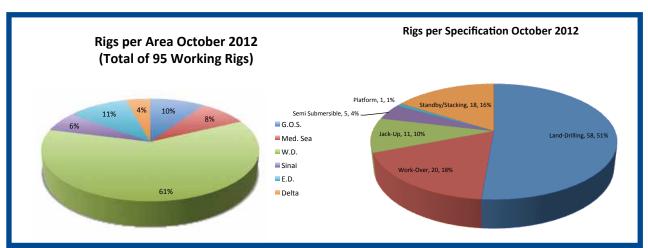
Table 1 Egypt Rig Count per Area – October 2012								
RIG COUNT								
Area		Total	Percentage of Total Rigs					
Gulf of Suez		9	9 %					
Offshore	9							
Land								
Mediterranean Sea		8	8 %					
Offshore	8							
Land								
Western Desert		58	61 %					
Offshore								
Land	58	,						
Sinai		6	6 %					
Offshore								
Land	6	10	11.0/					
Eastern Desert		10	11 %					
Offshore								
Land	10							
Delta		4	4 %					
Offshore								
Land	4							
Total		95	100%					

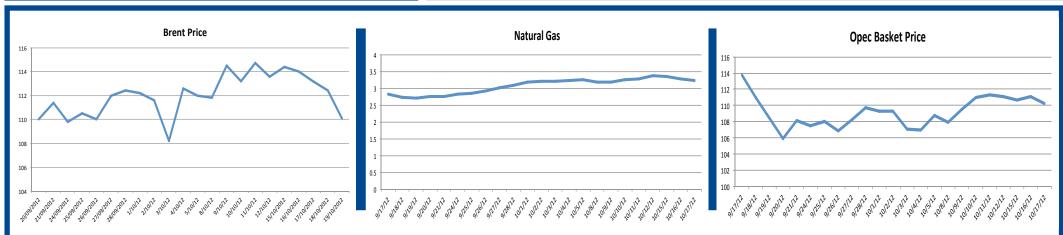




	Oil		Equivalent Gas		Condensate			Liquefied Gas				
	Barrel		Barrel		Barrel			Barrel				
	Septem- ber-10	Septem- ber-11	Septem- ber-12									
Med. Sea				22648393	22128750	22574464	1411821	1388383	1115749	349489	387834	339575
E.D.	2153838	2239282	2193004									
W.D.	7487014	7823972	8533977	6703393	6868036	6808214	1796450	1762063	1495613	539144	535900	612988
GOS	5194673	4692945	4371153	289821	282857	249821	80528	78809	62886	178667	181655	176797
Delta	117638	107092	82387	2551250	2028393	1668036	209237	172463	133158	107748	88938	93840
Sinai	2093187	2138661	2124823	38214	1429	893	42188	30096	34143	84157	84216	81698
Upper Egypt	17042	18190	14987									
Total	17063392	17020142	17320331	32231071	31309465	31301428	3540224	3431814	2841549	1259205	1278543	1304898



















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Is a specialist Services Company, providing leading edge International Communications Solutions to Enterprises, Governments and Telecommunications operators. With a proven systems integration heritage, PCI can offer its customers turnkey capability including design, procurement, and implementation, operations, and maintenance and project management.

#### Our services include:

### V-SAT services

Using VSAT and wireless technology, PCI provides communications to remote work locations. PCI engineers and technician provides specialized, program management, installation and operations services.

### Tele-Medicine

Imagine turning on your computer, clicking an email, and finding a message from a International or remote community health center. The email record has an attachment that contains heart sounds, which you could actually listen to and analyze on your desktop. Or imagine it contains a picture of a damaged finger, a sore throat, or an inflamed eardrum, which could be analyzed and cliagnosed with new medical software and connected medical expertise.

After you are finished, you can create a digital medical record, and store the record in an HIPAA compliant, highly secure database.

### Unified communications

Communications with your remote offices and remote workers can be done with VoIP to eliminate LD costs. Flexible call routing and easy to use features increase your employee productivity. PCI provides powerful and affordable business tools that improve your company communications.

### Wireless

PCI products give you the power to establish LAN-to-LAN connections over distances of up to 30 miles (48 Km) - with superior performance. Moreover, each product is a compact, single, integrated outdoor unit designed to withstand harsh environments and has built-in intelligence for anti interference and power management features.

### IT services

Our best IT personnel offer world class IT solutions. We provide customized IT services as per our clients need. PCI has the technical staffing to address the service and maintenance issues facing growing companies, in today's evolving international workplace. Our IT personnel provide best services to maximize productivity and efficiency of your business.

### Join the Cloud Networking Revolution with Meraki With few clicks install deploy and manage your corporate computer network

# Stay Connected Voice and Data with your branches, HQ and Home:

Meraki's unique auto provisioning site-to-site VPN connects branches securely, without tedious manual VPN configuration. Leveraging the power of the cloud, MX Security Appliances configure, monitor, and maintain your VPN so you don't have to.

# The highest performing wireless network with unmatched deployment flexibility:

Meraki deployments take hours — not days or weeks like others.

Configure your network policies in minutes, without training or certifications, through Meraki's intuitive dashboard.

Plug and play APs then self-provision from the cloud.

### Save up to 50% by Eliminating Hardware:

Cloud-based control provides secure, reliable centralized management without the cost and complexity of traditional hardware-based WiFi controllers.

# Save your internet bandwidth, Accelerate VoIP and Secure the CEO's iPad:

Meraki is designed for modern, mixed use networks that support mobile devices and web-based applications. Integrated Layer 7 device fingerprinting, traffic shaping, and application firewall services provide complete visibility and control of the devices, users, and applications on your network, while powerful yet easy to configure access policies maintain security and compliance.

# Manage Android, iPads, iPhones, Mac and windows devices from the cloud:

Systems Manager lets you configure, monitor, and support devices in your organization. 100% cloud based, Systems Manager eliminates costly, complex management appliances and software.

### Free Access Point for IT Professionals

IT professionals receive a FREE Meraki access point with a 3-year Enterprise Cloud Controller license, a  $$699 \, \text{value}.$ 

Confirm eligibility and shipping address with a our representative:

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#### OPTIMIZING

#### PRODUCTIVITY



The ultimate success of your well is the result of a series of closely connected E&P operations, with each phase affecting the one that follows. Every day, M-I SWACO helps operators on more wells and with more of those crucial steps than ever before. We deliver a portfolio of individual and integrated solutions designed for positive impact on operational productivity at every step of your well's life.

We've developed specialized technologies to address a range of specific issues. Innovations such as the micron-size, treated particles in WARP\* Advanced Fluids Technology that can be used in all water- and oil-base drilling and completion fluid systems to increase density without compromising rheology or promoting particle settlement.

Other innovations include SMART RDF\* fluids and breaker systems. Engineered to work together seamlessly, they give you high-performance drilling with greater fluid control during completion while protecting your formation's production potential.

Throughout the life of your well, you'll find there are M-I SWACO solutions that can help you increase efficiencies, reduce waste, maximize production and minimize environmental impact.

They all add up to greater productivity every step of the way.

Drilling

Wellbore

Production Solutions Productivity Technologies Environmental Solutions

"Mark of M-Isse



Customer-focused, solutions-driven

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