



Egypt is not Libya

Egypt's demonstrations were wholly white; they did not seek blowing up petroleum infrastructure as in Libya. The current unrests in the region of Middle East and North Africa have led to the increase of crude oil price, which has raised a worldwide concern

P₁₄

Deepwater Surveys Offshore Nile Delta

Until 2000, most offshore exploration activity in Egypt was focused on the shallow waters of the Gulf of Suez. Since then, the industry's focus has gradually switched to the Mediterranean Sea and the search for natural gas. Discoveries have stimulated investment and activity has grown rapidly, moving further offshore into deep water.

P₁₅

PICO DFT hits new records

Upon the performed work with all of Petrogulf Misr, Amapetco, Waha Oil Company and Vegas; a new success was proved within the trial well 113-159 in Sinai that belong to Balayim Petroleum Company "Petrobel". The evaluation report from Petrobel was indicating a new record in their field regarding drilling days, performance and the total mud cost

P₂₀

Khalda: successful drilling of an exploratory well

Khalda Petroleum company continues the successful implementation of its drilling plan for the current fiscal year of 2010-2011. The plan included drilling both development and exploration wells in the company's concession area in the Western Desert.

Egypt Oil and Gas Newspaper learned that Khalda successfully drilled a new exploratory well, West Kalabsha C-3, located in the Western Desert. The drilling process took 95 days and was tested on an open production hole of 3/4 Inch, with a daily flow of 4110 barrels of oil per day. The source added that the company used EDC-18 rig in drilling the new well.

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

Dover to pull out

The Canadian Dover Petroleum considers selling its shares in the company's concession area in Gebel El Zeit in the Gulf of Suez, revealed sources to Egypt Oil and Gas Newspaper (EOG).

EOG also learned that the decision came after the late events of January 25th and due to the political unrest.

Recently, Dover issued its orders to stop financing Petrozeit, EGPC's partner with Dover, and the drilling plans of the fiscal year of 2010-2011.

According to sources in Petrozeit, there is no exact date set for the withdrawal of Dover out of Egypt, yet their investments to be concluded at the end of this year.

Statoil hits dry in Mediterranean

Norwegian Oil and Gas Firm Statoil drilled a dry well in the El Dabaa license in the Mediterranean Sea, announced the company on March 28.

"Extensive logging has been performed in the well, and preliminary results show that the well is dry," Statoil said in a statement.

It added the drillship used for the drilling, Transocean's RIG.VX Discoverer Americas, would now head back to the Gulf of Mexico. Statoil is the operator in the El Dabaa license of which it holds 80 percent, with Sonatrach International Petroleum E&P, a wholly owned subsidiary of the Algerian state oil and gas company, holding the remaining 20 percent.

The exploration well targeted the Kiwi prospect in the El Dabaa licence, located in the Mediterranean west of the Nile Delta, with a water depth of around 2,700 meters at the drill site.

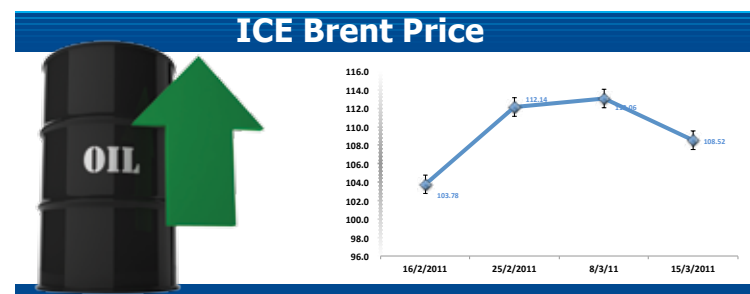
In 2007 Statoil signed two deepwater concession agreements – El Dabaa and Ras El Hekma – which cover areas of 8,368 and 9,802 square kilometers, respectively.

Egypt's Gas Deals: Exploitative or Necessary for Growth?

P₁₀

Oil and gas agreements over different Jurisdictions

P₁₈



MENA unrests spread, crude oil spikes high

The amounting wave of unrests in the Middle East and North Africa region has been associated with an escalating crude oil price that reached up to \$106 a barrel at the end of last month. This price level is considered the highest since September 2008. Crude oil futures surged to a fresh 29-month high last month, as ongoing turmoil in North Africa and the Middle East added to fears the crisis would spread to major oil-producing nations in the region.

According to the International Energy Agency, crude oil continues to rise as fighting between Libyan rebels and troops loyal to Muammar Qaddafi intensifies. Violence in Libya has cut output in the North African country by as much as one million barrels a day, according to the International Energy Agency.

As a matter of fact, countries in North Africa and the Middle East were responsible for 36% of global oil output and held 61% of proved reserves in 2009, according to the studies of the U.S. Energy Information Administration.

There has been also a rising concern about the probability of similar unrests in the Kingdom of Saudi Arabia. The council of senior clerics in the KSA issued a statement forbidding public protests, following demonstrations by minority Shi'ites in the Eastern Province, which holds much of the kingdom's oil reserves. It is worth mentioning that

Saudi Arabia is the largest exporter among OPEC members and produces approximately 8.4 million barrels of oil a day.

Such challenges endangering the market worldwide, some countries have been studying possible measures to be taking to ease this soaring oil prices. For instance, the Barack Obama administration revealed that it is considering tapping into the strategic petroleum reserve. To date, the U.S. strategic petroleum reserves hold approximately 726.7 million barrels of crude, the equivalent of a 34-day reserve at the U.S. daily consumption rate of 21 million barrels.

The current unrests have not been the sole drive behind the increasing crude oil price; the drop of the U.S. dollar against most of its major currency rivals has been another factor. During the last week of March, the U.S. dollar fell about 250 pips vs. the euro and the EUR/USD pair reached as high as the 1.4000-level, marking a 4-month high. The dollar fell about 250 pips against the British pound as well.

Despite the continuous efforts of the petroleum analysts and experts to outline a possible crude oil pricing scheme over the upcoming period of time, no one can exactly tell how would the market look alike since the tensions are increasing in the MENA region and directly challenging the market stability.

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Egypt Drilling Report

Your gateway to an industry forecast

2011

Egypt Oil & Gas' Drilling Report 2011 provides an in-depth analysis of the drilling market from various perspectives. This year's report responds to many ambiguities that dominated the drilling market at large and affected the domestic market. A five-year analysis is provided, during the period from 2005 to 2010, to evaluate the industry operations flow before the eruption of the global economic recession, throughout the recession and during the recovery stage.

Echoes of January 25:

Is it Chaos or a reform opportunity for the Egyptian petroleum sector?

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- Drilling activities from 2005 to 2010
- Well data section including discoveries, developments and explorations
- Special in-depth major operator analysis
- Drilling activities vs. rates of production.

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Ghorab: Egypt in strong position to raise gas price to Israel

Egypt is in a strong position to raise gas price to all importers, said the newly appointed Minister of Petroleum, Eng. Abdallah Ghorab in a press conference.

Ghorab revealed that Egypt is negotiating with Jordan and Israel to raise gas export prices. "Currently, they receive a generous below-market discount on gas from Egypt, which Egyptians resent, particularly with regard to Israel."

The Minister highlighted, "Public opinion and pressure supports the difficult negotiations we are leading now with Israel".

However, he declined to unveil the current price of Egyptian exported gas. He did promise to bow to public opinion by changing the price of gas and announcing shortly an index price. "This will affect our contracts with other importers," he nailed the point.

Egypt exports 4% of the local gas to Israel, according to figures released in the press conference.

Regarding local subsidies, the Minister of Petroleum vows to keep the price of gas barrels untouched at LE3, but said, grudgingly "...I find it strange that consumers pay LE15 a barrel to a private trader but refuse to allow the government to raise its original price by [even] one pound."

Ghorab calculated that the energy subsidy bill, which is currently budgeted at LE72 billion, would rise by LE10 billion to LE82 billion, due to a hike in international oil prices.

Egypt produces 700 thousand barrels a day and 6.3m cubic meter of natural gas. "If all of this was sold at market price the government would be rich," he added. Nevertheless, subsidies will remain untouched "because this is a sovereign decision," rather than economic one.

Energy subsidies in Egypt are criticized as it benefits the rich more than the poor.

Ghorab was appointed by Dr. Essam Sharaf, the Egyptian Prime Minister. "We all need to help in rebuilding a better future for Egypt," affirmed Ghorab. "The ministry will expand in the uses of natural gas in able to help all the Egyptians."

State news agency MENA quoted Ghorab as saying his top priority would be supplying petroleum products to the domestic market while adhering to agreements with foreign oil companies.

"The petroleum sector is tied to oil agreements and foreign partners, and we hope that cooperation will continue and we can fulfill all of our commitments," MENA quoted him as saying during Ghorab's swearing-in ceremony.

Ghorab graduated in 1976 from the Faculty of Engineering of Cairo University. He was previously chief executive of the state-owned Egyptian General Petroleum Corporation (EGPC).

In his professional career, he was appointed as the president of Khalda Petroleum Company; besides, he worked for 22 years for The Gulf of Suez Petroleum Company (GUPCO).

whether on the local or international levels. Besides, ENPPI witnessed the highest net profit at the end of 2010; which was a first time record since the company's establishment.

Besides, throughout the six years being the CEO of PetroJet, Dahy expanded the projects and activities of the company outside the Egyptian territories and doubled the company's profits.

Dahy leads EGPC

Eng. Abdallah Ghorab, Minister of Petroleum, appointed Eng. Hany Dahy, former Chairman of Enppi, as the Chairman of the Egyptian General Petroleum Corporation (EGPC).

At the beginning of 2010, Dahy was appointed as the chairman of ENPPI, and throughout this year, he succeeded to lure more than \$16 billion projects for the company,

Agiba deepens in the Western Desert

Agiba Petroleum Company is reaching the final phase of drilling four new exploratory wells in the company's concession area in the Western Desert, according to its drilling plan of the fiscal year of 2010-2011.

"Sino Tharwa Drilling Co, Weatherford International, and the Egyptian Drilling Company (EDC) will be among the operating companies to drill in Melehia and West Qattara fields in the Western Desert," said a top EGPC official to Egypt Oil & Gas Newspaper.

The total drilling investments count for \$13 million. "The investments also included conducting development operations for some of the wells in the same acquisition area," added the EGPC source.

Agiba is a joint venture operating company for exploring, drilling and producing hydrocarbons in Egypt, and the shareholders are the Egyptian Petroleum Corporation (EGPC) and the Italian Eni.



West Bakr ready for more drilling

West Bakr Petroleum Company finalized the bid round for drilling of a new exploratory well in the company's acquisition area in the Eastern Desert.

The operation will start by the end of the first quarter of the drilling plan for the new fiscal year of 2011-2012.

The total finance for the new well costs \$4 million, compared to the current fiscal plan that included the drilling of one exploratory and another development wells.

It is worth mentioning that the company holds 31 wells in its acquisition area. West Bakr Company is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Japanese EPEDECO.



East West Petroleum plans to treble production

East West Petroleum provided a 2011 drilling and operations update for the Burg El Arab concession (BEA), located in the Western Desert.

Gross production from BEA is approx. 500 barrels of oil per day (bopd) and the 2011 work program is designed to delineate the reservoirs and to treble production to 1400 bopd during the year. Gaffeny Cline, an independent engineering firm, has been retained to complete a NI 51-101 compliant report for the BEA field. A final report is expected early this month.

Operationally, three development wells, BEA 8, 9 and 10 are planned to commence drilling in May, to develop oil accumulations in the Abu Roash G dolomite formation and the deeper Ba-

hariya clastics section. The development wells will also evaluate the deeper Al Amaine dolomite formation where oil has previously been encountered. There will also be a six-well workover program during 2011 to increase and accelerate field production. In addition one exploration well will be drilled during the second half of 2011 to test a separate fault block in the 72 sq km BEA development lease.

The total capital expenditure program for 2011 is \$26.1 million, (\$5.2 million net to East West). This includes the above well program and the construction of 4" field production pipelines, a 6" shipping pipeline from the BEA facilities to the Western Desert Petroleum Company crude collection station and construction of a storage tank at the Al Hamra port.

EMG: Egypt should honor Israel natgas deal

East Mediterranean Gas (EMG), which supplies Egyptian natural gas to Israel and other Middle East countries, does not see any justification for amending the terms of its contract with the Egyptian government to negotiate a higher price, said an EMG stakeholder.

Nimrod Novik, senior vice president of Merhav, a founding partner of EMG, told Reuters, "Our contract was amended in 2009 and it has built into it the precise mechanism, schedule, criteria and procedure for price negotiations and they do not exist at the moment."

"We expect both sides to respect ... this contract."

Egyptian Petroleum Minister Eng. Abdallah Ghorab was quoted by the MENA news agency saying talks were under way to adjust gas contracts -- especially with Israel -- to receive a higher price. He said media campaigns and public disapproval of gas exports were sufficient basis for negotiating greater benefits to Egypt.

Novik said he could not elaborate as to the terms of price renegotiation. He also declined to say exactly how much Israel pays for Egyptian gas but that it was above \$3 per million BTUs.

In comparison, industry experts say Qatar, the world's largest natural gas exporter, gets about \$2 per million BTUs.

Merhav is owned by Israeli businessman Yosef Maiman, who also holds 60 percent of Ampal-American Israel Corp. Merhav, Ampal and Maiman own 25 percent of EMG.

Other stakeholders in EMG include Egyptian businessman Hussain Salem, Egypt Natural Gas Co, Thailand's PTT and U.S. businessman Sam Zell.

The Egyptian press have accused the EMG consortium, which supplies 45 percent of the gas needs of Israel's electric utility, of selling its gas to Israel at below market prices.

"Reports in the Egyptian press have been erroneous for years," Novik said. "When they quoted the original price was 75 cents it was more than double and when they published it is \$1.50, in reality it is more than double...I can see why Egyptians are upset with the price

EMG is paying."

Israel signed a deal to export natural gas from Egypt a decade ago for as much as 30 years and the contract was amended in 2009 to extract a higher price.

"What EMG (Israel) pays for Egyptian gas is higher than for other Egyptian gas exports -- whether it is through a pipeline to Jordan, Syria and Lebanon or through LNG (liquefied natural gas)," Novik said.

Gas supply from Egypt resumed after the pipeline carrying it across the Sinai Peninsula was damaged in an explosion and fire on Feb. 5.

Novik said supplies had reached "contractual quantities".

Israel gets most of its gas needs from the Yam Thetis group, which found natural gas off the country's Mediterranean coast. Newly discovered gas offshore at the Tamar site, set to come online in a few years, and the larger Leviathan prospect, have some believing Israel should stop Egyptian gas imports.

Egypt and Israel signed a peace treaty in 1979 but relations between the two sides have been cool for most of that time.

"The Israeli energy market needs more than one source for supply reliability," Novik said.

He pointed to the shutdown of the Egypt pipeline and many occasions where Yam Thetis was forced to close down and EMG stepped in to supply Yam Thetis' customers.

Novik rejected the notion that disruptions from Egypt were more likely due to attacks on the pipeline. "Any energy installation is vulnerable to terror attacks," he said, adding EMG had bolstered security.

He said EMG expected to continue signing deals with Israeli customers, adding natural gas use was growing rapidly in Israel.

The Israeli market absorbed 5 billion cubic meters of natural gas in 2010 and this is expected to triple in the next five years, Novik said.

"New projects are announced daily," he said. "It's not just electricity. Industry is also converting to cheaper and cleaner natural gas."

Egypt supplies 200 mcf to Jordan

Egyptian natural-gas supplies to Jordan reached 200 million cubic feet a day, Egypt's state-run Middle East News Agency reported, citing Jordanian Energy Minister Khalid Touqan.

Egyptian gas flows to its eastern neighbor resumed on March 15 after an explosion in the pipeline on

Feb. 5, the agency, also known as MENA, said.

Under the agreement between the two countries, Jordan imports 240 million cubic feet a day of natural gas from the North African country, which is used to generate 80 percent of its electricity, according to MENA.

Kuwait Energy, East West Petroleum partner, has informed them that operations in Egypt have not been affected and there has been no impact on production from BEA; though there have been some operational delays in moving drilling equipment to the site.

East West Petroleum and its partners are evaluating the feasibility of co-producing the Al Amaine where oil bearing with the Abu Roash G and Barhariya clastics in the BEA field. Well testing in the new development and exploration wells will enable evaluation of the impact on production of fracturing the vertical wells and drilling horizontal wells in tighter zones. Other operators in the western desert have significantly improved production rates and reservoir recovery factors through reservoir fracturing programs.

Energiean to drill 2nd well in Upper Egypt

Energiean provided an update on the drilling of the WKO-3X in the West Kom Ombo Block covering a total area of 31,520 km² and located in Upper Egypt. The WKO-3X was spud.

The WKO-3X well is the second of two committed frontier explorations well in the vast and highly unexplored West Kom Ombo License.

The main objective of the well is to provide a second stratigraphic control point, approximately 100

km southwest of the WKO-1X well location, in an area with very sparse geological and geophysical data coverage. The findings of the WKO-3X well will be used for defining and further optimizing the future exploratory steps in the license area. Energiean's operations in Egypt have not been directly affected by recent political events; however, the Company is closely monitoring the situation on a continuous basis.

Will Hess leave Egypt for good?

Hess Corporation, an integrated oil company based in USA, decided that it would sell its shares in its concession area in the Mediterranean Sea.

This comes after the company's decision to withdraw its current investments from the petroleum sector as a result of the lack of significant projects offered by its partner in Egypt, a top official told Egypt Oil & Gas Newspaper.

He clarified that Hess will leave

Egypt by next May 2011, although it came utterly incompatible with the late statements made by the company that they would conduct studies on all of the tanks in order to finalize its drilling program to be implemented in the acquisition area of the Mediterranean.

It is worth mentioning that the joint venture between HESS and EGPC is the North Alamein Petroleum Company (NALPETCO).

PetroAmir reserves to rise

PetroAmir reserves reached 30 million barrels of crude oil and 30 billion cubic feet of gas, revealed top official to Egypt Oil & Gas Newspaper.

Currently, PetroAmir production rate reached nine barrels of oil per day from one layer of Amir and Geyad fields.

The official also informed EOG that

last year's production reached 2.6 million barrels by the end of the 2009-2010 fiscal year.

PetroAmir is the Joint venture company between the Egyptian General Petroleum Corporation and the Greek Vegas Oil & Gas. The company concession is located in North West Gema.

WASPETCO plan approved

Wadi El Sahl Petroleum Company (WASPETCO) gained the approval of the Egyptian General Petroleum Corporation (EGPC) to go through with its current fiscal plan of the year 2010-2011 in the area of Hurghada.

WASPETCO plans to implement the rest of the plan in the 3rd and 4th quar-

ter of the current fiscal year of 2010-2011 in the company's acquisition area in Hurghada.

The current production rate of WASPETCO is 200 barrels of oil per day (bopd), with future plans to more than double this rate to reach up to 500 bopd by the end of 2011.

TransGlobe Energy: production increases in Egypt

Energy Corporation announced production increases in Egypt in West Gharib concession (100% working interest, TransGlobe operated).

During the first quarter, six oil wells were drilled; two Upper Nukhul wells and four dual Nukhul (Upper and Lower) wells. In addition, two drilling rigs are currently drilling at West Gharib, primarily focused on the Nukhul formation. It is expected that up to 44 wells could be drilled in West Gharib during 2011, primarily focused on the Nukhul formation.

During March, the Company has completed three Lower Nukhul and two Upper Nukhul oil wells. March production to-date has averaged approximately 9,100 barrels of oil per day ("Bopd") representing a 12% increase from February production of 8,133 Bopd. Daily production has increased to approximately 11,500 Bopd with the addition of the third Lower Nukhul producer, which represents a 3,367 Bopd increase or a 41% increase over Febru-

ary production.

The Arta / East Arta Lower Nukhul pool has expanded significantly since year-end 2010. The Company has now drilled six Lower Nukhul wells, which have encountered a sandstone/conglomerate reservoir up to 130 feet thick. Five wells have been placed on production with initial production rates of over 1,000 Bopd per well without the requirement for fracture stimulation. These results are better than the modeled average of 500 Bopd for a Lower Nukhul producer. One additional well reached total depth on March 20 and is being cased as a dual Nukhul (Upper and Lower) oil well. This latest well has extended the reservoir an additional 90 feet down dip and did not encounter the oil / water contact.

Additionally, two Upper Nukhul oil wells in the north portion of the East Arta pool were frac'd this past week and are currently being equipped for production.

El Hamra lessen production

El Hamra Oil Company decided to reduce its crude oil production rate, which was previously planned for in the production plan of the current fiscal year of 2010-2011, from the company's concession area of the Western Desert.

El Hamra aimed to reach a production pace of 3100 barrels

of oil per day (bopd) after it was planned to reach 6000 bopd from El Alamein field.

The current production rate reaches 1100 bopd to 1300 bopd. It is to be mentioned that El Hamra is a joint venture company between EGPC and American IPR.

Pharaonic intensify the Port Said drilling

Pharaonic Petroleum Company is preparing to drill an exploratory well in its concession area of Port Said during the middle of the current year of 2011, according to the company's drilling plan.

The drilling finance will cost approximately \$4 million, which counts for nearly one fifth the total cost of the cur-

rent fiscal plan that is worth \$35 million.

The company recently drilled another exploratory well in January 2011.

It is to be mentioned that Pharaonic Petroleum Company is a joint venture company between EGPC and BP Egypt.

Abu Qir raises production levels

Abu Qir Petroleum Company is currently preparing to finalize the second stage of North Abu Qir-3 field (NAQP_II) in the company acquisition area in the Mediterranean Sea.

Abu Qir is planning to raise production from the marine port during the current fiscal year. The expected production

from the field is 80 billion cubic feet of gas and 2000 barrels of condensates per day, after the drilling of two new wells in the coming period.

It is worth mentioning that the Abu Qir Petroleum Company is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and Italian Edison.

Tanmia and Naftogaz into more success

Tanmia Petroleum Company is currently working on expanding its operations in the petroleum services sector, especially in the early production process and also the its constant eager to provide latest rigs for the Egyptian market.

Tanmia contributed in raising Naftogaz's production to reach 4000 from 1000 barrels of oil per day. That came after the expanding work Tanmia did in early production station

in the company's concession area of West Alam El-Shawish. The increase came from extending the length a line for 4000 meter to merge all the production lines.

The company previously conducted geological and geophysical studies in the area of HH, located in North Amer block in Gulf of Suez to determine the petroleum reserves for extracting.

BP plans \$11 billion gas project in Egypt

Egypt will review the price of natural gas exports; Minister of Petroleum Eng. Abdallah Ghorab was quoted as saying.

"There is a mechanism to increase the price in the contracts," Ghorab told reporters after meeting with Bob Dudley, the CEO of British Petroleum (BP), in Cairo.

Ghorab said that there were "technical matters" that should be sorted out before the resumption of gas exports to Israel.

BP's CEO Dudley said his company discussed with the

Egyptian Government setting up a natural gas project worth \$11 billion, creating 5,000 jobs.

The project is scheduled to be carried out within the coming five years, according to Dudley.

BP said last year it would spend \$10 billion in Egypt on gas and oil exploration activities over the coming years.

Egypt's proven natural gas reserves are estimated at around 77.2 trillion cubic feet, according to the Ministry of Petroleum.

Quotes

I am fully confident that the noble ends of the Egyptian revolution will reflect positively on bilateral ties

Jordanian Prime Minister Marouf Bakhit in his meeting with Commander-in-Chief of the Egyptian Armed Forces Field Marshal Mohammad Hussein Tantawi, on agreeing to enhance cooperation in the fields of electricity and gas

The recent events have, however, underlined the importance of asset diversification

Robert Adair, Melrose Resources Executive Chairman, on the company's plan to cut reliance on Egypt

The assets freeze is extended to the new entities on the U.N. list...including the National Oil Corporation (NOC) and also to five subsidiaries of the NOC designated autonomously by the EU

EU member governments said in a statement, on EU agrees sanctions against Libyan oil companies

This is a notification of a possible force majeure event because for now production is still ongoing

Spokeswoman for leading stakeholder Total in Liquefied natural gas producer Yemen LNG, on Yemen LNG disruption fears

We have suffered no operational disruption at all in Egypt and we do not see any prospect of suffering such disruption

David Thomas, Chief Executive of Melrose Resources



Dominion secures new deepwater exploration license in Kenya

Dominion Petroleum announced the award of deepwater Block L9 in the Lamu Basin, offshore Kenya, after concluding negotiations with the Government of the Republic of Kenya by executing heads of agreement (HoA), which define the terms for Block L9.

The award of L9 is subject only to the signature of a Production Sharing Contract (PSC) by Dominion and Kenya's Ministry of Energy; currently scheduled to take place this month in Nairobi.

Block L9 represents one of the last, best new licensing opportunities along the whole of the deepwater East African margin and has many geological similarities to the company's Block 7 offshore Tanzania. Dominion will operate L9 with a 60% working interest. Due to the amount of interest expressed by potential partners in Block 7 to date Dominion may now seek to include L9 in any subsequent 'farm-out' process and try to coordinate exploration activities between the two blocks.

Block L9 has seen one well drilled in it previously, the Simba-1 well in 1979. The Simba well encountered gas shows in the tertiary and upper Cretaceous. The Simba results suggest a working hydrocarbon system in the Lamu basin and offshore oil seeps have also been identified to the north of L9.

Following signature, the Initial Exploration Period of the PSC will last for two years. During this time, a

gross minimum work commitment of \$6.15m inclusive of the acquisition of 500 sq kms of 3D seismic data is required. Following the initial period, there is an option to relinquish the PSC or commit to another two year exploration period with the obligation to drill one well in that period. The terms and the commitments for L9 defined in the HoA compare very favorably to other countries in the region relative to the potential resource the block represents.

Andrew Cochran, Chief Executive of Dominion Petroleum, commented, "Kenya's Block L9 represents one of the very few 'ground floor' opportunities remaining in the highly prospective, and increasingly attractive, East African offshore basins. The PSC, when signed, will represent a significant expansion of Dominion's deepwater footprint, in an area that is rapidly gaining the attention of major players in the industry."

He added, "Through Dominion's expansion to offshore Kenya, with a large operated working interest, we're keeping pace with the industry along the East African margin amongst company's leading the charge in the region. By using the knowledge and experience gained from our operations offshore Tanzania we were able to quickly identify and secure L9 in midst of what was a very competitive process. Dominion looks forward to working with Kenya and wishes to thank the Government for the opportunity they've awarded us."

Oman plans \$1 billion boost in gas Production

Oman Oil Company Exploration & Production (OOCEP), the upstream arm of government-owned Oman Oil Company (OOC) plans to invest \$1.1 billion in the development of the gas-rich Abu Butabul discovery in its newly acquired Block 60 concession in central Oman according to the Omany Daily Observer.

This initial investment amount is part of an ambitious phased project to extract from the promising reserves of tight gas and condensates in Block 60. OOCEP is working along a tight deadline to bring the field into commercial production by setting the first quarter for 2013 to achieve this.

The project is targeting a peak production output of 90 million standard cubic feet per day (mmscf/d) in order meet Oman's increasing demand for gas in power generation, water desalination and as feedstock for petrochemicals industries.

OOCEP signed an Exploration and Production Sharing Agreement (EPSA) for Block 60, five months after previous operator BG Group of the UK left the concession. The agreement was signed by Mohammed bin

Hamed al Rumhy, Oman's Oil and Gas Minister and Salim bin Zahir al Sibani Chief Executive Officer of OOCEP.



Chariot Oil & Gas Raises £90 million to Fund Offshore Namibia Exploration

Chariot Oil & Gas Limited, the AIM listed Africa focused oil and gas exploration company, announces that it has conditionally placed 35,958,376 New Ordinary Shares (the 'Placing Shares') at a price of 250 pence per share (the 'Placing') to raise gross proceeds of £90 million (approximately US\$146 million). Placing Highlights:• Following extensive analysis, management believes that significantly more value will be retained through an equity issue combined with selective farm-outs, than focusing solely on the farm-out process. Whilst Chariot still intends to enter into multiple farm-out agreements, and this process is running concurrently, the Placing provides Chariot with much greater optionality and leverage going forward. The Company continues to anticipate announcement of another farm out agreement by the end of Q1 2011. Multi-disciplinary technical work undertaken across the Chariot licences has led to a substantial increase in gross mean unrisked prospective resources from 3.9 billion barrels ('bbls') reported on listing to 13.9 billion bbls as per latest update (10.4 billion bbls net to Chariot) - the Company now has a „drill ready? inventory

consisting of twelve prospects. Net proceeds of the Placing, together with existing cash, will be used to further Chariot's work programme and the Company continues to intend to drill its first well in Q4 2011. The funds will enable Chariot to participate in a minimum of two wells and conduct a further 5,000km² 3D seismic programme across areas of specific interest in the Central Blocks. Upon completion of the Placing, Chariot's net cash position will be approximately US\$150 million Paul Welch, CEO of Chariot commented: 'Chariot is delighted to have carried out such a successful fundraising with strong support from both new and existing institutional shareholders. The positive reaction to our farm-out process from a large number of significant industry players has helped confirm for us the value of our existing asset base. This equity raise means that we have greater control on the next phase of our development, and our stated timeline. These funds will enable us to undertake key parts of our work programmes on more favourable terms, including the drilling of a first well in Q4 2011.'

Total in a World First with Subsea Gas/Liquid Separation Project in Angola

The Acergy Polaris finished installing the three subsea separation units (SSU) for the Pazflor project, in 800 meters of water in Block 17 offshore Angola. The flagship innovation of the project, these units constitute a world first in terms of technology.

For Pazflor, it is the first-ever project anywhere to deploy a development plan based on gas/liquid separation at the mud line spanning several reservoirs. This milestone technological innovation is what will make it possible to meet the challenge of producing the heavy, viscous oil contained in three of the four reservoirs in this gigantic development in the Angolan deep offshore.

The Pazflor oil field comprises four reservoirs. One of them, Aca-cia was formed around 25 million years ago in the Oligocene and contains light oil. The other three - Perpetua, Zinia and Hortensia - are younger, dating from the Miocene, just five to seven million years ago. They contain more problem-

atic oil that is heavier and much more viscous.

Subsea gas/liquid separation is the key to the economics of producing these challenging reservoirs, making Pazflor a deepwater trailblazer. The subsea production system for Pazflor's three Miocene reservoirs includes three subsea separation units. Each one consists of four retrievable packages: a gas-liquid separator, two hybrid pumps to boost the liquids, and a manifold to distribute the effluents to the separator and pumps. Purpose-designed for Pazflor, the hybrid pumps are yet another world first. They combine multiphase stages, compatible with the presence of gas in the liquid, and a centrifugal stage, to improve efficiency. The SSUs are the culmination of several years of R&D work and a rigorous qualification program to ensure the optimum efficiency and reliability of this vital production equipment. Fabrication, completed in 2010, entailed nearly 350,000 man-hours of work.

Aminex signs Tanzania rig contract

Aminex signed a rental contract for use of the Caroil-6 drill rig at Nyuni Island, offshore Tanzania.

The Caroil-6 will be used to drill the Nyuni-2 well, targeting a large Neocomian-age gas prospect, and the rig will be mobilized to Nyuni Island within 60 days. The Nyuni-1 was drilled and suspended in 2004, having encountered gas in shallower Albion-Aptian sands. Nyuni-2 is an exploration well and will be drilled from the same site as the suspended Nyuni-1 well, but deviated to the southeast at an angle of approximately 30 degrees from vertical. Planned total vertical

depth is approximately 2975 meters and measured depth approximately 3380 meters.

"Finalizing a contract for Caroil-6 is the first major step in our 2011 Tanzanian drilling program, following our recent fund-raising exercise. Shareholders will be notified as soon as the Nyuni-2 well has been spudded," commented Aminex chairman Brian Hall.

The Caroil-6 was successfully used for drilling Aminex's Kiliwani North-1 discovery well in 2008. It has since been upgraded with a top-drive and additional mud pump capacity.

Iraq, which has natural gas reserves totaling 126.7 trillion cubic feet, according to official figures, produces only around 1.6 billion cubic feet a day, half of which is being flared. However, the country has ambitions to become one of the world's biggest liquefied natural gas exporters after meeting its domestic needs.

Under the terms of MOU, the government of Abu Dhabi is committed to open opportunities to qualified Korean exploration and production companies to participate in the upstream development of one or more fields with cumulative technically recoverable reserves of at least one billion barrels. The MoU also provides for the storage of six million barrels of Abu Dhabi crude oil in Korea's Strategic Petroleum Reserve (SPR). The

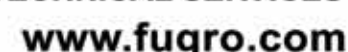
Within the context of mutual commitment to apply the standard practices of oil industry, the parties to the Heads of Terms agreement will proceed to negotiate the terms of a full contract, which, when finalized, would enable investment and implementation of an agreed exploration and potential development plan for the areas under the contract.

The complete development of the two fields encompasses the engineering, procurement, fabrication and installation of a total of 12 wellhead platforms, 2 tie-in platforms and 1 injection platform. The work will also include a 36-inch 260-kilometres-long

In addition, Saipem has agreed with its clients various increases in the scope of its work on existing E&C Offshore contracts.

The high resolution multibeam echosounder and geophysical data revealed a seabed consisting of unstable soils and severe gradients and also identified and mapped telecoms cables and control umbilicals running across the site, critical information for route selection and design that would not have been identified by traditional survey methods using towed systems.

Fugro's ROV services include the provision of drill support from basic observation class ROV systems, right up to full specification work-class ROVs along with a full range of intervention, tooling, inspection, repair and maintenance services, all supported locally.



Shell to divest African downstream units for \$1 billion

Shell agreed to divest the majority of its shareholding in most of its downstream businesses in Africa to Vitol and Helios Investment Partners for a total consideration of some \$1 billion.

Under the terms of agreements, Shell will retain equity in two new joint venture companies, which will assure continued availability of Shell fuels and lubricants in 14 African countries under the Shell brand.

"This is a good deal for our customers as well as for Shell," said Mark Williams, Royal Dutch Shell's Downstream Director. "We will significantly reduce our capital exposure in line with our strategy to concentrate our global downstream footprint, and continue to provide the high quality Shell products that our African customers have come to trust and rely on over many decades."

"We are delighted to have concluded this agreement with Shell and Helios," said Ian Taylor, President and CEO of the Vitol Group. "Africa is a continent we know well. These two new ventures allow us to invest in Africa and its fast-growing economies, and grow all the businesses under the umbrella of the world-class Shell brand for the benefit of our customers."

"We are pleased to enter into this landmark agreement with our partners, Shell and Vitol," said Tope Lawani, Managing Partner of Helios Investment Partners. "We believe that combining Vitol's world class sup-

ply expertise and Helios' deep understanding of the African operating environment with the Shell brand and a highly professional workforce will create significant new growth opportunities for the business, and will ensure the continued supply of high quality products and services for African consumers."

One joint venture will own and operate Shell's existing oil products, distribution and retailing businesses in 14 African countries, with the potential to add five more in future. Vitol and Helios will hold 80% of the venture and Shell will hold the remaining 20%. A separate company, which will be 50% owned by Shell and 50% by Vitol and Helios, will own Shell's existing lubricants blending plants in seven countries and will manage macro-distributor relationships in each of the countries where the main venture operates, plus a number of others.

Shell, Vitol and Helios will now concentrate on securing necessary regulatory approvals and integration planning, ahead of a phased completion of the proposed deal during 2011 and the first half of 2012.

Shell's fuels, lubricants and refining activities in South Africa, the company's lubricants business in Egypt and its exploration and production businesses, liquefied natural gas interests and most international trading activities in Africa are not part the proposed deal.

KBR awarded the Equatorial Guinea refinery study

KBR revealed that it has been awarded a contract by The Ministry of Mines, Industry and Energy of the Republic of Equatorial Guinea to provide a Conceptual Study and associated Project Management Services for the development of a low complexity, modular 20,000 barrel per day (BPD) refinery at Mbini in the Republic of Equatorial Guinea, West Africa.

The aim of the refinery is to meet the local fuel demand of the Republic of Equatorial Guinea and marks the first step away from the country's dependency on imported fuel to meet local demand.

"KBR is proud that the Republic of Equatorial Guinea has chosen to work with KBR on this project," said John Quinn, President, KBR Downstream. "KBR will employ its significant experience in developing and nurturing Refining projects on the African continent to assist the Republic of Equatorial Guinea

in achieving its objectives of meeting local liquid fuels requirements and establishing a refining industry in the country."

"The Mbini refinery project is of strategic importance for the Republic of Equatorial Guinea both politically and economically as it will eliminate the country's dependency on imported oil derivatives. The Ministry of Mines, Industry and Energy is confident in KBR's experience and professionalism. We are also confident KBR will deliver a refinery design that meets the Government objectives and will provide thorough terms of reference to initiate an international tender process for the construction of the refinery," said the Honorable Marcelino Owono Edu.

KBR is a global engineering, construction and services company supporting the energy, hydrocarbon, government services and civil infrastructure sectors.

Sinopec expands despite the Mideast tensions

China Petrochemical Corp., (Sinopec), revealed its plan to invest in a proposed refinery in Saudi Arabia, which reflect the corporation's drive to expand overseas despite the current concerns over rising tensions in the Middle East region.

Sinopec will take a 37.5% stake in the Red Sea Refining Company joint venture that will build the Yanbu refinery once its agreement with Saudi Arabian Oil Co., (Aramco), becomes binding. Aramco will hold the remaining interest, the companies said.

This marks the first move by the largest refiner by capacity in Asia to become a global player in oil processing after focusing its overseas expansion up to now in acquiring stakes in producing crude oil and natural gas fields.

"It will advance Sinopec's overseas operations, enhance its strategic planning of refining, and further guarantee China's energy supply security," said Su Shulin, Sinopec General Manager.

The Yanbu refinery will process 400,000 barrels a day of Arabian Heavy crude oil, a type of crude produced in Saudi Arabia, and is expected to begin operations in 2014.

The refinery will produce 90,000 barrels a day of gasoline, 263,000 barrels a day of ultra-low sulfur diesel, 6,300 metric tons a day of petroleum coke and 1,200 tons a day of sulfur, and will supply these products to both the international and domestic markets.

Sinopec is playing catchup with domestic peer PetroChina Co. (PTR), which has plowed billions of dollars into building up a refining and distribution network that includes hubs in North America, the Caribbean and Europe.

In a major deal in January, PetroChina offered around \$1 billion to British petrochemicals firm Ineos Group Holdings PLC for shares in two proposed joint ventures that would conduct crude oil refining and trading at Scotland's Grangemouth refinery and France's Lavera refinery.

Given the ongoing turmoil in the Middle East and North Africa, Sinopec's move looks much riskier than the PetroChina-Ineos deal. Saudi troops have been deployed in Bahrain, creating a potential flashpoint in a state that's strategically important to another regional rival-Iran.

Analysts are already talking of tensions escalating in the region, which calls into question the logic of any new energy investment in the Middle East.

"The present crisis may well worsen, perhaps even to the dimensions of 1973-1974, when contradictions of the Saudi-American relationship reached a breaking point as officials in Washington openly threatened the possibility of seizing Gulf oil fields or even beyond, given the absence of the Cold War framework," said Helima Croft, an analyst at Barclays Capital.

But Sinopec's deal is potentially extremely lucrative, as it enables the Chinese company to forge closer ties with Saudi Aramco, which controls the world's biggest oil reserves. Up to now, the business relationship has centered around crude trading and Aramco's investment in a Sinopec-run, 240,000-barrel-a-day refinery in China's Fujian province.

SHAMS 1 SOLAR PROJECT SECURES FINANCIAL CLOSE

Shams Power Company announced the financial close of Shams 1, one of the world's largest concentrated solar power (CSP) projects and the first of its kind in the Middle East. The US\$600 million closing marks the largest solar project transaction to date and combines financing from 10 regional and international lenders.

Demonstrating strong interest from lenders, the financing – a non-recourse 22-year door-to-door fully amortizing structure – was oversubscribed with commitments totalling more than US\$900 million. Shams 1 lenders included BNP Paribas, KfW, Mizuho, National Bank of Abu Dhabi, Natixis, Société Générale, Sumitomo Mitsui Banking Corporation, The Bank of Tokyo-Mitsubishi, Union National Bank and WestLB. BNP Paribas acted as financial advisor.

"The dynamic deal team was able to leverage knowledge across the sponsor group resulting in an innovative structuring and a ground-breaking financing for a landmark deal," said Derek Rozycki, Executive Director, Structured Finance and Capital Markets at Mubadala, the parent company of Masdar. "Going forward, we will continue to leverage our extensive expertise in international capital markets and our knowledge of the region to support these types of leading edge financing deals."

The joint venture between Masdar (60%), Total (20%) and Abengoa (20%) will develop, build, operate and maintain the plant which will be located in Madinat Zayed, approximately 120 kilometers southwest of Abu Dhabi in the United Arab Emirates (UAE). In addition to the strong solar irradiation in the area, the location was chosen to supplement ongoing efforts to develop the western region of Abu Dhabi by providing renewable power, as well as new jobs and a strengthened economy.

"With this financial close we are going one step forward toward the completion of the Middle East's largest solar power plant," said Philippe Boisseau, President, Total Gas & Power. "We are pleased to partner with Masdar and Abengoa in this

ambitious project. We are on schedule and the work is going well in Madinat Zayed."

As one of Masdar's flagship projects, Shams 1 will directly contribute toward Abu Dhabi's target of achieving 7% renewable energy power generation capacity by the year 2020.

Dr Sultan Al-Jaber, CEO of Masdar, added, "Shams 1 is a milestone project for the region and will be a core contributor to Abu Dhabi's long-term renewable energy objectives. As the first utility scale, commercial solar power project in the Middle East, Shams 1 represents the realization of the vision that the Abu Dhabi leadership has for renewable energy in the Emirate. We thank our partners for their support and continued collaboration."

Further validating the strength of the project, Shams 1 was recently awarded the "Middle East Renewables Deal of the Year 2010" by Project Finance.

Shams 1 will be one of the largest concentrated solar power plants in the world, extending over an area of 2.5 km², with a capacity of approximately 100 MW and a solar field consisting of 768 parabolic trough collectors. Construction began during Q3 2010 and is expected to be completed in approximately two years.

GE acquires Next-Generation Wind Turbine Tower Technology

GE announced the acquisition of next generation technology from Wind Tower Systems, LLC (WTS) that is expected to enable taller wind turbine towers. The need for taller, cost-efficient towers is becoming an important factor in the wind industry as blade lengths increase.

The WTS has been working on the development of the space frame tower system technology for use at wind farm sites that require hub heights of 100 meters or more. The space frame tower technology is a highly engineered and optimized structure that will handle the unique static and dynamic loads generated by wind turbines. Moreover, it also has been developing innovative ways to transport and install these taller wind turbine towers. The space frame technology will use standard flatbed trucks. Hi Jack system technology can eliminate the need for heavy lift cranes during installation. These new technologies offer the ability to cost effectively extend the tower height, which in turn enables the turbine to produce more energy.

"We see great potential in the addition of this technology to our portfolio not only for our customers but also for the wind industry as a whole," said Victor Abate, Vice President-Renewable Energy for GE Power & Water. "Taller towers are an essential complement to longer blades. Longer blades capture more energy and in turn improve return on investment for wind farm developers."

Thomas Conroy, CEO of Wind Tower Systems said, "We are delighted that the development of the company's products will be completed and commercialized by GE." He further added, "Plans are underway to install a prototype of the GE's space frame tower system technology to validate and test its design later this year with commercial availability targeted for 2012".

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Egypt's Gas Agreements: Exploitative or Necessary for Growth?

Egypt's location as a gateway between Asia, Africa and Europe and the strategic presence of the Suez Canal, in addition to substantial untapped resources, have made it a very attractive destination for international gas producers. While Egypt's government has been focused on attracting as many companies as possible to do business in the country with highly preferential terms of agreement, accusations of corruption and misuse of public funds have followed revelations about discriminatory agreements obliging Egypt to sell gas at below market price, or determining higher price levels for gas bought by the Egyptian government from foreign producers

By Kate Dannies



Business Monitor International (BMI) forecast that Egypt will account for 18.56% of African regional oil demand by 2012, while providing up to 5.67% of its supply. Meanwhile, gas production should reach 85 billion cubic meters by 2013, up from an estimated 55 billion cubic meters in 2008.

On the brink of becoming one of the world's major gas producers, Egypt faces challenges over contract terms that determine the level of revenues from gas export deals and the exact balance of interests in partnerships with foreign oil and gas companies seeking to explore and develop local resources.

As corruption probes progress following the January 25th Revolution the question remains: how should Egypt balance its image as an attractive investment destination with an energy policy that benefits Egyptian society?

Egyptian Gas Agreements

In 1989, the Egyptian government signed 35 gas exploration and development agreements under preferable contracts that would encourage foreign gas companies to build up infrastructure and pipeline networks while taking large profits, often in the form of gas and oil rather than economic revenue.

Egypt has since entered into major export deals with Spanish, Jordanian, Italian, American, French and Israeli companies as well as large-scale partnerships with foreign oil companies for exploration and production.

Today, Egypt works with more than 50 foreign oil and gas companies in exploration, excavation, and production of oil and gas locally. Major firms operating in the country include Eni, Exxonmobil, Shell, British Gas, British Petroleum and Apache.

Recent deals with BG and BP have been controversial, but the crux of the

public's complaints about how Egypt's gas agreements are structured to rest symbolically on the country's export agreement with Israel.

Public Perception

Before it was halted on March 5th due to pipeline damage, Egypt supplied about 40% of Israel's natural gas under a renewed contract signed in December 2010 that stipulates below-market prices for the gas. This agreement, operated by East Mediterranean Gas, Gasco and Israeli Partner Ampal Israeli American Corporation, is a remnant of the Camp David agreements, and widely viewed as exploitative given the far below-market prices stipulated in the contract.

These deals have not escaped controversy locally amongst activists who claim that Egypt is selling itself short by exporting gas at below market prices and by concluding deals with foreign oil ma-

jors that don't benefit Egypt as much as they could.

If such sentiments were prevalent before the January 25th Revolution, when several lawsuits challenging export deals to Israel in particular, post-revolution corruption probes have refocused attention on the validity and viability of these deals.

Indeed, recent events have shown the extent to which Egypt's Ministry of Petroleum was crippled by fraud; former minister Eng. Sameh Fahmy and other petroleum executives are currently under investigation for charges of misuse of public funds. Fahmy, along with former EGPC executive director Abdel-Alim Taha are accused of misusing billions of dollars of Egypt's petroleum and natural gas wealth.

Specific contracts have been pinpointed to illustrate the alleged abuses, including a restructuring of the government's deal

with BG, which saw the company's profit share rise to 28% from 12%, resulting in \$20 billion revenue loss. The British company has played a leading role developing Egypt's natural gas industry and is responsible for over 35% of all gas produced in Egypt.

Moreover, they are accused of giving up a gas concession in the North Alexandria field to BP, in a much-discussed deal in summer 2010 that analysts claim changed the face of the Egyptian petroleum industry with its breakthrough terms.

Breakthrough Deal

Under the terms of the deal, which amended the commercial terms for two concessions in the West Nile Delta, BP is reported to have been given full rights over production and guaranteed a higher oil-indexed price for gas produced for purchase by the government. The deal will increase profits for BP, making costly offshore exploration more commercially viable.

"The BP agreement is groundbreaking because it is structured very differently from Egypt's traditional hydrocarbon agreements," Femi Oso, an energy analyst with Wood Mackenzie told Reuters.

"Before, the Egyptians would get a share of the gas, but now they do not. BP

gets the full production," Oso is quoted as saying. "It is the first of its kind."

Is it encouragement or exploitation?

Some analysts perceived these preferential terms as the Egyptian government's way of making investment in the country as attractive as possible and unlocking development potential. But skeptics maintained that the new contract set a dangerous precedent, making Egypt less competitive than some peers and encouraging other foreign partners to renegotiate their terms.

"Egypt's upstream investment regime was already one of the more attractive, though not attractive enough to compensate for the high costs of offshore development," Samuel Ciszuk, analyst at IHS Global Insight told Interactive Investor.

However, he highlighted that the breakthrough deal between BP and the government has signaled a turnaround and could pave the way for other oil and gas companies.

"The greater investment appeal achieved by this deal will unlock Egyptian growth elsewhere. In the long run this should pay for the higher gas price the government has agreed," he is quoted as saying.

Indeed, BP maintained that the new terms were necessary to make offshore

explorations viable. BP spokesman Robert Wine told AFP that negotiations for the agreement "had been a long process. Under the previous terms it was not commercially viable for us."

While companies maintain the need for "commercial viability" the reality is that foreign oil and gas companies may have taken the hard bargaining too far, handicapping Egypt's energy self-sufficiency and sacrificing much-needed revenues that could go into developing the local petroleum sector.

Although arguably less than ideal for Egypt, until recently such deals were benefitting both the foreign oil and gas companies, and, allegedly, Ministry of Petroleum officials, who were content to benefit at the expense of Egypt's well-being. Now, there is talk of change as institutions are purged and officials called to account for their actions.

Progressive Change

As Fahmy continues to be investigated, sitting Minister Abdullah Ghorab has announced he is in negotiations with Israel and Jordan to change the pricing of the existing gas export deals. Although he has stated that all existing contracts will be honored, Ghorab has also made a commitment to supplying local demand before allowing exports to flow out of the country.

Reports of what exactly has been done to date remain fuzzy, but it seems Egypt's Ministry of Petroleum is well on its way to reforming existing deals to gain further benefit for Egypt.

Although negotiations with foreign oil and gas companies for new deal terms could prove tricky, complaints about gas export deals can be remedied by simply raising the sale prices to be on par with going market rates.

As the spotlight remains on the sector, with activists watching carefully for real change, it is clear that the general public will accept nothing less than a totally reformed energy policy for Egypt.

"The information available suggests that all the contracts relating to the export of gas should be now re-opened and re-negotiated. This is possible whatever the precise re-opening clauses state. The fact that Egypt sells at a much lower price than that at which it purchases gas is sufficiently explosive to justify re-negotiation," analyst El Amrani wrote.

"The foreign companies involved in the contracts would be unwise to oppose a re-opening. Contracts are a formal framework for a relationship. It is the relationship that matters, and it will only work to the benefit of both parties if it is continually perceived as fair by both of them," El Amrani concludes.

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Foreign Investments under public attacks

Over the last two months, the Egyptian petroleum industry has been under attack, specifically the former ministerial board, being accused of giving special incentives/privileges to foreign companies on the expenses of the Egyptian ones. On the other hand, many foreign investors condemned the old system for not fulfilling its financial commitments towards them and that many modifications, especially contracts/agreements, should be made for a more advantageous work environment

By Yomna Bassiouni

Under the theme of “Strengthen your investments. Listen to the Future”, the Egypt Oil & Gas Campaign seizes the opportunity to discuss means to answer all complaints concerning the foreign investments and draw the new road for a fruitful environment. After the January 25th Revolution, the wave of reform and development has dominated every sector in Egypt. Hence, this is the right time to be part of this change and strengthen the foreign investments in such a dynamic field.

Contracts Dilemma

Dr. Hany Elsharkawi, Dana Gas

Egypt President, wonders if the petroleum sector laws, specifically the concession law, are still valid anymore after the collapse of the Egyptian old regime and constitution.

Marwan Al-Ashaal, SiPetrol Legal Advisor answered this controversial question by confirming that all laws are on pause now. “There is a state of confusion concerning current laws, yet there are two main concerns nowadays; the production flow, drilling and commitments.”

Dana Gas Egypt President asked whether commitments should be reviewed amid

the current unrests in the country. Al-Ashaal clarified that SiPetrol did ask the top heads of EGAS to review commitments, yet the official reply SiPetrol received is that EGAS can extend the terms concerning the period of times, but no commitment review can be made.

“Bottom line, even if we bargain to amend any term in any agreement, such as gas prices for example, there is no official body whether EGPC or EGAS who can implement any amendments since there is no parliament to approve them!” added Dr. Elsharkawi.

“The Egyptian petroleum sector is really strange; the apparent structure is concession, while in fact it is a production sharing one. Worldwide, there are four determined E&P structures, which are Production Sharing Agreements, Concessions Agreements, Contracting and Mild-Contracting Agreements,” clarified Al-Ashaal. “We do need a clear petroleum law, which we currently lacks in order to have a precise scheme to follow to enforce the petroleum operations and investments in Egypt.”

“if we support the idea of having a sepa-

rate petroleum law, this law should take into consideration all kinds of challenges hindering the operations progress, such as the hassles of approvals we need to get before initiating our operations,” said Ahmed Al Shamy, Kuwait Energy Egypt Operations Manager, shedding light on the areas that fall under the Egyptian Military supervision. “Military approvals are mandatory in various concessions, without them we do not get the drilling approval.”

Al Shamy suggests that the EGPC, before initiating any bid rounds, should study what kind of approvals will be needed and handle this issue instead of making these approvals a burden on investors.

Elsharkawi pointed to the environmental associations as being another reason behind delay of operations in some areas, specifically in the Red Sea. “The Military approvals are not the sole ones required, sometimes we have to address the environmental association to receive needed official documents to start our E&P programs.” He further added that sometimes investors may even fail to get the approvals and hence the wheel of work is forced to be postponed. “There is a problem of miscommunications between the different governmental entities, such as Military Forces and EGPC.”

Al Shamy clarified that investors should not be involved in such miscommunications. “This should be the role of the EGPC.”

Talking about the solutions for the coming period of time, “instead of a general law to govern the various sectors of the petroleum industry, we should work now on the current regulations and agreements to modify as a short-term strategy to ensure the work flow,” said Eng. Tawfik Diab, PICO International Petroleum Managing Director. Evaluating the role of the Ministry of Petroleum and the EGPC, Diab believes that both institutions have a general institutional resistance towards the changes needed given Egypt’s changing profile as a mature oil producer, increasing gas projects and a capex intensive exploration country (Med). “Both features require very specific incentive and fiscal structures, such as the EOR benefits, the sharing of excess oil for mature fields to curb expenses and share hard earned rewards, and higher gas prices for costly or risky gas exploration and/or exploration projects in addition to the need for a quick recovery schemes for high risk exploration projects or tail end mature projects.”

Future Investments in Egypt

“The petroleum sector is going through critical period of time and we do need to admit that the sector is facing serious issues,” warned Diab. “as investor, I will not feel comfortable if you bring me the best minister in the world and reinforce a general petroleum law, without giving me exact and accurate moves to modify the current stagnation we are facing,” doubted Diab.

Asked about the petroleum model that should be followed in the Egyptian petroleum sector, Elsharkawi referred to the North American Petroleum Sector as one of the most successful models worldwide. “He added, “From my personal experience, although they are extremely restricted regulations related to their natural resources, yet they do not face any problems.”

One of the problems we face in Egypt is the PSA in general, which is not a really god concept, clarified the Country Manager of the UAE gas producer. “in fact, this type of agreements is a heavy burden on the foreign investor as he is required to take an excess luggage, which is the joint venture... looking back to the tax royalty regime, which was applied in Egypt

long years before this PSA, you will find out that both parties (government and investor) share almost the same profits, outcomes...etc.”

“There is much less headache in the tax royalty regime compared to the PSA,” confirmed Alsharkawi. “Forget about the cost recovery, I would prefer to review my profit and even be audited by the ministry, pay my taxes and share the rest with the ministry rather than implement the PSA model.”

Moreover, he shed light on the monopolization system imposed by the government to be the sole client/buyer of the produced gas. “The government should play the role of an

organizer and not being part of every single aspect.”

He further explained that before 2001, gas prices were linked to Brent price, but in 2001, the Ministry asked the companies to set a gas price ceiling, which has been a really bad decision. “You had to abide by this ceiling or else the Ministry will not buy your produced gas.”

Challenging petroleum progress

Asked about the current petroleum situation and the ongoing challenges affecting the sector as a whole, diab summarized the list of challenges into few factors; payments delay, lack of commitment and coordination, amendments of concessions agreements and structure of joint venture.

“As a matter of fact, some factors have been challenging our investments and such challenges are still persisting. I can list too many factors, such as delayed payments for oil and gas sold by EGPC on behalf of Contractor, lack of support by EGPC for Contractor to find alternative means to market products such as export to make up for delay in payments, lack of commitment and coordination between different Government entities (i.e. MOP and Military) in honoring existing agreements and promoting investments, the structure of joint venture that does not align interests of Government and Contractor and extraordinary employment burdens to satisfy general Government employment policies leading to redundancy and extra costs, in addition to the prolonged negotiations for Concession amendments and extensions,” explained Diab.

As a suggestion to solve some of the current barriers, Al Shamy proposed the strict implementation of a concession law that would avoid any Ministry sudden intervention or amendment of a signed concession agreement. “We do need a crystal clear law that would solve the miscommunication problem as well. As mentioned earlier, there is a lack of coordination between the Ministry of Petroleum, the environmental associations and the Military Forces,” added Al Shamy.

One of the current challenges facing the Egyptian petroleum sector is the state of market instability that followed the January 25th revolution. According to Diab, there is a lot of uncertainty in the sector, which may lead to instability if realized. “The officials of the petroleum sector have a key opportunity to maintain stability now but face several challenges, such as government does not to seek to pass the buck on national issues such as employment and the need for innovative ideas to be implemented to resolve ongoing payment issues,” clarified Diab. “Besides, there should be a clear statement that all agreements will be honored by all governmental institutions, including the Military officials.”

The Managing Director or Pico International Petroleum explained that PICO, like all other peers in Egypt, had to slow down or shift high expenditure activities “until the course of things becomes clearer and we get a better understanding of how EGPC and the Ministry are planning to tackle these issues”. As for the company’s upcoming plans, “Given that things clear up and things are back to normal we have plans to, we are planning to spend over \$300 million over the next three years in FDP’s in our current assets in addition to around \$500 million in acquisitions in Egypt during the same period.”

At the end of this round-table discussion, all investors share a common vision that investments commitments should persist in Egypt, because this is out of their responsibility towards the country and not only out of seeking profit.



Dr. Hany Elsharkawi
Dana Gas Egypt President

Bottom line, even if we bargain to amend any term in any agreement, such as gas prices for example, there is no official body whether EGPC or EGAS who can implement any amendments since there is no parliament to approve them!



Eng. Tawfik Diab
PICO International Petroleum Managing Director

The petroleum sector is going through a critical period of time and we do need to admit that the sector is facing serious issues.



Eng. Ahmed Al Shamy
Kuwait Ennergy Operations Manager

To solve some of the current barriers, there should be a strict implementation of a concession law that would avoid any Ministry sudden intervention or amendment of a signed concession agreement.



Marwan Al-Ashaal
SiPetrol Legal Advisor

The Egyptian petroleum sector is really strange; the apparent structure is concession, while in fact it is a production sharing one

Egypt is not Libya

When Muammar Gaddafi's son said that Libya is not Egypt, in one of his TV appearances after demonstrations started in Libya, he was definitely right. Egypt itself just went through a major change, but it was totally different from what is currently happening in Libya. Egypt's demonstrations were wholly white, for instance it did not seek blowing up petroleum infrastructure as in Libya. Italian group Eni SpA, which in Egypt is a major producer with more than 200,000 barrels of oil per day, commented on Libya's events "There has been a major change in Egypt; we did not lose one barrel, so a change does not necessarily mean an impact on our production"

By Sama Ezz Eldin



On the other hand, Eni, in Libya they are considered as the biggest foreign oil operator producing around 280,000 barrels of equity oil equivalent per day, after the events they said they will stop all oil production in Libya, "Producing oil from Libya will come to an end fairly soon; I am talking of day. Eni has not loaded any crude cargoes from Libya this week," Eni's Chief Executive Paolo Scaroni told reporters.

The International Energy Agency (IEA) said that it is closely monitoring the situation in Libya like it did in Egypt, but the difference that in Egypt protests focused mostly on acts of civil disobedience against the authority with no harm to the petroleum constructions. IEA reports on Libya included, "As violence has increased in Libya, oil companies have announced that they are evacuating employees and shutting down production. Eni Spa, Repsol YPF, and BP plc announced that they are temporarily suspending operations in Libya as a result of the unrest."

The world also woke up on the news of oil rises as Gaddafi bombs infrastructure. His forces struck an oil pipeline leading to Es Sider and dropped bombs on storage tanks in the Ras Lanuf oil terminal area in the eastern section of Libya that is rebel-controlled. Rebels said government forces also hit an oil pipeline leading to Sidrah. "The large explosions and enormous columns of smoke from storage tanks and other facilities in Ras Lanuf, close to the Es Sider terminal, are perhaps more than merely symbolic," Barclays Capital Oil Analysts headed by Paul Horsnell said.

Moreover, Libya's Al Jurf offshore oil field has stopped producing amid turmoil in the country, Total Chief Executive Christophe de Margerie told journalists at a media briefing, "We were one of the last producers (in Libya) because one of our fields (Al Jurf) is offshore. We were still producing at that field, but now it is stopped."

"Will the shut-in volumes go higher? The answer is yes," Societe Generale's Oil Analyst Mike Wittner said.

"It is a question of time whether oil facilities are getting targeted. And if it happens it will take months to repair damaged facilities. If the violence spread into oilfields, repair work to upstream facility even takes longer than downstream," Wittner added.

The experts are looking at the events in Libya and its influence on the country and the world. Egypt is among those countries

that were surely affected by Libya's late actions, the high prices of oil and gas specially that Egypt just witnessed a major change and managed to go through it with no damages to the petroleum facilities or personals. Eng. Abdalla Ghorab, the newly appointed Petroleum Minister, said that the production rate was not affected by the political situation in Egypt and has not changed from its normal rate of 685 thousand barrels of oil.

"The development plans were not affected also and still going as scheduled. We also expect future exploration and development of oil and gas fields."

"Foreign companies operating in Egypt have deposited plans through the current fiscal year targeting more development, exploration, production. Also strengthening operations in their concession areas to meet the local demand of energy," Ghorab told reporters.

The influence of Libya's events on Egypt may accrue in the oil prices and Egyptian labor that returned from Libya. "The events in Libya will impinge on the petroleum sector in Egypt and also the economic situation in the Middle East. Libya is one of the major oil producers in the Middle East and Africa," an official source from the ministry told Egypt Oil and Gas Newspaper.

"Many of the petroleum labor in Libya are Egyptians and they are returning after most of the oil firm left Libya. They will be considered an overload on the local economy, especially that they are not well educated and it will bad hard on them to find new jobs in such events," added the source.

Other experts looked at the influence from another side, of which that Egypt should cease the opportunity to fill the petroleum gap cause by the shut down in Libya. Saudi Arabia is already trying to rise in the picture by announcing that it's willing to fill Libya oil gap. Also the newspapers reported that Top world oil exporter Saudi Arabia is in talks with European companies affected by the disruption in Libyan supply and is willing and able to plug any gaps in supply, mainly with Spanish and Italian oil firms which were hit by the Libyan shutdowns. "We are in active talks with European refineries to find out what quality they want and we are ready to ship it as soon as they need it. This is the way buyers and sellers work. We need to find out what they want before we take any action," a senior Saudi source told Reuters.

Amr Kamal Hamouda, Head of the Fustat Centre for Studies and an oil expert, saw that

the event in Libya will surely affect the Egyptian oil sector as Egypt is part of the Middle East world. "The difference between Egypt and Libya that our demonstrations weren't about damaging petroleum infrastructure."

"The Egyptian people were smart not to harm their own economy and they know how the foreign companies would react if the same happen in Egypt. Now we must focus on offering our refineries to European companies to bring their crude oil and we start to be their safe direction."

"Lately we heard a lot of news about refineries being burned and bombed in Libya and without doubt the foreign companies will look for safer grounds," said Hamouda.

The official source agrees with Hamouda that Egypt should be attracting foreign companies to the local market throw showing the safety and stability of the country, "Egypt should act like Qatar is now rising to help Japan to cover its need of energy after the nuclear plants were shut down due to the horrible earthquake."

Recently, Reuters reported that Qatar offered to provide natural gas supplies to Japan, as their main source of energy is being shut down.

Hamouda also commented on the current petroleum situation in Egypt, "After the 25th of January events, the petroleum sector should work on its deficiencies. The improvement should include the exploration, contracts, currency issues, and the waste of public money."

"Paying the foreign partner its share and the old debts is main factor in attracting more investments into the Egyptian market. Setting a clear work agenda and targets will show the international companies how stable the Egyptian petroleum sector."

"Fixing the old exporting marinas, losing all the old obstacles that used to stand in the road of development. By conducting development work in those marinas, only able to receive 30,000 tones capacity we will be able to receive bigger oil shipments, with a capacity of 50,000 tones, and would ease the way for more foreign companies to operate from the Egyptian marinas," Hamouda advices.

Consequently, both sources find, among the development needed in the petroleum sector, amending the contracts with the Israeli side. "Egypt needs to set some adjustments to the gas agreement with Israel. Experts expect that the Egyptian side will only be able to export 25% of the original deal, due to the low price that Israel used to pay and to the high

local demand," Hamouda explained.

Whilst, the ministry source said that his wishes go for stopping the gas supply to Israel. "Egypt lost millions in these poor gas deals with EMG and Israel, those millions would have helped the country in the hard economic times after the 25th of January."

It is to be mentioned that the East Mediterranean Gas (EMG) is owned by Egyptian businessman Hussain Salem, Egypt Natural Gas Co (EGAS), Thailand's PTT, American businessman Sam Zell, Ampal-American and Israel's Merhav. EMG supplies 45 percent of the gas needs of Israel's electric utility.

Hamouda expects that Egypt is going to face the same electricity problem from last year's summer, "Last summer we suffered from major power cuts and back then we had enough money to buy fuel oil to supply the power stations. This summer we are suffering from economical problems and we don't have enough currency to replace the exported gas."

"We need to relook into our natural gas exports and see if we can first meet our local demand then start supplying outsiders."

"The January 25th came with major changes, but it kept itself white with no damages to the country's petroleum infrastructure. We need to use this into having a better look for the future of our oil and gas exports, sign better exports deals, and attract more foreign companies into the market with the stability and the safety of the petroleum operation in Egypt," Hamouda indicated.

As this article being written, news agencies reported that tribesmen prevented technicians from repairing an oil pipeline in Yemen's central Maarib province that was damaged by explosives earlier. Yemen, which borders the world's top oil exporter Saudi Arabia, has been hit by weeks of increasingly violent unrest against its President. They also attacked pipelines that ferry crude from Maarib, east of the capital Sanaa, to the Red Sea coast.

The whole world is watching and monitoring the changes in the Middle East and till now, Egypt is succeeding to show responsibility towards the interests of its own and the foreign operating companies on its land, as most of these companies announced that their operations were not affected and they remain in Egypt with more future plans. Stability and safety are two major demands for any international company that operates in the Middle East, and Egypt was able to provide both factors as it is expected from the leader of the Arab world.

Deepwater Surveys Offshore Nile Delta

By Fugro Egypt

Until 2000, most offshore exploration activity in Egypt was focused on the shallow waters of the Gulf of Suez.

Since then, the industry's focus has gradually switched to the Mediterranean Sea and the search for natural gas. Discoveries have stimulated investment and activity has grown rapidly.

as Fugro Oceansismica, who provide multi-channel geophysical seismic services, Fugro Alluvial Offshore Limited and Fugro Engineers who provide geotechnical services and Fugro Survey Limited who provide environmental services.

The Fugro Navigator has become a platform from which a wide range of Fugro's specialist survey services are now delivered to the Egyptian oil and gas market.

Following a recent upgrade and addition of DP capability the Navigator was ready for a new challenge: for the first time, the vessel was to undertake a pre-engineering survey with an ROV.

High resolution multibeam echo-sounder and geophysical data were needed for design work of for 200 Kms km of subsea flowlines and several manifolds in water depths from 300 to 700 m, offshore Nile Delta, with its soft unstable soils and severe gradients.

The survey also included visual inspection of existing subsea production facilities with the ROV.

Project Preparation

A survey skid for Fugro SAE's Panther Plus ROV was designed and fabricated and then careful selection of survey systems was made through extensive testing, initially in a test tank, and then during offshore trials.

Eventually, an R2Sonic 2024 multibeam echo-sounder and an Edgetech 2400 combined side scan and chirp were selected as the main sensors in addition to ancillary equipment such as doppler velocity log, motion sensor and bathymetry systems.

The weeks spent preparing the survey equipment proved worthwhile as the multibeam and chirp profiler data sets acquired during the project were excellent with little or no acoustic or electrical interference observed, a common problem when operating geophysical equipment on ROVs.

In particular the MBES data was able to pick out features such as cables and pockmarks that would otherwise have gone undetected by sidescan systems.

The sidescan data was compromised by the need to operate the ROV at height above seabed of 40m in order that the multi-beam system would cover a 120m wide corridor.

Therefore, the sidescan data from the towed sidescan system, another Edgetech 2400 system and accurately positioned by the vessel's

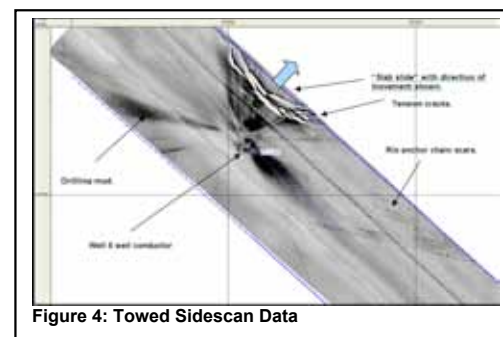


Figure 4: Towed Sidescan Data

HiPAP 500 USBL system, was used for mapping of seabed features.

But the 500KHz sidescan data could not match that of the multi-beam, as these images indicate.

The multibeam data shows telecoms cables and control umbilicals running across the site that could not be identified on by either of the sidescan data sets.

The multi-beam data also indicates gradients of over 30° across critical slopes where hull mounted data suggested maximum slopes of 12-15°, critical information for route selection and design.

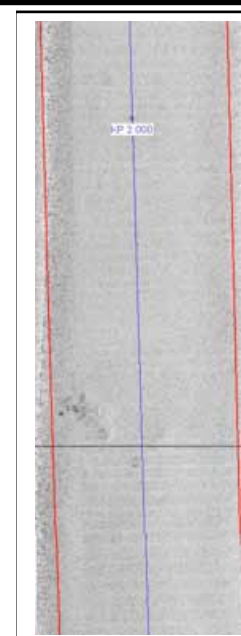


Figure 6: 500 KHz Sidescan Data

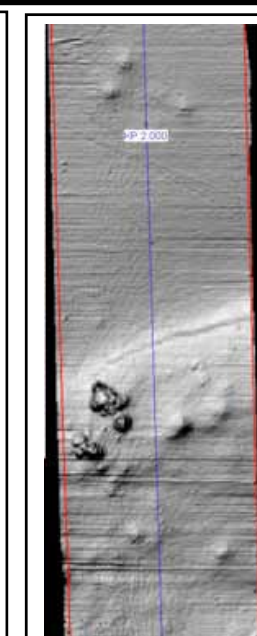


Figure 5: Multi-beam Data

Data was processed and detailed field reporting undertaken onboard to allow the client to vary the work scope.

On completion of the geophysical workscope, the survey skid was removed from the ROV, and the ROV then undertook visual inspections of existing facilities such as flowlines and drilling trees.

Final reporting was undertaken in Cairo where all reporting and processing deadlines adhered to, allowing the client to start the design work on time.



Figure 1: Fugro Navigator

idly, moving further offshore into deep water.

This increase in activity has allowed Fugro SAE to expand rapidly in recent years and, in 2008, Fugro SAE acquired its own dedicated survey vessel, M/V Fugro Navigator.

Equipped with industry-leading survey systems, the Navigator has since played a notable role in supporting exploration and development down to water depths beyond of 1000 m.

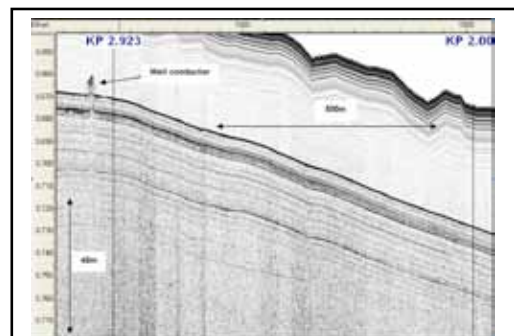


Figure 2: Chirp Data

Projects undertaken include geohazard site surveys for mobile jack-up and semi-submersible drilling rig operations, pre-engineering surveys for platforms, pipelines and subsea fields, as well as environmental baseline and metocean surveys.

The surveys are often 'multi-discipline' requiring certain specialised services provided by sister operating companies, such

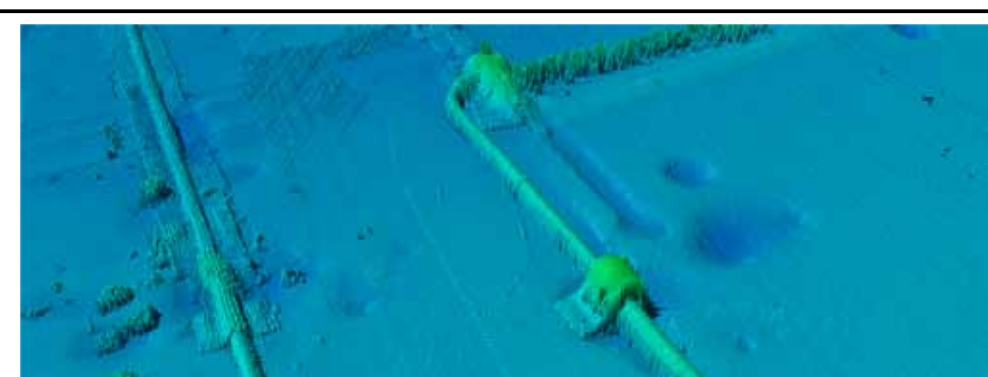


Figure 3: Multi-Beam Data showing Flowlines and Mattresses



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World's largest gas find in Israel

The latest achievements hit by Noble Energy offshore Israel have attracted world's attention towards the probable gas potentials in Israel, which could turn it to a gas exporter instead of a current importer

Prepared by Mostafa Mabrouk, Vice Chairman Assistant For Economic Affairs, Ganope



Two years ago (January 2009), Ratio Oil Exploration LP, an energy firm, was worth about half a million dollars, while today, Ratio's market capitalization approaches \$1 billion. The rally at Ratio is mainly due to the company's 15% stake in a giant offshore gas field called Leviathan, operated by Houston-based Noble Energy Inc., which made a natural gas discovery at the Tamar prospect in the Matan License, offshore Israel. The Atwood Hunter semisubmersible drilled the Tamar No. 1 well in 5,500 ft. of water to 16,076 ft., where it encountered more than 460 ft. of net pay in three high-quality reservoirs. Initial testing yielded a flow rate of 30 MMcfd of natural gas, but was limited by testing equipment available on the rig. Performance modeling indicated the well could achieve a production rate of over 150 MMcfd.

Noble confirmed its estimates that the field contains 16 trillion cubic feet of gas -- making it the world's biggest deep water gas find in a decade, with enough reserves to supply Israel's gas needs for 100 years. After analysis of all the post-drill and production test data, the estimated gross means resource potential of Tamar was increased to 5 Tcf. The Atwood Hunter also drilled the Tamar-2 appraisal, which also encountered gas, and the Dalit-1 well, also offshore Israel in the Michal License, which encountered gas. Noble Energy operates the well with a 36% working interest with partners Isramco Negev 2 with 28.75%, Delek Drilling 15.625%, Avner Oil Exploration 15.625%, and Dor Gas Exploration 4%. Noble and its partners think the field could hold enough gas to transform Israel, a country precariously dependent on others for energy, into a net-energy exporter. Such a transformation could potentially alter the geopolitical balance of the Middle East, giving Israel a new economic advantage over its neighbors. The energy index of the Tel Aviv Stock Exchange rose 1,700% in the past year. In recent months, energy stocks accounted for about a quarter of trading activity on the exchange, once mostly the domain of real-estate companies. It is also shaken regional relations. Lebanese politicians are trying to lure companies to explore their nearby waters, while the two countries-- still technically at war -- have threatened each other over offshore resources. A minor diplomatic furor has erupted between Israel and the U.S., which is lobbying hard against Israel's plans to raise taxes on energy companies, including Noble. Leviathan sits some 84 miles off Israel's northern coast and more than three miles beneath the Mediterranean's seabed. Noble began drilling its first exploratory well in the field in October. Even before Leviathan, a series of finds had put the so-called Levant Basin, stretching offshore in the Mediterranean, on the international energy map. In March, the U.S. Geological Survey released its first assessment of the zone, estimating it contained 1.7 billion barrels of oil and 122 trillion cubic feet of gas. That is equal to half the proven gas reserves of the U.S. Except for the occasional small oil and gas find in its early years, Israel has searched in vain for energy. Big Oil shied away, worried about antagonizing Arab and Iranian partners. A hardy group of Israeli explorers kept at it anyway. Ratio was one of them. In the early 1990s, Ratio's chief executive, formed the company to search for oil onshore.

By then, companies were also venturing offshore. In 1998, another Israeli energy firm, Delek Group Ltd., persuaded Noble, one of the first independents to operate offshore in the Gulf of Mexico, to start looking in Israel's slice of the Mediterranean. Noble drilled its first Israeli well in 1999, and quickly scored two modest finds. Financial firms and local businessmen with little energy experience began snapping up offshore leases from the government. Armed with promising seismic data, the pair then convinced Noble and Delek to buy into their lease. They sold a 45% stake to Delek and a 40% stake to Noble.

In January 2009, Noble made a landmark discovery. The Tamar field contained premium quality gas -- almost pure methane. Noble

had expected to find three trillion cubic feet at the most. The reservoir ended up containing nearly three times. Two months later, the company found a second, smaller deposit of gas at the nearby Dalit field. Then, last summer, Noble dropped a bombshell. The Leviathan field appeared to be a supergiant, according to three-dimensional seismic studies, with almost twice the gas reserves of Tamar. Ratio's shares soared, and so did those of other energy firms in Tel Aviv. The rally set off alarm bells among regulators. Officials at the Israeli Securities Authority declined to comment on specific cases, but said they were concerned about an ongoing pattern in which small energy companies publish vague or misleading reports that cause their share prices to skyrocket, and often to plummet later. In September, the ISA raided the offices of two energy-exploration firms related to probes into trading irregularities.

Amid the stock-market frenzy, the Israeli government started considering changing its 1950s-era energy royalties and tax regime, to boost the government's take of any gas find. Earlier this year, Finance Minister Yuval Steinitz said he was considering changing terms retroactively -- meaning the government could extract better terms on previously assigned leases. Noble and Israeli oil executives went on the offensive. The company enlisted high-level negotiators, including the U.S. State Department and former President Bill Clinton, to lobby against any change.

Despite these problems, Israel's gas find is making waves abroad. Lebanon has staked out its own claim to offshore gas. In last August, lawmakers in Beirut rushed the country's first oil-exploration law through its normally snarled parliament.

Lebanon's Oil Minister, an ally of the Shiite militant group Hezbollah, said in late October that his ministry hopes to start auctioning off exploration rights by 2012. Iran, Israel's arch-nemesis and Hezbollah's chief backer, has also weighed in. Tehran's Ambassador to Lebanon claimed that three-quarters of the Leviathan field actually belongs to Lebanon. The Israeli infrastructure minister denied the claim and warned Lebanon that Israel would not hesitate to use force to protect its mineral rights. Meanwhile, the poster child of the boom, Ratio, has seen its star fade after authorities launched a criminal probe of the company's relationship with an Israeli wanted by the U.S. on racketeering and conspiracy charges. The Israeli investigation is ongoing and charges have not been filed.

Large gas reserves confirmed at Israel's Leviathan deposit

Test drilling at Israel's Leviathan gas deposit in the Mediterranean Sea has confirmed large gas reserves there, which allow Israel to begin exporting gas, said the project operator, U.S. Company Noble Energy. Leviathan, located to the west of the Mediterranean port of Haifa, contains 450 billion cubic meters of gas, said the company quoting the results of test drilling. Additional drilling will be carried out at the gas field to specify the figure. The discovery is believed to assure the country's energy independence and is likely to put an end to Russia's plans to export natural gas to Israel. Gas extraction at Leviathan, which is 6.5 times the size of Tel Aviv, is expected to provide Israel with some \$300 billion over the life of the field -- one-and-a-half times the national GDP. Noble Energy said there was a 50% chance that test drilling would confirm Leviathan's estimated gas deposits. In 2009, a U.S.-Israeli consortium discovered another large gas deposit 60 miles off the coast of Haifa, called Tamar. The Leviathan field is estimated to be twice that size. Analysts say that altogether, the basin in the Eastern Mediterranean to which those fields belong could contain an amount of gas equivalent to one-fifth of U.S. natural gas reserves.

Leviathan worth \$4.8B per year to Israel

Citi analyst David Lubin said that the Leviathan natural gas reserve, which may also include oil, is worth as much as \$4.8 billion

per year to Israel's economy. Tests have shown that the Leviathan structure contains 16 Tcf (450 billion cubic meters) of natural gas. Lubin said that Leviathan appears to be worth the equivalent of 2.97 billion barrels of oil, or 74.25 million barrels per year for 40 years, or 203,000 barrels per day. Using an oil-equivalent price of \$65 per barrel (which is a big discount on the price of oil to account for the difference between the price of gas and oil), his valuation would reach \$4.8 billion, or 2.2% of 2010 GDP. Lubin's earlier estimate was for an impact worth of 1% of GDP. Since then, he explained, two things happened to change the figure -- the price of oil has jumped, and there is now much more clarity about the size of Israel's reserves. The analyst took pains to point out that there are some uncertainties about Israel's gas situation, such as whether the gas will be exported or used to reduce Israel's energy imports, the final tax and royalties arrangement now that the Sheshinski recommendations are headed to the Knesset, the extent of infrastructure costs, and how any state revenues will be used (to reduce the debt, as the Treasury wants, or to set up a Sovereign Wealth Fund, as the Bank of Israel suggests). All in all, Lubin clarified that it is likely good news for Israel's economy and balance of payments -- which should support the shekel in the long term.

Surplus of fuel for Israel

After making a huge natural gas discovery off the coast of Israel, Noble Energy now faces a different challenge: figuring out what to do with it. With Israel suddenly awash in gas, the Houston company believes the clear answer is to export surplus gas to Europe or other parts of Asia, where it can fetch better prices. Yet, none of the options the company is studying is simple and all would require billions more in investment. The most likely scenario is building liquefied natural gas capacity in Israel, Noble CEO Charles Davidson said in an interview. Production from the company's newly announced Leviathan gas field could easily support two "mega-train" plants to convert natural gas to liquid and prepare it for shipment to global ports, he said. But if it goes that route, Noble would likely seek partners to help shoulder the multibillion-dollar project.

Another export option would be a deep-water pipeline, but that comes with more political risk, since it would require the blessing of neighbor nations, not all friendly with Israel. Given the size of the discovery, it may require LNG plants and a pipeline, Davidson said. On December 29th, the company found an estimated 16 Tcf of natural gas at the Leviathan field in the Mediterranean off Israel's coast. Together with Noble's Tamar field, discovered in 2009 and estimated to hold 8.5 Tcf of gas, Israel now faces potentially huge natural gas surpluses. The discoveries put Israel on the global energy map long dominated by oil-rich Arab nations in the Middle East. And the finds are a huge boost for Noble, an independent oil and gas company in business for nearly 80 years.

A U.S. Geological Survey study last year said the Eastern Mediterranean's Levant Basin could hold 1.7 billion barrels of oil and 122 trillion cubic feet of gas. Discoveries there hold the potential to transform Israel's economy and influence in the region and to open a new front in the global hunt for fossil fuels. But, Israel's recent plans to nearly double the tax rate on oil and natural gas production could make other companies cautious about rushing in.

Noble is still trying to come to terms with Israeli officials about how Leviathan should be treated under proposed rules that could boost the government's take to 50% or more. Davidson said Israel has shown some willingness to ease tax requirements on fields discovered earlier, like Tamar. Higher taxes would not change Noble's bullish outlook toward oil and gas production in Israel but could mean that marginal projects do not go forward, he said.

Gas potentials outline the Egyptian scheme

Egypt is a rapidly growing natural gas producer. The Suez Canal and Sumed Pipeline are strategic routes for Persian Gulf oil shipments, making Egypt an important transit corridor for world oil markets.

Prepared by Mostafa Mabrouk, Vice Chairman Assistant For Economic Affairs, Ganope

Hydrocarbons play a sizeable role in Egypt's economy both from oil and natural gas production and also in terms of revenues from the Suez Canal, an important transit point for oil shipments out of the Persian Gulf. Total oil production, however, has declined since the country's 1996 peak of close to 935,000 bbl/d to current levels of about 660,000 bbl/d. Egypt's consumption is slightly higher than production and the country has begun to rely on a small volume of imports to meet domestic demand. Egypt also has the largest oil-refining sector in Africa and since refining capacity now exceeds domestic demand, some non-Egyptian crude are currently imported for processing and re-export.

Decreases in oil production have been offset by the rapid development of the natural gas sector for both domestic consumption and export. Over the past decade, Egypt has become a significant natural gas producer and a strategic source for European natural gas imports. Egypt currently has a pipeline network for exports to Eastern Mediterranean countries in addition to liquefied natural gas exports to Europe, Asia, and the Americas. However, increasing domestic demand for natural gas has led the government to stall natural gas export expansion plans.

Crude oil declines

According to the Oil and Gas Journal January 2011 estimate, Egypt has proven oil reserves stand at 4.4 billion barrels, an increase from 2010 reserve estimates of 3.7 billion barrels. In 2010, Egypt's total oil production averaged 660,000 (bbl/d), of which approximately 540,000 bbl/d was crude oil. Despite new discoveries and enhanced oil recovery techniques at mature fields, crude oil production continues its decline. At the same time, new natural gas field production has led to increases in the production of natural gas liquids and lease condensates which have offset some of the declines in total oil liquids production. Oil consumption is estimated to be close to 710,000 bbl/d, slightly higher than production. Oil imports are expected to continue with some refined product exports in the short-term, but are still contingent on domestic demand growth. The country did register a small volume of net oil imports in 2010. These imports are, in part, the result of Egypt's refining capacity being larger than oil production.

Domestic demand for petroleum products continues to grow. The government had been planning to reduce demand growth by gradually lifting subsidized prices and targeting subsidies more effectively. This is a politically sensitive issue that will be difficult to fully implement. The increased use of compressed natural gas as a fuel for motor vehicles is one trend that may aid government efforts in curbing demand, but natural gas is also subsidized and increasing consumption is beginning to affect natural gas exports.

Egyptian oil production comes from five main areas; primarily the Gulf of Suez and the Nile Delta in addition to the Western Desert, the Eastern Desert, and the Mediterranean Sea. Most Egyptian production is derived from mature, relatively small fields that are connected to larger regional production systems. Overall production is in decline, particularly from the older fields in the Gulf of Suez. However, some declines have been offset by small yet commercially viable discoveries in all producing areas.

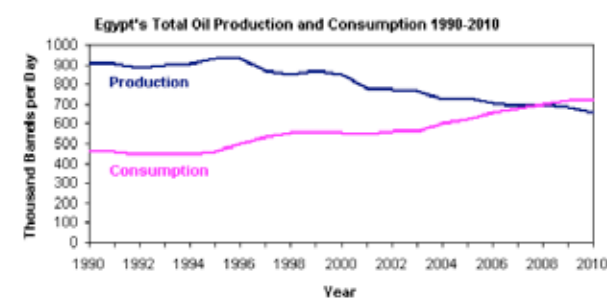
Natural gas potentials

Egypt's natural gas sector is expanding rapidly with production quadrupling between 1998 and 2009. According to the Oil and Gas Journal, Egypt's estimated proven gas reserves stand at 77 trillion cubic feet an increase from 2010 estimates of 58.5 Tcf and the third highest in Africa after Nigeria (187 Tcf) and Algeria (160 Tcf). In 2009, Egypt produced roughly 2.3 Tcf and consumed 1.6 Tcf. With the ongoing expansion of the Arab Gas Pipeline, and LNG facilities, Egypt will continue to be an important supplier of natural gas to Europe and the Mediterranean region.

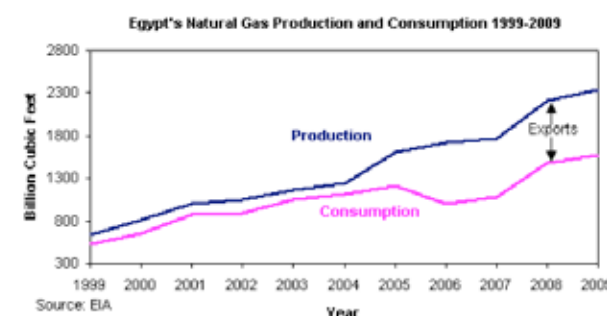
Exploration and production activities in Egypt's natural gas sector continue to grow. While there have been marked decreases in the production of natural gas associated with oil extraction, new finds of non-associated gas fields combined with growing domestic demand and export capacity, are increasing interest in the Egyptian natural gas sector. Most industry analysts place Egypt's natural gas production on an upward trend in the short- and medium-term despite the existing limitations to the sector's growth. To promote exploration in the more expensive deep water offshore,

the Egyptian government revised pricing policies by agreeing to pay more for natural gas produced in these areas, assuring continued international interest in developing these potential resources. Over 80 % of Egypt's natural gas reserves and 70 % of production is in the Mediterranean and Nile Delta but exploration and production continue in all major hydrocarbon rich areas including the Western Desert.

Egypt began exporting natural gas in the mid-2000s with the completion of the Arab Gas Pipeline (AGP) in 2004 and the start-up of the first three LNG trains at Damietta in 2005. In 2009, Egypt exported close to 650 billion cubic feet of natural gas, around 70 % of which was exported in the form of LNG and the



Source: EIA



Source: EIA

remaining 30 % via pipelines. Egyptian pipeline exports travel through the Arab Gas Pipeline (AGP) that provides gas to Lebanon, Jordan and Syria with further additions being planned. The Arish-Ashkelon pipeline addition, which branches away from the AGP in the Sinai Peninsula and connects to Ashkelon, Israel, began operations in 2008. Domestic pressure over contracts, pricing for exports to Israel, and technical problems caused a few interruptions but exports resumed in 2009.

Strategic routes: Suez Canal & SUMED

Year-to-date through November of 2010, petroleum (both crude oil and refined products) as well as liquefied natural gas (LNG) accounted for 13% and 11% of Suez cargos, measured by cargo tonnage, respectively. Total petroleum transit volume was close to 2 million bbl/d, or just below five % of seaborne oil trade in 2010.

Almost 16,500 ships transited the Suez Canal from January through November 2010, of which about 20% were petroleum tankers and 5% were LNG tankers. With only 1,000 feet at its narrowest point, the Canal is unable to handle the VLCC (Very Large Crude Carriers) and ULCC (Ultra Large Crude Carriers) class crude oil tankers. The Suez Canal Authority is continuing enhancement and enlargement projects on the canal, and extended the depth to 66 ft in 2010 to allow over 60 % of all tankers to use the Canal. Closure of the Suez Canal and the SUMED Pipeline would divert oil tankers around the southern tip of Africa, the Cape of Good Hope, adding approximately 6,000 miles to transit, increasing both costs and shipping time.

On the other hand, the 200-mile long SUMED Pipeline, or Suez-Mediterranean Pipeline provides an alternative to the Suez Canal for those cargos too large to transit the Canal (laden VLCC's and larger). The pipeline has a capacity of 2.3 million bbl/d and flows north from Ain Sukhna, on the Red Sea coast to Sidi Kerir on the Mediterranean. The SUMED is owned by Arab Petroleum Pipeline Co., a joint venture between the EGPC, Saudi Aramco, Abu Dhabi's National Oil Company, and Kuwaiti companies. The majority of crude oil flows transiting the Canal travel northbound, towards markets in the Mediterranean and North America. Northbound canal flows averaged approximately 428,000 bbl/d in 2010.

The SUMED pipeline accounted for 1.15 million bbl/d of crude oil flows along the route over the same period. Combined, these two transit points were responsible for over 1.5 million bbl/d of crude oil flows into the Mediterranean, with an additional 307,000 bbl/d travelling southbound through the Canal. Northbound crude transit represented a decline from 2008 when 940,000 bbl/d of oil transited northbound through the Canal and an additional 2.1 million travelled through the SUMED to the Mediterranean.

Total oil and gas products

Total oil flows from the Suez Canal declined from 2008 levels of over 2.4 million bbl/d in 2008 to just under 2 million bbl/d on average in 2010. Flows through the SUMED experienced a much steeper drop from approximately 2.1 million bbl/d to 1.1 million bbl/d over the same period. The year-on-year difference reflects the collapse in world oil market demand that began in the fourth quarter of 2008, which was then followed by OPEC production, cuts (primarily from the Persian Gulf) causing a sharp fall in regional oil trade starting in January 2009. Drops in transit also illustrate the changing dynamics of international oil markets where Asian demand is increasing at a higher rate than European and American markets, while West African crude production is meeting a greater share of the latter's demand. At the same time, piracy and security concerns around the Horn of Africa have led some exporters to travel the extra distance around South Africa to reach western markets.

Unlike oil, LNG transit through the Suez Canal has been on the rise since 2008, with the number of tankers increasing from approximately 430 to 760, and volumes of LNG traveling northbound (laden tankers) increasing more than four-fold. Southbound LNG transit originates in Algeria and Egypt, destined for Asian markets while northbound transit is mostly from Qatar and Oman, destined for European and North American markets. The rapid growth in LNG flows over the period represents the startup of five LNG trains in Qatar in 2009-2010. The only alternate route for LNG tankers would be around Africa as there is no pipeline infrastructure to offset any Suez Canal disruptions. Countries such as the United Kingdom and Italy received more than half of their total LNG imports via the Suez Canal in 2009 while over 90 % of Belgium's LNG imports transited through the canal.

Proven Oil Reserves (January 1, 2011)	4.4 billion barrels (Oil & Gas Journal)
Oil Production (2010)	660 thousand bbl/d
Oil Consumption (2010)	710 thousand barrels per day
Refining Capacity (2009)	975,000 bbl/d (OGJ and APS Review)
Proven N. Gas Reserves (January 1, 2011)	77.2 trillion cubic feet (Oil & Gas Journal)
Natural Gas Production (2009)	2.21 trillion cubic feet
Natural Gas Consumption (2009)	1.57 trillion cubic feet
Recoverable Coal Reserves (2009)	23.1 million short tons (World Energy Council)
Coal Production (2009)	0.03 million short tons
Coal Consumption (2009)	1.39 million short tons
Electricity Installed Capacity (2008)	23.4 gigawatts
Electricity Generation (2008)	124 billion kilowatt hours
Electricity Consumption (2008)	109 billion kilowatt hours
Total Energy Consumption (2008)	3.2 quadrillion Btus
Total Per Capita Energy Consumption (2008)	41.0 million Btus
Energy Intensity (2008)	7,681 Btu per \$2005-PPP**

Oil and gas agreements over different Jurisdictions

Hydrocarbons and ownership of natural resources in general have played a principal role in classifying civilizations throughout the history of man and especially over the past six decades in the whole world. Such role has changed the political and economic map of the world and has also set the aims and poles of power. The history of mankind has also evolved and developed laws and rules to preserve the treasures and natural resources of every nation within its geographical and political borders.

By Marwan Al Ashaal, Attorney at Law



Within this context, the below brief study aims at presenting the developments made to legalize the use of natural resources with focus on hydrocarbons. The exploration and exploitation of oil and gas in general is one of the forms of using the natural resources of a state. In order to regulate such usage, most of the countries have developed different methods to achieve the best and optimum utilization. The 1907 Hague Convention for usage of oil and gas resources has set the initiative for the general rules for usage and ownership of hydrocarbons. The daily rapid market standards, technologies and changes in the industry made the initial idea develop and take more than one shape. States usually chose the methods of contracting with investors in natural resources “Host Government Agreements” based on a few factors mainly; the nature of Jurisdiction (Common Law, Civil Law or Islamic Shari’a), which would subsequently define the nature of ownership of natural resources. Such variances in application of methods of contracting may vary, yet would all capitalize on a unique aim, which strives to reach the best transfer of knowledge and optimum utilization of natural resources. Furthermore, the variation of methods of contracting usually considers the political and financial structure of states, with which the type of agreements for foreign investments in the oil and gas business started evolving to become a strong industry.

There are main parameters that need to be addressed to reserve the balance of the agreements and maintain the aim of contracting through the thorough understanding of the general structure for ownership of minerals:

A- Under the Common Law regimes

In many common law jurisdictions, the government owns all/a substantial portion of the subsurface mineral rights. Statutory regimes govern ownership rules, but where the statute is silent, courts will interpret and apply property law principles developed in the common law.

However, the oil and gas is “fugacious” (migratory) in nature, the quantities are unknown. There are three theories of ownership of oil and gas in place:

- 1- “Texas” theory: ownership of oil and gas in situ, subject to loss by migration due to rule of capture
- 2- “Oklahoma” theory: no ownership in situ, but title acquired upon production
- 3- “Nonownership” theory: owner of mineral right has only a license to capture, with ownership acquired upon capture.

The distinction between theories is significant only in relation to remedies for drainage. Common law has generated a complicated mix of case law, statutes and policies and principles that are applied in the absence of case law & statutes. Legislatures are increasingly seeking to codify these principles.

B- Under the Civil Law regimes

The applicable codes govern ownership of the mineral rights. Initial principles of Roman law provided that private property included ownership to center of the earth and to the sky. These concepts codified but most states have reserved subsurface rights to the state. No question exists regarding ownership of the oil & gas when the entire subsurface is owned by the state. The rights to develop granted by the state are typically by license.

Civil law courts are tending to have regard to precedent to address the fact that our complex world cannot easily be defined in a fixed civil code. So the differences between two approaches to the law are blurring.

C- Under Islamic Shari’a regimes

The Qur’an allows for private ownership of property, subject to: Rights of others and Public interest. Principles of ownership of minerals are not consistent among the different schools: Hanafi (minerals ownership follows land ownership), Shafie (hidden mineral ownership follows land, but unhidden minerals are not owned) and Maliki (all natural resources are state owned).

Where a mine is part of the state’s domain, the sovereign has Iqta, the right of the discretion to grant an exclusive concession, the royalty payable; the land may not be kept idle. Originally the agricultural grants and the principle is now taken to apply to mineral grants such as valid agricultural analogies exist for concessions, and production sharing contracts (share cropping). The taxation in Islamic Law mainly capitalizes on Zakat taxation at fixed rates. Yet the ruler may impose additional taxes, so long as it is based on the general rules of “equity and justice”.

However, oil and gas agreements have generally developed in common law jurisdictions. Civil law regimes lacked the concepts to address issues related to porous rock and fugacious substances. Many civil law regimes have therefore imported and codified concepts of oil and gas ownership from common law where these activities first occurred. But interesting issues still arise at the interfaces between common law and civil law jurisdictions (ie. UK/Norway, US/Mexico).

The five types of HGCs (Host Government Contracts) recognized internationally are:

- 1- Concession Agreements (60 countries have adopted)
- 2- Joint Venture Agreements (20 countries have adopted)
- 3- Production Sharing Agreements (41 countries have adopted)
- 4- Service Contract Agreements (4 countries have adopted)
- 5- The collateral form is a Hybrid type (16 countries have adopted)

Concession Agreements

Also known as permit, lease or license; The “equity” or “royalty & tax” structure is amongst the oldest & most widely used in UK, US, Norway, Thailand, Australia. The concessions holder of concession receives all of the oil & gas production, subject to obligation to pay royalties & taxes. The State generally does not receive oil production in excess of that which it purchases for domestic supply requirement. Export right to production is often given which provides for the maximum control to IOC (International Oil Companies).

Joint Venture Agreements (JV)

It is not really a form of petroleum grant, a JV involves participation by another company, typically a national oil company (NOC) coownership structure akin to “partnership” applies arises through nationalization, participation requirements of a concession or other grant JV may be incorporated or unincorporated. NOC pays its share of expenditures, although it may be carried through the exploration and development phase. NOC and IOC each receive a share of production in proportion to their equity contributions. IOC pays royalty income tax. The Joint venture creates the economic incentives of concession by giving IOC an equity stake but provides control to the NOC through coownership Structure.

Production Sharing Agreement (PSC)

The State delegates exploration and development rights to Competent Authority (possibly a national oil company). The CA enters into a PSC with IOC where IOC, acting as Contractor, finances and conducts exploration and development. If such activities are successful, IOC will recover its costs and earn a profit

by receiving a share of production Costs which are recovered from “Cost Recovery Oil” which is generally limited to a fixed percentage of production. The production not used for cost recovery is called Profit Oil. Profit Oil is shared between the State and IOC on either a fixed ration or variable share based on production volumes. However, a “pure” PSC involves no income tax or royalties; but in many cases, income tax still applies; royalty sometimes apply significant control to IOC, but NOC has contractual controls Indonesia, Malaysia, Libya, Egypt, China & others use PSCs.

Service Contract Agreements

IOC pays all exploration and development costs and recovers these expenditures through a discounted crude purchase price, cash payments, or productions take. State retains entire production upside, although it may grant a negotiated sliding share of oil. Produced service fee generally is not affected by the price of the produced oil & gas. Performance incentives to IOCs exist by encouraging higher production, sometimes with additional fees at higher production thresholds. Performance incentive also exists to reduce operating costs, and sometimes capital costs, most suitable for riskfree operations, less relevant to exploration. IOCs are generally subject to income tax. IOCs generally dislike being a service Contractor to the State. Thus, this form of contract is infrequently used. Limited to Mexico, Iran, Oman; formerly used in Venezuela; proposed for Kuwait.

Hybrid

“Hybrid” Host Government Contracts; some states “mix and match” different features of the four types of Host Government Contracts to create new “blended” flavors, these are referred to as “hybrid” HGCs. The most common is to add a “state participation” feature to a host government contract host. Governments are increasingly introducing hybrids of these structures. These involve combinations of royalty, tax, JV participation, cost oil/profit oil shares and fees. The efforts to develop a world model host government agreement have foundered because structures are becoming more diverse. Host governments usually seek structures that suit their particular needs. IOCs are not necessarily prepared to accept similar fiscal terms in different countries.

In order to determine the best or preferred type of host government contracts, we need to answer two questions: Who has the exclusive right to explore & produce? Who owns the oil & gas that results from successful operations? The answer to these questions permits to categorize the types of contracts. The two described attributes of the four key types of HGCs are the only features that define these contracts. All other features are interchangeable such as: Degree of state control, Local goods & services, Employment & training and Stability.

Hence, the perception of increased state control and investor interest is not necessarily a feature of the contract type in all respects other than the right to receive oil & gas production and the fee structure, all host government contracts contain many common terms such as: term, relinquishment, domestic sourcing & supply obligations, operating/management committee, fiscal stability, local employment & training, title to assets, development plan and performance guarantees.

In general what the investor in the field of exploration of minerals would always need to satisfy before putting his feet into any investment is; the attractive Geology – cooperative fiscal terms – a strong and balanced petroleum regime.



"A company that not only deals with products but also reacts with technology"



DFT

DRILLING FLUIDS TECHNOLOGY

DFT was founded by PICO Petroleum Integrated Services in 2007 to provide the customers with reliable customized and high quality engineering services. Supported by its Lab in Amreya (one of the best Labs in MENA), its HYDPRO Software and having the R&D support of Intertek Caleb Brett Lab in Houston; DFT is providing a full fledge of Drilling Fluids products & systems for WBM & OBM that ranges from traditional to high technology products & systems together with DIF(drill-in fluids) components.

DFT success is a function in performance, improving well integrity as well as enhancing the learning curve which adds to our reputation further diversity.

PICO DFT hits new records

Upon the performed work with all of Petrogulf Misr, Amapetco, Waha Oil Company and Vegas; a new success was proved within the trial well 113-159 in Sinai that belong to Balayim Petroleum Company "Petrobel". The evaluation report from Petrobel was indicating a new record in their field regarding drilling days, performance and the total mud cost

By Hussein Khalil PICO DFT Director

This evaluation was based on executing the programmed parameters together with hitting all the set targets.

Well Information:

Location:	113 Land Block, Sinai, Egypt
Spud Date:	January 4th, 2011
Total well depth:	2,864 Meters
Maximum Hole Angel:	33.3o
Planned Well Days:	41
Actual Well Days:	27
Total Saved Days:	14

Actual Casing Seats & Mud Systems:

16" Hole for 13 3/8" Casing	12 1/4" Hole for 9 5/8" Casing	8 1/2" Hole for 7" Liner
45 – 995 Meters	995 – 2,325 Meters	2,325 – 2,864 Meters
Spud Mud	Salt Saturated Mud	Drill Vers (OBM)

The Situation

Belayim Petroleum Company decided to award PICO Petroleum Integrated Services - PICO DFT (Drilling Fluids Technology) a trial well in order to judge the technical capabilities and the execution plan for the new coming company. The

assigned well was 113-159 located in 113 Land Block, Sinai, in Egypt. Challenges in the assigned well can be summarized as follows:

1.The surface section will be drilled within the loose and unconsolidated sand section of Post Miocene formation. During this

section, the direction plan will be carried out to build an angle of 34o. Accordingly; the tasks that required from the drilling fluid to stabilize the loose section and, at the same time, to help building the required angle.

2.Still at the surface section; the presence

of the washable clay within this section will tend to bold the drilling bit which leads to obstruction in building the angle. The drilling fluid should assist in preventing the bit balling in order to facilitate the angle building process.

3. Within the intermediate section, the presences of the salt bodies that tend to mobilize against the well bore compel us to utilize a proper drilling fluid system that overcomes this issue. String Stuck in South Gharib formation while drilling the massive salt bodies could be experienced.

4. During the last reservoir section, down-hole losses are the main issue which leads to NPT (Non Productive Time) together with reservoir damage.

5. Cost impact is still a big issue to prove the commercial impact from our trial.

PICO DFT accepted the challenges and promised to offer solutions for all the key issues.

The Solution

PICO DFT had carefully studied all the offset wells, defined all the experienced problems, and came up with the proper mitigations. New ideas were provided from our extensive experience within the designated area of the well.

We, PICO DFT, have recognized that the mud systems need some sort of modifications.

1. For the surface hole (16"), we have recommended to switch the Spud Mud system to KCL/Polymer at the end of the interval with some special additives in order to overcome the anticipated issues.

2. For the intermediate section (12 1/4"), we have recommended to drill the system with full salt saturated system utilizing special treatment together with different concept of fluid control in mud parameters.

3. For the reservoir section (8 1/2") we have set a strategy for controlling the OBM (Oil Base Mud) in a different way rather than traditional method that used to be utilized.

The Results

PICO DFT successfully drilled the entire well achieving the following results:

1. Surface hole was drilled without a single problem where 13 3/8" casing was safely set and cemented on bottom.

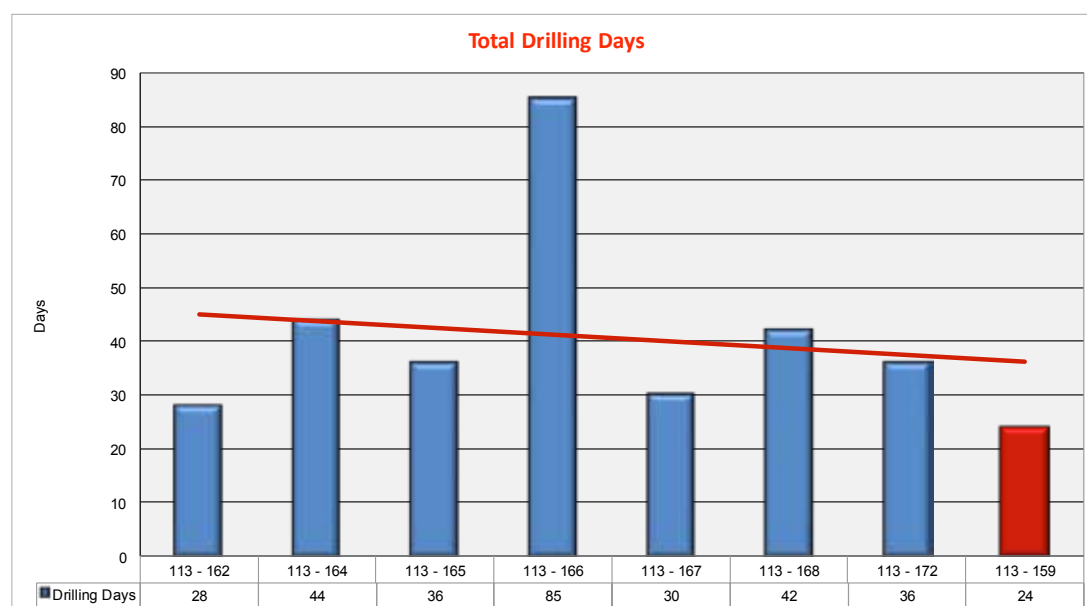
2. Intermediate section (12 1/4" interval) was smoothly drilled in a faster and safe time.

3. The reservoir section was drilled without any down-hole losses.

4. The entire well was drilled in less 14 days than the planned duration.

5. The total well cost was cheaper than ever wells drilled within the designated block.

Comparison of drilling per days



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19159

Rheliant

By MI SWACO

What is RHELIANT?

RHELIANT – A new synthetic-base mud designed to provide better drilling performance with flat rheological properties for deepwater and/or cold environment.

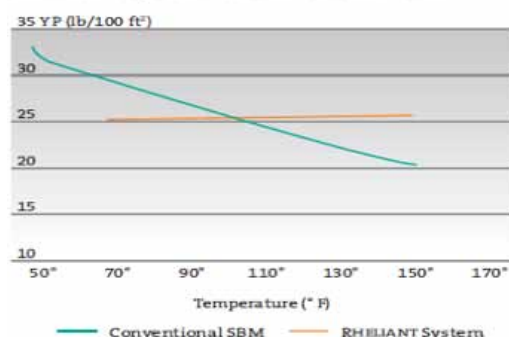
Features:

The flat rheological profile over a wide temperature lead to sag potential reduction, dilution/maintenance reduction and provided improvements in hole cleaning and reduction in pressure spikes

Benefits:

- Reduced fluid and well-construction costs
- Improved ECD management
- Minimized formation fractures
- Reduced environmental costs, greater

RHELIANT System vs Conventional SBM



safety

- Optimized drilling efficiency
 - Significantly reduced whole-mud losses
- The practical side of a flat rheological profile:

ECD Problem A: In deepwater, the surface rheology must be reduced when encountering cold temperatures to offset negative ECD effects

ECD Problem B: Adjusting the rheology upwards to compensate for higher downhole temperatures and pressure can lead to excessive ECD values and gel strengths.

The Rheliant Solutions: With its flat rheology, this new-generation system maintains consistent fluid properties that are independent of temperature and pressure. It maintains constant 150° F (65.5° C) properties even when confronting temperatures as low as 40° F (4.4° C). You can drill with ECDs lower than, or equal to, conventional invert systems while encountering fewer drilling problems and successfully avoiding the loss of whole mud.

Now, manage ECD without sacrificing hole cleaning or promoting barite sag

The RHELIANT system's superior cuttings transportation properties translate into smoother ECD profiles, reduced incidents of barite sag and dramatically improved hole cleaning. And, since the rate of removal keeps pace with the cuttings generated, the drill solids will not accumulate in the annulus and increase the ECD values. The system's constant yield point ensures efficient hole cleaning and fewer pickoffs. Not only is the RHELIANT system ideal for the challenging deepwater environment, it has also yielded tremendous benefits in any application where superior ECD management is needed to reduce the risk of lost circulation.

The RHELIANT system also has demonstrated its capacity to eliminate pressure spikes on connections. During the static period, the gel strengths that develop in conventional systems can build up pressure that breaks down the formation when the pumps are restarted. The RHELIANT system's low clay content keeps gels within a degree of consistency that effectively eliminates the pressure spikes seen with other invert drilling fluids.

An entire system engineered to reduce dilution and costs

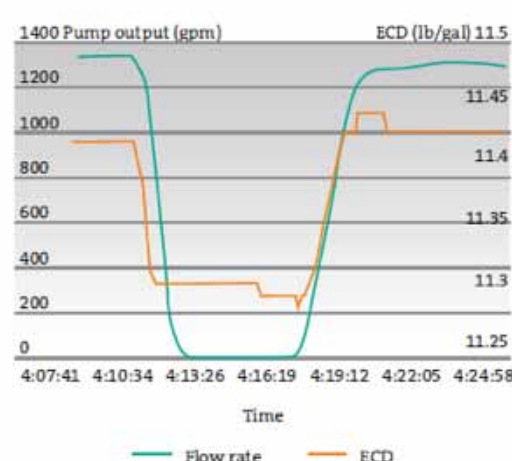
The RHELIANT system's lower clay content, fit-for-purpose viscosities, newly developed emulsifiers, rheology modifiers and adaptability to different base fluids yield a high-performance system that is cost-effective yet easy to

maintain.

Field results that deliver on the promise of the laboratory

In the field, the RHELIANT system has shown performance characteristics far superior to those of any conventional synthetic-base and other invert drilling fluids in deep-water applications.

Flat Gel Structure



- ROP as much as 20 ft/hr (6.1 m/hr) faster than typical synthetic-base systems
 - On-bottom drilling time reduced by as much as 24 hrs per interval
 - Reduced mud losses, less dilution and improved displacement characteristics
 - Balanced yield point delivers higher penetration rates, vastly improved cuttings-transport and considerable savings in hole-conditioning time
- New success stories with RHELIANT system in Egypt – Mediterranean Sea BP -Case History

The RHELIANT mud system proved to

be up to the challenge as was exceptional throughout the well until TD at 6350 meter (20,834 ft). No issues with this mud system became evident even when the BHT increased to 166 deg C (330 deg F). The mud remained stable at all temperatures even with wire line logs remain continually for 13 days without any condition trip.

The RHELIANT mud system utilized in core job in BP provided the best results while coring shown good recover core; a three core cut were made and recovered average 97%, without invasion and good quality of cake and thickness as shown in recovered core barrels this with good selection of bridging material and with applying of M-I SWACO Software (OPTI-Bridge).

Statoil-Case History

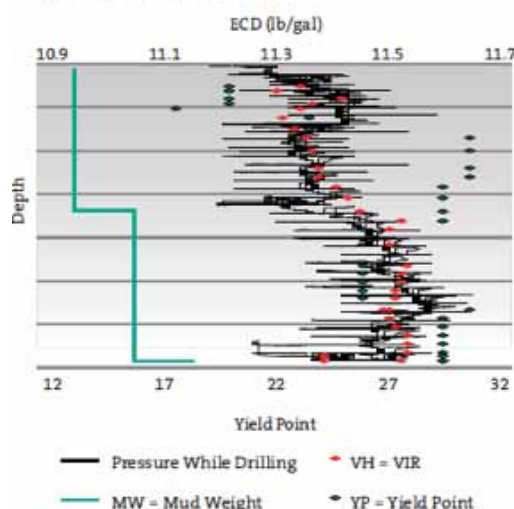
The RHELIANT mud system proved to be up to the challenge (8,900 ft water depth - the deepest water depth in the Mediterranean so far) as was exceptional throughout the well until TD at 21,357 ft. No issues with this mud system became evident even when we used as milling fluid to mill 2 casing strings without any problems. The RHELIANT mud system managed the lower ECD without any help of MPD while drilling very narrow fracture gradient.

Double-team critical situations with the RHELIANT system and our PRESSPRO RT service

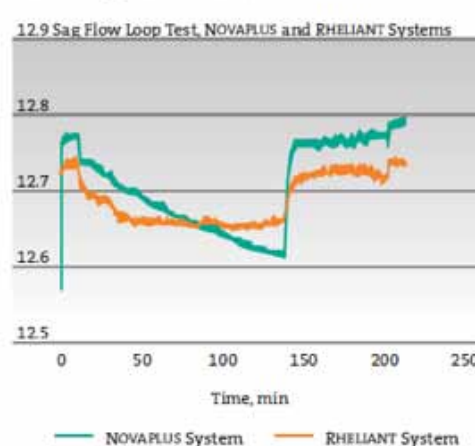
If your application has a very narrow operating window, you may want to consider the added assurance of combining the RHELIANT system with the M-I SWACO PRESSPRO* RT well bore pressure- management service.

- Proprietary software uses surface measurements to calculate down hole pressure and corresponding fluid properties during both drilling and tripping — in real-time
- Provides in-time equivalent static and equivalent circulating densities at any point in the wellbore during drilling
- Delivers surge and swab pressure measurements while setting casing or tripping pipe
- Service includes a critical-well analyst who has completed an extensive training curriculum developed specifically for this unique well site engineering service

The Effect of Hole Cleaning and Viscosity on ECD



RHELIANT System vs Conventional SBM Barite Sag Performance

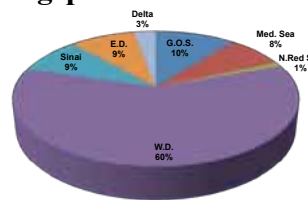


Egypt Statistics

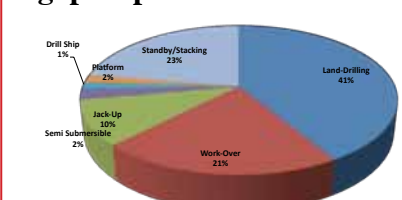
Table 1 Egypt Rig Count per Area -March 2011

RIG COUNT			
Area		Total	Percentage of Total Area
Area			
Gulf of Suez		11	10%
Offshore	11		
Land			
Mediterranean Sea		8	8%
Offshore	8		
Land			
N.Red Sea		1	1%
Offshore	1		
Land			
Western Desert		62	60%
Offshore			
Land	62		
Sinai		9	9%
Offshore			
Land	9		
Eastern Desert		9	9%
Offshore			
Land	9		
Delta		3	3%
Offshore			
Land	3		
Total		103	100%

Rigs per Area March 2011



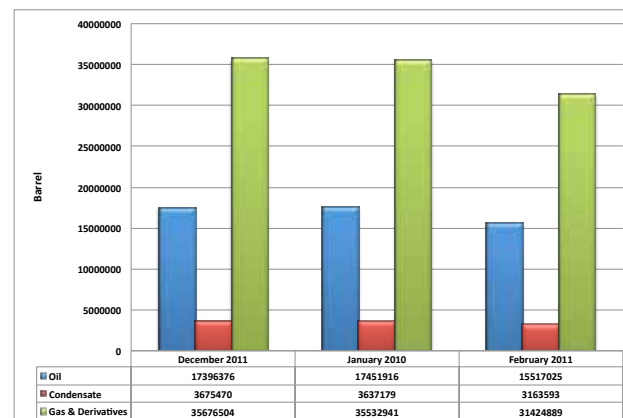
Rigs per Specification March 2011



Production - February 2011

	Sold Million cubic feet	Planned Million cubic feet	%	Oil Barrel	Equivalent Gas Barrel	Condensate Barrel	Liquefied Gas Barrel	Total Gas & Derivatives Ton	Total Gas & Derivatives Barrel
Med. Sea	120959	146020	82.84		21599821	1381267	437034	38847	23418122
E.D.				1936318					1936318
W.D.	33495	34944	95.85	7003621	5981250	1496859	597925	53149	15079655
GOS	928	2324	39.93	4583884	165714	63176	174532	15514	4987306
Delta	12661	11788	107.41	81027	2260893	187821	97049	8627	2626790
Sinai	190	196	96.94	1882615	33929	34470	76742	6822	2027756
Upper Egypt				29560					
Total	168233	195272	86.15	15517025	30041607	3163593	1383282	122958	50105507

	Actual	Planned	%
Oil	15517025	17069136	90.91
Condensate	3163593	3408440	92.82
Gas & Derivatives	31424889	36151644	86.93
Total	50105507	56629220	88.48



Average Currency Exchange Rate against the Egyptian Pound
(February 2010/ March 2011)

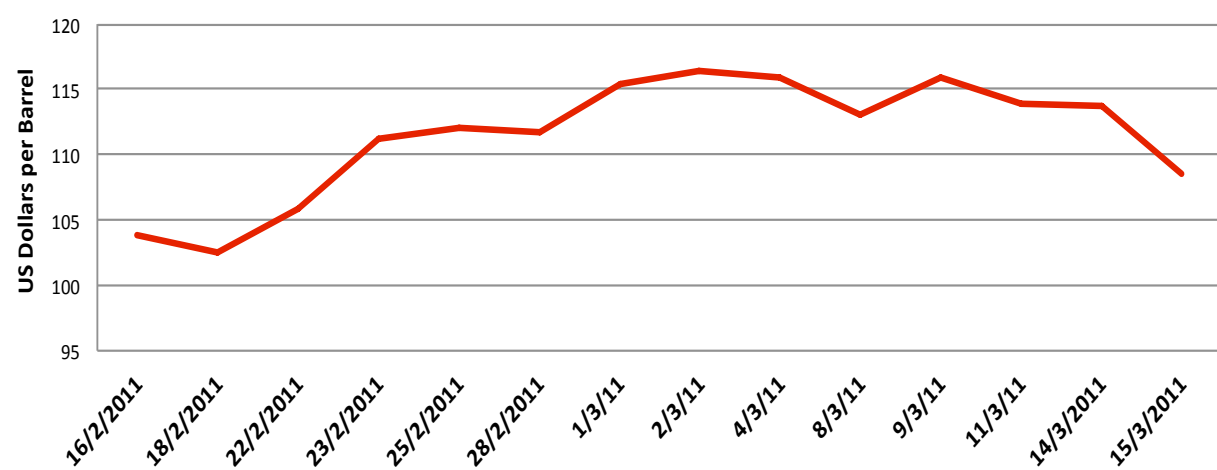
US Dollar	Euro	Sterling	Yen (100)
5.881	8.083	9.486	7.082

Stock Market Prices

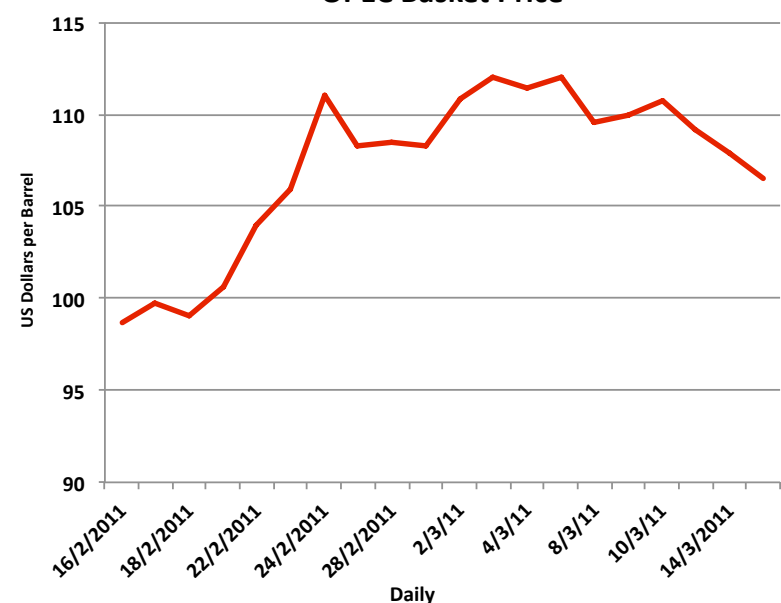
(December 2010/ January 2011) (Below prices were taken from Jan 16-Jan 27 before the closure of the Egyptian Stock Market)

Company	High	Low
Alexandria Mineral Oils [AMOC.CA]	57.89	49.07
Sidi Kerin Petrochemicals [SKPC.CA]	14.85	12.82

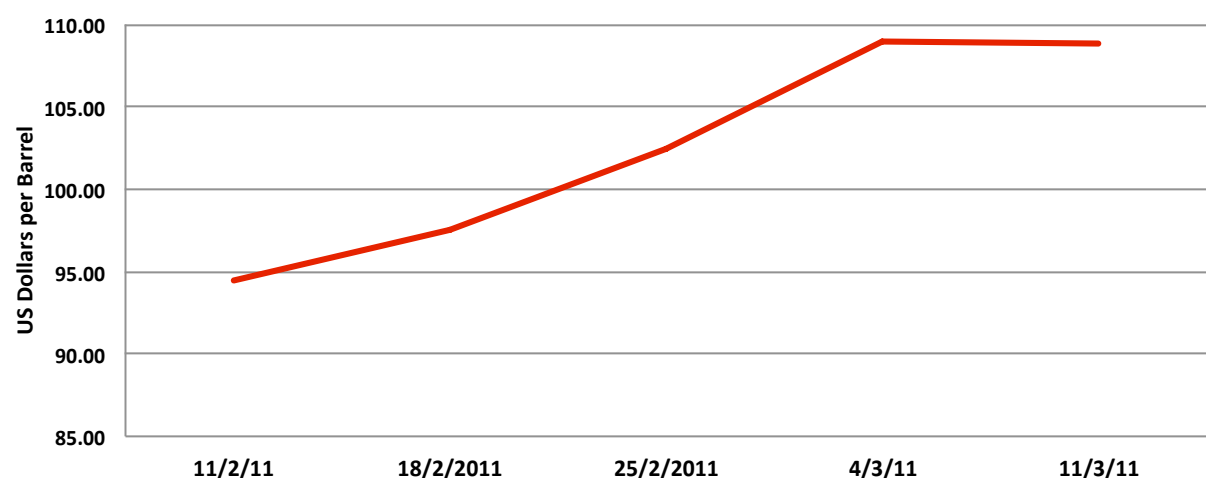
ICE Brent Price



OPEC Basket Price



Egypt Suez Blend Price



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10% DISCOUNT

PICO... Greener Environment

Based on PICO belief to integrate environmental and social values into business model, PICO gathered all staff and cooperatively went down around the company's headquarters cleaning the area, as part of its Corporate Social Responsibility (CSR) duty.

On February 19 and 26, all PICO employee and their families participated in cleaning and renovating the surrounding area of PICO head office as part of the company's social responsibility towards the society.

PICO has always been known to provide all

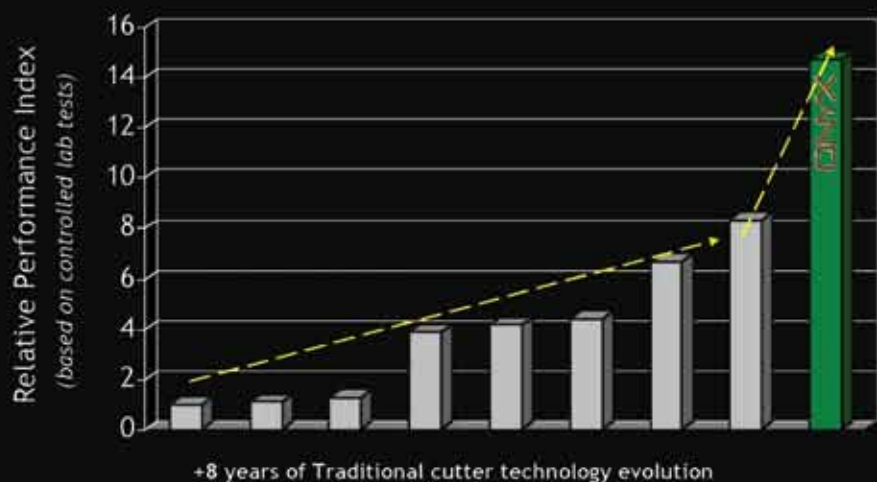
the support to the Egyptian community and the company is developing more ideas to be an effective partner to Egypt's brighter future.

PICO's future is also rising by the hands of Egypt's youth.

PICO Group saw its beginnings in 1974. Over the past years, PICO has developed an extensive set of expertise in the key sectors of the Egyptian economy and established itself as a private sector pioneer in Egypt. PICO Group is considered today to be among the most recognized businesses with its interest deeply rooted in Egypt.



ONYX™



Not your 'Normal' Cutter!

- ONYX is not a traditional PDC cutter
- ONYX represents a significant step change in PDC cutter technology

IDEAS

SMITH BITS

A Schlumberger Company

PeriScope

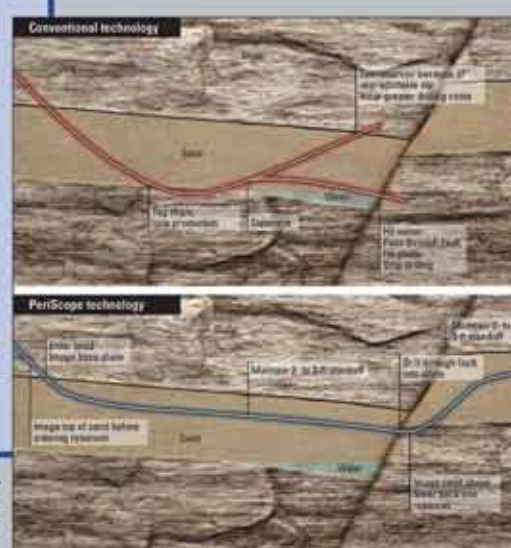
Directional, deep imaging-while-drilling service



Applications

- Maximizing production
- Precision placement of wells relative to reservoir boundaries
- Water detection and avoidance
- Refining reservoir models

The PeriScope® service ensures precise well placement to maximize production while minimizing drilling costs.

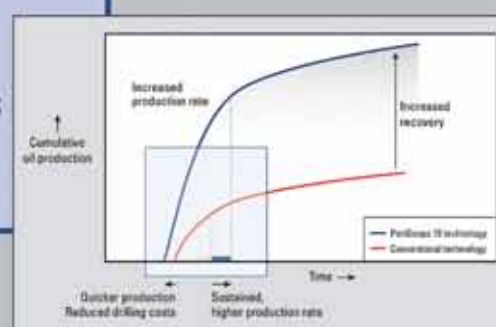


Benefits

- Increased production rates and recovery
- Access to reserves previously considered economically marginal
- Less water production
- Achievement of production objectives with less drilling
- Avoidance of drilling hazards
- More accurate reserves estimate

Features

- Unique directional measurements, highly sensitive to fluid and bed boundaries
- 360° images, indicating best steering direction
- Deep-reading measurements, providing early warning for timely decisions



Increase net present value with enhanced production and reduced well construction cost.

Schlumberger