

Abdel Aziz: Our goal is to reduce the cost recovery of the foreign partner

"Tanmia has been established not just for developing the Egyptian fields and reduce cost recovery, but it is also developing the humanitarian force pushing the industry forward by protecting and maintaining Egyptian experts and professionals working in the country," that is how Eng. Mostafa Abdel Aziz, President of Tanmia Company, puts in plain words the role of the company, describing it as a sacred national goal.



P14

How crisis management differs locally than abroad?

As the Gulf of Mexico oil leak continues to dominate headlines, Egypt experienced its own oil-related ecological threat, however, its source remained undercover

P9

Egyptian definition of Field Development

Why do we need foreign assistance to develop our fields? Is not the Egyptian expertise capable of conducting field development plans, which have been a key focus in the industry?

P10

U.S Natural gas shale amazes the world

Gas shale has become an important source of natural gas in the United States over the past decade, and interest has spread to potential gas shale in Canada, Europe, Asia, and Australia. One analyst expects gas shale to supply as much as half the natural gas production in North America by 2020

P17

Naftogaz and Ganope tighten their cooperation

Naftogaz, Ukraine's state company, received the approval of the People's Assembly and the Shura Council for the agreement signed with the Ganoub El Wadi Petroleum Holding Company (Ganope) to conduct exploration activities in Wady El-Maharis and South Wadi El-Maharis, which are located in the governorate of Assiut.

Earlier in 2008, Ganope released a bid round in the same area, which included 12 sectors spread around in its operations zone in the Red Sea-South the Gulf of Suez and the Eastern Desert, but did not get any respond from the companies.

On the other hand, Naftogaz gave a direct proposal to Ganope, which permitted the pitch. They both agreed on signing a production share agreement; Naftogaz share would count for 16% while the remaining 84% share to be held by Ganope.

According to the terms of agreement, the total investments count for a total of \$36 million. Moreover, Naftogaz is committed to drill 27 wells, with unspecified signature bonus, yet expected to exceed \$2 million.

The first phase of drilling in the area is scheduled to last for three years, while the second stage will be completed in two years. The third phase will be finalized in a three-year period.

This is considered the second contract for Naftogaz in the country. The first signed agreement was sealed for the Abo Senan field, located in the Western Desert.

FDC in market with EPHH

The Fields Development Company (FDC) is finalizing the procedures of buying two new rigs manufactured by The Egyptian Petroleum HH (EPHH), and cost nearly \$45 million, and with a capacity of 1500 horsepower, according to Eng. Moustafa Abdul Aziz, the company's chairman.

Abdul Aziz told Egypt Oil & Gas newspaper in exclusive statements that FDC is promoting the two rigs to operate in the Western Desert with the joint venture companies.

He added that Sino Tharwa Drilling Company will be managing the promotion and the drilling operations of the two rigs in companies such as GUPCO, Badr El Din Petroleum Company (Bapetco), and the rest of firms operating in the Egyptian market under the supervision of FDC.

He also pointed that FDC has the experience and the potentials to manage such project.

The daily rental cost of the two land rigs expected to range between \$14,000 to \$15,000. "The prices might change between night and day. Hence, it's all upon the market request and the availability of supply in the rigs," Abdul Aziz elaborated.

Infocus

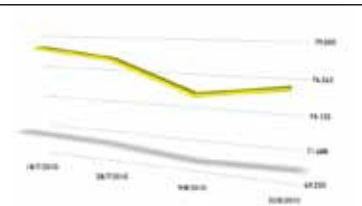


More development on its way

Throughout the past eight years, the Ministry of Petroleum has been implementing an ambitious plan to develop its fields, whether the newly discovered ones or the brownfields. The results of this strategy reflect the value of the country's fields that are still fruitful. More development plans are yet to come

P12

ICE Brent Price



PLATINUM SPONSOR



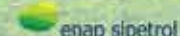
GOLD SPONSOR



OFFICIAL BEVERAGE SPONSOR



OUTFIT SPONSOR



HOSTED BY SUPPORTED BY



Lets Meet & Compete



Register Your Team Now! www.egyptoil-gas.com/soccer2010

Supported by Mr. Hady Fahmy
President of the Petroleum Sports Committee



On the wheel of development

Since the situation is getting more critical and effective measures should be taken to preserve the country's treasure for future generations, hence the concept of developing the current fields has become the focal point for most petroleum industries everywhere in the globe.

Back to 2007, Egypt Oil & Gas organized its first conference entitled "Brownfield Development and Production Optimization", under the patronage of H.E Eng. Sameh Fahmy, the Minister of Petroleum. The three-day series of presentations and discussions enlightened the sector about the many positive results of developing the already used fields and how a 40-year field can still generate more oil. Despite the enthusiasm of all participants to hold such event on yearly basis to exchange expertise and get up-to-date information and techniques, this eagerness faded gradually with time.

However, the Ministry of Petroleum has kept an ambitious plan to encourage more development projects in Egypt. The current strategy does not solely seek developing the ageing fields that used to generate oil and gas production for years, but it also includes the newly discovered fields, attempting to put them on production line as quick as possible. Nowadays, I believe that there is more awareness among the industry heads who seek to protect the country's treasure and avoid the abuse and uncalculated usage of the fields.

Believing in the importance of field developing, this issue's theme is dedicated to this vital topic. We conducted an exclusive interview with Eng. Mostafa Abdel Aziz, President of Tanmia Company, the first Egyptian company for field development, who sheds light on the country's development strategies and the role of the company. Moreover, an in-depth overview of the development plan of many companies during the fiscal year of 2010-2011 (such as SUCO, Rashpetco...etc) in addition to some of the projects already held last year.

Adopting the field development concept for years now, Egypt Oil & Gas would like to invite you all to share your latest information, techniques, studies, achievements...etc concerning this vital topic to exchange knowledge about field development.

Yomna Bassiouni
Editor-in-Chief

Events

A new era of connectivity

Alkan CIT jointly with its technology partner Cisco Systems held the "Synergies of Unified Convergence" seminar which took place late June at Intercontinental Citystars Hotel. The seminar was attended by a large number of Alkan's customers in the oil and gas field who were introduced to the latest updates and the most recent technological advancements offered by the two companies.

The one-day seminar focused on synergies of integrating the latest techniques of unified communications which allow the transfer of data, voice as well as video using satellite broadband services offered by Alkan with the standard solutions offered by Cisco Systems. Hence, this package of services ensures the continuity of communication between the different centres of companies and their refining and exploration sites regardless their location whether being onshore or offshore.

In his presentation, Eng. Wesam Mohamed, Alkan CIT, O & G sector manager, demonstrated the concepts of "Communication Convergence, next generation and unified Communication" which have a clear impact on facilitating communication and cooperation as well as cost reduction, thus empowering decision makers to cope with the requirements of work in terms of speed, efficiency and confidentiality. The presentation clearly showed the audience how VSAT technology could

be the right choice that guarantees seamless and reliable connectivity.

"This is the era where VSAT technology integrates to form intelligent hybrid networks that enable quadruple play deployments literally anywhere" Wesam Ensured

Alkan CIT also presented solutions for common challenges facing data centres and a number of virtualization technology offerings which are lately changing the focus of networking and computing since the applications are no longer tied to server hardware; and are now considered as objects moving through the network.

Concepts and definitions of "VN-Links" or "Virtual Networks" were also discussed and a new set of features and capabilities introduced that enable VM interfaces to be individually identified, configured, monitored and migrated as well as diagnosed, explaining how these networks commonly require platform support for the Port Profiles, Virtual Ethernet Interfaces, Virtual Centre Integration and Virtual Ethernet mobility. The term literally refers to a VM specific link that is created between the VM and Cisco switch. Besides, it is the logical equivalent and combination of a NIC, a Cisco switch interface and the RJ-45 patch cable that hooks them together.



On the other hand, Eng. Ahmed Abdel Aal, Managing Director of Alkan CIT, declared that the company is keen to offer state of the art technologies to its clients in the Oil & Gas sector, he also added that Alkan nowadays has 16 branches in Africa and the Middle East and is actively expanding its reach across the region yet very keen on increasing and developing its services in the Egyptian market which is one of the most important markets for the company.

About Alkan CIT

Alkan CIT is a leading telecommunication solution provider and systems integrator that offers a variety of turnkey solutions for customers in all business fields. With local presence in most countries of the MEA region, the company has always been able to fully support its clients' businesses from planning right through full operation.

Covered by Ahmed Morsy

Egypt Oil & Gas

Editor-in-Chief

Yomna Bassiouni
ybassiouni@egyptoil-gas.com

Managing Editor

Tamer Abd El-aziz
tabdelaziz@egyptoil-gas.com

Senior Staff Writer

Ahmed Morsy
amorsy@egyptoil-gas.com

Reporters

Sama Ezz El-Din
Shady Ahmed

Freelance Editor

Olivia Quinn
Clarissa Pharr

Media & Statistics Monitoring

Webmaster
Ayman Rady

Photographer

Ahmed Hamad

Business Development Manager

Laila Solaiman

Business Development Officer

Nourallah Khaled

Customer Service Coordinator

Passant Fadl

Senior Graphic Designer

Ahmed El-Degwy

Designers

Ahmed Marzouk

Cartoonist

Ramy Ameen

Administrative Assistant

Basma Naguib

IT Specialist

Sameh Fattouh

Production Advisor

Mohamed Tantawy

Accountant

Abdallah Elgohary

Legal Advisor

Mohamed Ibrahim

Publisher Mohamed Fouad

This publication was founded by
Omar Donia, Mohamed Sabbour
and Mohamed Fouad

All rights to editorial matters in the newspaper are reserved by Egypt Oil and Gas and no article may be reproduced or transmitted in whole or in part by any means without prior written permission from the publisher.

Contact Information:

Tel: +202 25164776

+202 25192108

Fax: +202 25191487

E-mail: info@egyptoil-gas.com

www.egyptoil-gas.com



Lets Meet & Compete

Supported by **Mr. Hady Fahmy**
President of the Petroleum Sports Committee

EGYPT
OIL & GAS

10-22 RAMADAN 1431

Register Your Team Now! www.egyptoil-gas.com/soccer2010

4th Ramadan Petroleum
SOCCER
Tournament

PLATINUM SPONSOR

دانة غاز
DANAGAS

GOLD SPONSOR

PICO ENERGY
Petroleum Integrated Services

DSD
FERROMETALCO

OUTFIT SPONSOR

enap sipetrol

OFFICIAL BEVERAGE
SPONSOR

Coca-Cola

HOSTED BY SUPPORTED BY



Petrozeit carries out seismic survey



Egypt Oil & Gas newspaper learned that Gebel El Zeit Petroleum Co. (Petrozeit) is currently conducting 3D seismic studies in its acquisition area to locate the traces of crude oil, through the first quarter of the current fiscal year of 2010-2011.

EOG also learned that the total investment of the new study is \$150,000, in attempt to raise its production rate from this area.

Petrozeit secured \$6 million on the drilling operations and its current production rate of crude oil is 1100 barrels per day.

Hurghada Petroleum hunts for more oil

Hurghada Petroleum plans to start the drilling of a new exploratory well in Hurghada Petroleum field, in North Hurghada during the current fiscal year of 2010-2011.

The reserves of crude oil in this area are estimated at an average of 6.3 million barrels of oil, with a daily production rate of 1200 barrels.

The total investments of the new wells are \$20 million, compared to the last year's drilling plan investments \$34 million that included drilling exploratory well (North July-I) to place it on the production line with a cost reached \$5 million, in addition to the production facilities.

The current production rate of the company stood at 600 barrels of oil per day.

It is worth mentioning that Diamond Offshore Drilling was appointed by Hurghada Petroleum for the well drilling during the past fiscal year of 2009-2010.

Al Fanar: more oil from North July concession

AL Fanar Petroleum Company completed the needed seismic studies to start the drilling operations of a new exploratory well, NGUP1 filed, in its acquisition area in North July concession during the current fiscal year of 2010-2011.

"The total investments of the exploratory well are estimated at \$24 million," Ashraf Orabi, Assistant to the Exploration Manager at AL Fanar, told Egypt Oil & Gas Newspaper.

Orabi added that the company is going to work on drilling more exploratory and development wells if the studies show promising results.

He also added that the company's production plan for the financial year 2010-2011 aims to reach a production of 8000 barrels of oil per day.

Al Fanar is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and the American IPR, which currently produces 750,000 barrels of oil per day.

A joint venture between EGPC and Naftogaz

Egypt Oil & Gas newspaper (EOG) learned that Eng. Sameh Fahmy, the Minister of Petroleum, agreed on turning nine of the sectors that follows Naftogaz into oil development contract. It includes HG34/1, HG34/2, HG34/3, and HG34/4.

The total reserves are estimated by 3.4 million barrels of oil and 71.3 billion cubic of gas in the Abu Rawash and Bahariya formative. The area of

the development contract, HG, covers an area of 27 kilometer.

Moreover, it was agreed to sign a development contract worth \$700,000 to be paid over 15 days. In the context of this agreement, a joint venture company will be established between the Egyptian General Petroleum Corporation (EGPC) and Naftogaz in its first acquisition area of Abo Senan. Naftogaz paid \$3 million.

Zafrana to drill two new wells

Zafrana Oil Co. prepares to drill two new exploratory wells in the Zafrana field in its acquisition area in the Gulf of Suez.

The company plans to utilize the Transocean rig in case it will not be able to rent another offshore rig.

Egypt Oil & Gas newspaper (EOG) learned that the total investments of

the offshore exploratory wells are estimated at \$30 million.

This plan serves Zafrana's target to raise its production rate of heavy oil from the Zafrana field to reach 6600 barrels of oil per day (bopd), compared to the last fiscal year of 2009-2010 of 4950 barrels of oil per day (bopd) from the marine platform (A).

OSUCO: new well drilled in North Shukeir



Offshore Shukeir Oil Company (OSUCO) revealed its plan to drill a new development well in North Shukeir field in the company's acquisition area of Gulf of Suez, according to Moustafa Abdul Aziz, Assistant to the General Manager of Petroleum Engineering at the company.

Abdul Aziz added that OSUCO drilling plan for the year 2010-2011 is to cost \$12 million, of which \$6 million are dedicated to the new de-

velopment well.

He also said that this drilling plan serves the company's target to increase its production rate to reach 1500 barrels of crude oil per day, since \$2 million were added to raise the drilling budget, more than last year's.

Abdul Aziz pointed that OSUCO assigned \$250,000-budget to fix some of the wells and change some of the wells' course.

GEMPETCO to rent a new rig



Gemsa Petroleum Company (GEMPETCO) plans to rent an offshore rig to drill a new development well and to execute its new drilling plan for the current fiscal year of 2010-2011 in the Gemsa field, in the Gulf of Suez.

The total investments allocated for this well count for \$15 million. GEMPETCO aims to boost its production rate of crude oil to reach 2400 barrels per day, compared to the current rate of 1613 barrels of oil per day.

It is worth mentioning that GEMPETCO is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and the Egyptian Company Pico.

Rashpetco hits more deep water

Rashid Petroleum Company (Rashpetco) is in the process of executing its exploration plan for the current fiscal year of 2010-2011 in the West Delta Deep Marine concession.

Eng. Taher Abdul Al Rihim, Operation Manager in Rashpetco, told Egypt Oil & Gas newspaper (EOG) that the company is preparing to drill two exploratory wells (Sama, Safrod) during the current fiscal year of 2010-2011.

Al Rihim added that the total investments of drilling those wells reached \$150 million.

Nospco keeps the hope

The North Sinai Co. For Petroleum (Nospco) intensifies its attempts to find more producing layers and compensate for the water production problem by conducting a new technical study in the Tao field, located in its acquisition area in North Sinai.

Egypt Oil & Gas also learned that the investments of the study reached \$100,000, as the company installed a new gas compressor with a capacity of 200

million cubic feet per day. The new installation aimed saving more natural gas in its acquisition area.

The geological studies were scheduled to start during last July, as it is predictable that the tank of gas reserve will decrease before the end of this year.

It is worth mention that North Sinai Co. For Petroleum - Nospco is a joint venture between EGPC and the French Preenco.

BP, RWE amend two gas contracts

BP Plc and RWE AG changed the terms of two natural-gas production contracts in Egypt, ending a requirement that the government invest in developing offshore fields, the companies and Oil Ministry said.

BP and RWE's oil and gas unit RWE Dea said they will pay royalties to Egypt's government under revised terms for the North Alexandria and West Mediterranean Deepwater concessions. Egypt has the third-largest gas reserves in Africa after Algeria and Nigeria, with 77.3 trillion cubic feet at the end of 2009, according to London-based BP.

Production at the two fields is forecast to reach 1 billion cubic feet per day, with first gas expected in 2014, BP said in an

e-mailed statement. RWE Dea, based in Hamburg, said in a separate statement that it will invest \$3.6 billion in developing the fields in the West Nile Delta, 40 kilometers (25 miles) off Egypt.

"We used to have a production sharing agreement that said the state should invest," RWE Dea Chief Executive Officer Thomas Rappuhn said in an interview in Cairo. "This has been changed. We pay royalties for what we have invested and produced," he said, offering no details about the planned payments.

The Egyptian Oil Ministry said in a statement that both companies will make the investments necessary to develop the gas fields.

"The most important thing about the

agreement is that it makes an obligation for the foreign partner to start output at a specific date and produce a certain amount," Abdel Alim Taha, a senior Oil Ministry official, told reporters.

BP has a 60 percent stake in the North Alexandria concession, with RWE Dea holding the remainder. The British company holds 80 percent of the West Mediterranean Deepwater concession and RWE Dea the rest. BP is the operator at both projects.

RWE AG is Germany's second-biggest utility by revenue and market capitalization after E.ON AG. BP is Europe's second-largest oil company by market capitalization behind Royal Dutch Shell Plc. (Source: Bloomberg)

Dragon witnesses production increase



Sea Dragon Energy Inc. announced that Al Amir SE #6 well has now been completed in the Kar-eem Shagar formation in the interval 9,805 ft to 9,835 ft. A flow test followed and a peak production of 4,630 bopd and 3.9 mmscf/d was recorded on a 48/64" choke. The well was shut in for a pressure build up and later placed on stream at approximately 1,100 bopd.

The Al-Ola X-1 well spudded on July 15th and is currently drilling at 1,540 feet. This well is being drilled as an exploratory well outside of the southern boundary of the Al Amir SE Development Lease. It is intended to capture a southern extension to the Al Amir SE oil field.

With the placement of the Al Amir

SE #6 well on stream, the NW Gemsa gross production has now reached approximately 9,500 bopd. Cumulative production to date from the concession is almost 2.8 mmbbls.

Sea Dragon has a 10% working interest in the NW Gemsa Concession with Vegas Oil at 50% as operator and Circle Oil Plc. with 40%.

Commenting on the progress made to date on the NW Gemsa operations in Egypt, Company Chairman and CEO Mr. Said Arrata stated "It is encouraging to see the increase in production as a result of our development plans in the NW Gemsa concession. We look forward to further appreciation in this property's reserves, production and cash flow with continued exploitation of its full potential."

Apache to acquire BP assets in Egypt

Apache Corp has agreed to acquire all of BP's oil and gas operations, acreage and infrastructure in the Permian Basin of West Texas and New Mexico and Egypt's Western Desert. Apache also will acquire substantially all of BP's upstream natural gas business in western Alberta and British Columbia. Apache will pay \$7 billion for the assets, which include estimated proved reserves of 385 million barrels of oil equivalent (boe).

Net production from the properties in the first half of 2010 was 28,000 barrels of liquid hydrocarbons and 331 million cubic feet of gas (MMcf) per day, or a total of approx. 83,000 boe per day. By comparison, in the just-completed second quarter of 2010 Apache produced 646,866 boe per day. The transaction also adds 2.4 million net acres to Apache's global portfolio.

"This is a rare opportunity to acquire legacy positions from a major oil company, with oil and gas production, acreage, infrastructure, seismic data, field studies, exploration prospects and other essential aspects of our business," said G. Steven Farris, Apache's chairman and chief executive officer. "We seldom have an opportunity like this in one of our core areas let alone three. This is a step change that will add muscle, enabling Apache to add value for decades to

come through our demonstrated exploitation capabilities and exploration drilling."

The effective date of the transaction is July 1 2010. Closing is subject to certain preferential rights as well as normal regulatory approvals and conditions in the United States, Canada, Egypt and the European Union. As a part of the acquisition, Apache will advance \$5 billion of the purchase price to BP on July 30 2010, ahead of the anticipated closing. This advance will be returned to Apache or applied to the purchase price at closing. Apache intends to finance the acquisition with a combination of debt and equity securities as well as cash on hand. The company has also obtained a \$5 billion bridge loan facility to backstop any financing requirements.

Apache expects the transaction to be modestly accretive to cash flow and per-share production and reserves and neutral to earnings per share in the first full year.

Regarding Egypt, Apache is acquiring four development leases and one exploration concession across 394,300 acres in Egypt's Western Desert. The assets have estimated proved reserves of 20 million boe (59 percent liquids), and first-half 2010 net production of 6,016 barrels of oil and 11 MMcf of gas per day.

"This is under-explored acreage in a highly prospective area of the Western Desert; a 3-D seismic acquisition program is under way," Farris said. "BP's holdings also include strategically positioned infrastructure including a natural gas processing plant, a liquefied petroleum gas plant and oil and gas export lines. These facilities will enable Apache to increase production from our existing fields in the Western Desert."

Apache's second-quarter net production in Egypt averaged 98,495 barrels of oil per day - up 8.5 percent from the first quarter - and 388 MMcf of gas per day, up 7 percent. At year-end 2009, Apache had estimated proved reserves of 309 million boe and 11.1 million gross acres in Egypt.

"This transaction provides a sustainable growth platform for Apache's onshore North America operations that complements our recent transaction with Devon Energy Corp. in the Gulf of Mexico and our pending merger with Mariner Energy, as well as strategic infrastructure and exploration potential in Egypt," Farris said.

"We appreciate the opportunity and the professional manner in which BP employees conducted themselves. Their cooperation was a key ingredient for this transaction to come together."

Eni Fires Up Gas Production Offshore Egypt

Eni has started gas production from the Tuna field, within the Tamsah Concession, which is located in the Mediterranean off the coast of Egypt. By the end of its ramp-up period in September, this project will produce 4.5 million scm/day of gas which will contribute about 8,500 boe/day to Eni's equity share production.

The project consists of a new 4 leg platform in approximately 80 meters of water, three producing wells and 14 Km of 24" pipeline connecting to existing infrastructure.

Eni owns a 50% participating interest of the Tamsah concession through its fully owned affiliate IEOC, with the remaining 50% owned by BP. Petrobel, a joint operating company equally owned by IEOC and EGPC, is the operator of the Tuna project.

Eni's activities in the Tamsah concession, one of the most prolific in Egyptian waters with a total production in excess of 170,000 boe/d, continue with an important ongoing campaign of infill drilling in Tamsah Field and the development of the Denise B field, which is expected to come into production in 2011. Since 2009 the Tamsah Concession has benefited from improved con-



tractual terms.

The development of this project is further evidence of Eni's commitment to Egypt and in particular to its contribution to meeting increasing domestic gas demand by exploring and developing the still substantially untapped gas resources in the Mediterranean.

Eni is the largest foreign energy player in Egypt. The company's oil and natural gas equity production averaged approximately 230,000 barrels of oil equivalent per day in 2009. Eni operates in Egypt through its wholly owned subsidiary the International Egyptian Oil Company (IEOC), which directly carries out exploration activities and participates in Joint Venture partnerships and Joint Venture companies.

Quotes

"We used to have a production sharing agreement that said the state should invest. This has been changed. We pay royalties for what we have invested and produced"

RWE Dea Chief Executive Officer Thomas Rappuhn said in an interview in Cairo, on amend Gas contract with Egypt

"The spill in Hurghada was small and was contained quite quickly, but the danger is, if an accident like this happens in the Mediterranean then it would spread very quickly and would be harder to contain"

Richard Byrnes, Manager for environmental services at (Petro Environmental Services Company) PESCO, on Egypt and Saudi oil spill exercise

"There will naturally be a strong push by all other explorers and producers in the area to receive the same terms, with renegotiations like to ensue a few months from now, given Egypt's need to solve its tight domestic gas supply after years of near or actual shortage"

Sam Ciszuk, energy analyst with IHS Global Insight, on BP and EGPC new agreement

"We are on schedule and on budget with our development plans to accelerate production. The company will continue its focus short term on organic growth in Kom Ombo and NW Gemsa with the view of maximizing production and cash flow. I am also looking forward to exploring the vast potential of the undrilled acreage in Kom Ombo"

Sea Dragon Chairman and CEO Said Arrata, commenting on the progress made in the company's operations in Egypt

"This agreement unlocks a new phase in realizing the huge potential of the Nile Delta basin, which will play an important role in meeting regional energy security needs in the coming decades. BP and EGPC have a long-standing and successful partnership, and the agreement we signed takes that to a new level in developing these deepwater resources, as well as creating an important source of future growth for BP."

BP Chief Executive Tony Hayward, on BP's agreement to amend the North Alexandria and West Mediterranean deepwater concessions

Sasol receives onshore technical permit in South Africa



Sasol, through Sasol Petroleum International Pty Limited (SPI) the wholly owned upstream oil and gas subsidiary of Sasol Limited, announced the successful award of a joint application with Statoil ASA and Chesapeake Energy Corporation for an onshore petroleum Technical Cooperation Permit (TCP) in South Africa.

The TCP covers an area of approximately 88,000km², primarily located in the Free State and also covering areas in the Eastern Cape and KwaZulu-Natal.

The permit awards the applicants the exclusive right to study the prospectivity for shale gas in the Karoo Basin for a period of up to 12 months, but does not include any surface activity or drilling. The joint venture partners plan to evaluate existing and available geological information within the area to determine the potential for shale gas. The study work will include the sampling and analysis of existing geological cores that were drilled by Soekor in the 1970's and 1980's during their search for shale oil. The same shale formations are now being assessed for potential gas production. This concept follows recent global developments in shale gas, where technology advancement in drilling and extraction technologies have allowed for economic development of significant shale gas resources.

If the geological evaluation proves successful, the partners will consider committing to a more extensive exploration pro-

gram in the Karoo Basin

Shale gas is clean natural gas produced from shale, a type of sedimentary rock, mainly consisting of clay and some organic matter. Shale gas has become an increasingly important source of natural gas in the United States over the past decade, and interest has spread to potential gas shales in Canada and Europe and now also in South Africa. The Karoo Basin in South Africa has unproved shale gas potential and significant exploration efforts are required to assess and quantify this prospective resource.

"A discovery of large recoverable shale gas reserves in the Karoo Basin will be a game changer in the broader South African energy market context and will likely constitute a major step to further develop gas transmission and distribution infrastructure in the country", said Ebbie Haan, Managing Director of SPI.

Large gas discoveries in the Karoo Basin could also help alleviate South Africa's power and fuels shortage and assist in creating employment and wealth for the country. In addition, the increase of natural gas in South Africa's energy portfolio will significantly aid in the reduction of greenhouse gas emissions on a per unit basis compared to more conventional resources such as coal.

But we are at the beginning of a journey that requires technical risk reduction, environmental stewardship, stake holder alignment and in case of success, significant future capital investment.

Maersk completes \$6 billion Qatar Al-Shaheen project

Maersk Oil has completed the \$6-billion al-Shaheen oil field expansion project in Qatar on time and within budget with the field producing around 300,000 barrels per day (bpd), one third of the OPEC oil producing state's total crude oil production, said Qatari Oil Minister Abdullah al-Attiyah.

Maersk has been working on a major expansion of the offshore al-Shaheen field aimed at boosting its production from an average of 331,000 bpd in 2008 to around 525,000 bpd on completion.

Attiyah said at the inauguration ceremony that al-Shaheen is considered now as the biggest oil producing field in Qatar, accounting for a third of Qatar's total crude oil production. Previously the 335,000 bpd Dukhan field was the emirate's largest producing field.

Qatar Petroleum had been targeting higher production from al-Shaheen by end of 2009, but it has been constrained by OPEC production cuts totaling 4.2 million bpd, which came into effect in January 2009.

Last May, Maersk said that al-Shaheen production was constrained by OPEC output cuts and production from al-Shaheen was slightly lower than the 2009 level.

The expansion consisted of building 15 new platforms and 136 oil production and water injection wells.

Al Shaheen field has been appraised and developed by Maersk Oil Qatar since 1992 under a production-sharing agreement with state-owned Qatar Petroleum.

A joint statement announcing completion of the expansion work said the field, which initially was believed to have maximum capacity of 50,000 bpd, has produced 1 billion barrels of crude oil to date.

"The development of the al-Shaheen field at a cost of around \$6 billion has been completed on schedule and within budget," Maersk Oil Chief Executive Jakob Thomsen was quoted in the statement as saying.

Maersk said that future production from the field was being discussed with Qatar Petroleum in view of current production results.

Qatar has said that completion of the al-Shaheen expansion will raise its crude oil production capacity to more than 1 million bpd from just over 900,000 b/d.

Qatar produced 820,000 bpd of crude oil in June, the latest Platts survey of OPEC's production showed, above its 730,000 bpd OPEC target.

Adnoc seeks JV partners for \$12b Shah Project

Abu Dhabi National Oil Co. (Adnoc) is talking to potential partners for help with the \$12 billion development of the Shah sour gas field after ConocoPhillips' withdrew from the project earlier this year, a company official said.

"Adnoc is in talks for joint venture partnerships," Saif Al Ghafli, Adnoc Representative and Chief Executive Officer of Adnoc affiliate Abu Dhabi Gas Development Co., said in Abu Dhabi after signing four contracts with international companies as part of the Shah project.

Al Ghafli didn't say which companies Adnoc is talking to.

Adnoc has embarked on a search for potential partners to join it on Shah after ConocoPhillips pulled out from the development in April. The U.S. oil major had planned to be a joint venture partner but withdrew to focus on projects yielding short and medium-term revenues. The Shah project is seen as a long-term contributor to value, ConocoPhillips said at the time.

The Shah sour gas field development is essential to help Abu Dhabi meet gas demand in the emirate, which has surged as the government builds gas-fired power stations, desalination plants and develops industries such as petrochemicals. Abu Dhabi is the largest of seven emirates that make up the United Arab Emirates.

The project aims at producing 1 billion cubic feet a day of sour--or sulfur-rich--gas and stripping out the sulfur and transporting it to processing and export facilities.

Plans for Shah have been held up due to the technical difficulties linked to developing the field's large reserves of sour gas, which is highly corrosive and more costly and challenging to process as it requires special handling and infrastructure.

Al Ghafli said Monday the project was set to come on stream in the third quarter 2014 and Adnoc would press on with its plans even if it failed to bring on board a partner.

"We are not holding things back till a partner comes, we're already awarding contracts," Al Ghafli said.

Abu Dhabi Gas Development earlier signed four contracts with Saipem, Samsung Engineering, Technicas Reunidas, and Punj Lloyd for various packages on the field development.

CUNO

Fluid Filtration from a
World Leader in Purification

3M



How come the weather is the only nasty thing at this gas field?

Innovative compressor trains from Siemens boost production and preserve the environment.

After 50 years of operation, the Groningen gas field in the Netherlands is now, and also for the next decades, fit to secure the supply of its clients. The facilities are fully modernized. One key success factor was the long-term relationship of the operating company NAM and its contractors. Siemens has advanced the compression and variable speed drive technologies to ensure the adaptation of the gas supply to fluctuating demand, to slash maintenance requirements, and to maximize environmental performance. Highest availability and low power consumption of all units are the best basis for an eco-friendly and successful operation. Learn more: www.siemens.com/energy

Answers for energy.

SIEMENS

Discussion to build four refineries in Iraq

The Iraqi oil ministry is talking to several international oil companies about investment in four planned refineries throughout Iraq to meet increasing domestic demand, the country's deputy oil minister has said.

"The estimated cost of these four new refineries that are designed to produce some 740,000 barrels a day of refining capacity is more than \$20 billion," Ahmad al-Shammaa told Dow Jones Newswires in an exclusive interview.

Shammaa said Iraq's first priority refinery is in Kerbala governorate south of Baghdad with a production capacity of 140,000 barrels a day and an estimated cost of \$4 billion.

Kerbala refinery is in the front-end engineering and design phase now. Technip SA (TEC.FR), which was awarded the FEED contract last year, is expected to finish the designs at the beginning of next year, he said.

The ministry is offering investors three options: build, own and operate, build, operate and transfer and a joint venture with a state company, he added.

Designing the refinery is the last step before inviting companies to tender for the refinery. However, three South Korean companies have already shown interest in building the refinery, he said without naming them.

The second priority is to build a refinery in Missan governorate in southern Iraq with a capacity of another 150,000 barrels a day, he said.

U.S. Companies Shaw Group Inc (SHAW) along with Stone & Webster Inc (XD-SEW), are designing the refinery and they are ex-



pected to finish the front-end engineering design next year. It will also cost around \$4 billion, Shammaa said.

Iraq also plans to build the Nassiriya refinery, near the city of Nassiriya in the south, to process 300,000 barrels a day. Shammaa said that products of the refinery would be exported via Iraq's export terminal in Basra in southern Iraq. The refinery is being designed by Foster Wheeler AG (FWLT) "We need also to work out a network of pipelines that would carry products to our export terminals in Basra," he said.

The fourth refinery is planned in the oil-rich Kirkuk governorate with another 150,000 barrels a day processing capacity, he said. Shaw Group and Stone & Webster are designing the refinery.

Iraq, the only member of the Organization of Petroleum Exporting Countries that doesn't have to adhere to an oil production

quota, is facing a fuel shortage. The country, which has the world's third largest crude reserves, presently imports more than a quarter of its fuel needs.

Iraq has three major refineries in Baghdad, Basra and Baiji 200 kilometers north of the capital, as well as a scattering of smaller refineries throughout the country, with designed capacities of 750,000 barrels a day. But outstanding repairs, crude transport bottlenecks, acts of sabotage and crude oil storage capacity cut their operational capacity to around 530,000 barrels a day.

The Iraqi oil ministry and the national investment commission held a joint conference at the ministry's headquarters in Baghdad last month, in an attempt to attract international refinery investors to build these refineries. At that meeting, the ministry announced that it would give a discount of 5% to its crude oil prices to investors in these refineries.

Vitol, Helios in talks for Shell's Africa Downstream Businesses

The Vitol Group confirmed that it is in exclusive negotiations with Shell Oil Products Africa for the potential acquisition of equity in their downstream businesses in 19 countries in Africa, subject to final negotiations and any necessary regulatory and final company approvals. Vitol's potential acquisition of equity will be in partnership with Helios Investment Partners, a major investment firm focusing on Africa and one of the few independent pan-African private equity investment firms to be founded and managed by Africans.

The scope of the negotiations is Shell's downstream businesses (Retail, Commercial Fuels, Lubricants, Liquefied Petroleum Gas (LPG), Bitumen, Aviation and Marine) in Morocco, Tunisia, Egypt (excluding lubricants), Cote d'Ivoire, Burkina Faso, Ghana, Togo, Senegal, Mali, Guinea, Cape Verde, Kenya, Uganda, Tanzania, Botswana (excluding LPG), Namibia, Madagascar, Mauritius and La Reunion.

The scope of the business includes 1300 retail sites, retail sales of around 3,500,000 cubic meters, and 1,200,000 cubic meters of terminal storage. There are around 2500 employees currently employed in the various businesses in the 19 countries.

Under the terms of the exclusivity agreement, Shell will not be holding discussions with any other third party other than Vitol and Helios for the time being. In addition, under the scope of a potential deal between the three companies, it is envisaged that Shell would retain a shareholding and the Shell brand would remain across all marketing businesses, including retail and lubricants. With the exception of Egypt, Shell's lubricants businesses in all 19 countries would also be in scope.

Prysmian wins €150-million offshore wind project in Germany

Prysmian, a leading worldwide player in the energy and telecommunications cables industry, has been awarded a project worth in excess of €150 million by the German transmission system operator Transpower - a subsidiary of the Dutch grid operator TenneT - for the grid connection project HelWin1 linking two offshore wind farms in the North Sea to mainland Germany.

Prysmian is expected to provide complete supply, installation and commissioning of the submarine and land cable connections as part of a larger contract worth approximately a half billion, awarded to the consortium of Prysmian and Siemens Energy. Siemens will deliver the Voltage Sourced Converter (VSC) system, with a rating of 576 MW. The turnkey connection will first link the Offshore Wind Park Nord See Ost, located about 85 km offshore, to the mainland with the purpose of transmitting wind generated renewable power into the German Grid.

The project closely follows the recently awarded BorWin2 project, worth more than € 200 million, which sets a number of milestones in the industry as it will be the first commercial ± 300 kV DC cable project using extruded technology (highest direct current voltage level ever reached), the first 800 MW connection to offshore wind parks and the largest VSC system with a capacity of 800 MW. The HelWin1 project will also use extruded HVDC cable technology from Prysmian together with Siemens HVDC Plus® converter technology at the offshore platform and onshore stations. The HVDC connection of approximately 130 km to be supplied by Prysmian will comprise subsea and land cable types at a voltage of ± 250 kV DC along a 85 km sea route passing to the east of Helgoland continuing along a 45 km land route to the land converter station in Büttel, north-west of Hamburg. Extruded 155 kV HVAC

submarine cable connections will complete the connections from the offshore wind park transformer platforms to the offshore converter platform.

The cables and accessories will be manufactured from 2011 onwards in Prysmian's European HV factories including the dedicated submarine cable facility in Arco Felice, Italy. Installation activities will commence in 2011 and continue throughout 2012. The commencement of operation of the HVDC link is planned for 2013.

Prysmian has developed a wide range of state-of-the-art products and technologies for applications in the renewable energies sector, from wind turbines and solar plants to large high voltage interconnection systems of new power generation sites. This latest contract again demonstrates Prysmian's leading position in the development of HVDC cables for power transmission in terms of both technical expertise and the commitment to support smarter and greener power grids throughout the world. Among other projects in which Prysmian has recently been involved in the field of both HVDC power transmission and offshore wind parks are some of the largest developments worldwide such as Walney, Ormonde, Gunfleet Sands, Thanet and Greater Gabbard in the UK as well as Alpha Ventus and BorWin2 in Germany.

Scotland and China to cooperate on offshore wind steel structures

SeaEnergy Renewables Ltd (SERL) and Chinese Nantong COSCO Ship Steel Structure Co Ltd (NCSC) will develop and market steel structures for the offshore wind industry under a strategic cooperation agreement.

The cooperation agreement is expected to lead to a definitive agreement to develop and market offshore wind turbine jacket substructures, towers and access systems for offshore wind farms.

SERL's CEO Joel Staadecker said, "We are delighted to be working with one of China's premier state-owned enterprises and directing our efforts at the critical supply chain need for offshore structures. The combination of our proven skills in delivering offshore infrastructure and turbines in deeper water and NCSC's expertise in design and manufacture of steel structures for marine applications provides the ideal platform to serve the growing global offshore wind industry as it moves into deeper waters."

Renewable Energy

How crisis management differs locally than abroad?



As the Gulf of Mexico oil leak continues to dominate headlines, Egypt experienced its own oil-related ecological threat, however, its source remained undercover

By Ahmed Morsy

As a result of the spill, oil floated to the shore of Egyptian Red Sea, the government said it had yet to discover the source of the pollution and may reduce the number of rigs operating in the nearby Gulf of Suez. However, later the Egyptian Ministry of Petroleum announced that the crude was leaked by a passing tanker or may have seeped from the ground due to a heat wave, but was not from any of its rigs.

Egypt's Ministry of Petroleum announced in a statement that by reducing the number of oil rigs in the Gulf of Suez it might be able to monitor those that remain more effectively. Besides, the Egyptian Minister of Petroleum Eng. Sameh Fahmy has called for the establishment of a fund to fight pollution, the ministry said.

Moreover, the Ministry's report included that all offshore oil platforms in the Red Sea are "sound," according to the state-run Middle East News Agency. Oil from the rigs was compared with samples from the sea but the investigators "cannot say for sure" whether the samples matched.

Petroleum companies, government agencies and local authorities tried hard to clean up the "limited" spill and four ships were sent to the waters near Hurghada, a tourist hub, to prevent any more crude from reaching the beaches. However, there is a big difference between how we treated with the spill of oil here in Egypt and there in the Gulf of Mexico regardless the amount of oil leaked.

Locally, the authorities do their best not to embarrass the source or the company behind the oil leaked or even our abilities and capabilities are the reason behind why we couldn't

have covered the actor. While on the other hand, it has been a long season of embarrassment for BP.

BP continues to work cooperatively with the guidance and approval of the National Incident Commander and the leadership and direction of federal government including the Department of Energy, Department of the Interior, Federal Science Team, Bureau of Ocean Energy, Management, Regulation and Enforcement, U.S. Coast Guard and secretaries Ken Salazar and Steven Chu. Hence, it's BP who is responsible for the amending and also any financial issues. The cost of the response to date amounts to approximately \$3.95 billion, including the cost of the spill response, containment, relief well drilling, grants to the Gulf states, claims paid, and federal costs. On June 16, BP announced an agreed package of measures, including the creation of a \$20 billion fund to satisfy certain obligations arising from the oil and gas spill. It is too early to quantify other potential costs and liabilities associated with the incident.

And The Obama administration suspended deepwater drilling after a blown-out well owned by BP caused a massive oil spill in the Gulf of Mexico. The initial moratorium, issued in late May and barring new drilling below 500 feet (152 metres) for six months, was put on hold after U.S. District Judge Martin Feldman found the order too broad, arbitrary and inadequately justified.

The Obama administration is only responsible for discussing how to prevent any other crisis to occur. It has defended the need for suspending deepwater drilling so that officials have time to investigate the cause of the BP disaster, issue new safety regulations and improve oversight.

The Interior Department is-

sued the new moratorium on July 12. It barred drilling through Nov. 30 on new wells that use subsea or surface blowout preventers similar to the one used on the BP well. The administration said the suspension could be lifted once drillers provide more evidence of their ability to prevent a blowout and respond adequately should another deepwater catastrophe occur, and detail what assets are available to contain a second spill should it occur.

Conversely, in Egypt, the Petroleum Ministry and local authorities made themselves busy with how to get rid of the oil spill which till the moment has no owner.

Environmental activists and private tourism companies say they are mystified by the government's inability to find the source of the spilled oil. Amr Ali, Managing Director of the Hurghada Environmental and Conservation Association, a non-governmental organization, said his group videotaped oil in the waters surrounding a drilling platform in the northern Red Sea run by Petrogulf Misr, a state-run company formerly known as Geisum Oil Co.

In fact, Petrogulf Misr Oil Company is the main suspect in the case despite the statements of the ministry, the company already has the closet offshore platform to the Hurghada shore. Petrogulf Misr was a joint partnership between the ministry of Oil and Kuwaiti International Investment group which is selling its share in the company.

"Environmental requirements are obligatory to all companies operating both in the offshore and onshore as any of the companies can't work without taking the approval from the Ministry of Environment to maintain the natural reserves. Besides, each petroleum company has the factors of QHSE which necessitate maintaining the environment and not to leak any oil spill," Eng.

Mohammed Al Shabrawy Drilling General Manager of Belayim Petroleum Company (Petrobel), told Egypt Oil and Gas.

"The oil spill in the Red Sea may be from shipping which extends along the Red Sea as it is possible that one of the vessels leaked a certain amount of barrels due to poor storage," Al Shabrawy added.

He also highlighted that the oil spill that occurred in the Gulf of Mexico caused the sensitivity of such situation for fear of repeating this in Egypt. In addition, the analysis which is similar to the DNA analysis for the spot of oil did not decisively prove who is responsible for the oil spill, which brings us back to the safety measures in order to avoid such problem in the future, according to Shabrawy.

The ministry gave four possible explanations for the spill in its statement. The oil could have leaked from an offshore rig or a tanker passing in the Gulf of Suez, 10 kilometres from Hurghada, it said, or a leak may have been caused by an attempted sabotage of rig equipment. The crude could have also erupted from rocks on one of the islands off the coast due to high temperatures, it said.

Maybe it is matter of trust, maybe it is the fact that the Ministries of Oil and Environment do not really react to the size of the environmental and economic disaster this spill regardless of how small it is has caused. We are speaking about a very sensitive eco-system, we are speaking about hundreds of reservations are cancelled whether locally and internationally.

We do not have to wait till having a real catastrophe like Gulf of Mexico, this spill regardless from ship or from platform is like a wakeup call, we should have some proactive system for any similar incident.

"Everything will return to normal in a very short period," the state-

ment of the Petroleum Ministry said last month, without giving further details on the impact of the spill or its origin.

Egypt has been developing its eastern coastline to encourage tourism, which earned the country \$15.4 billion last year and is its biggest source of foreign exchange revenue, according to the Tourism Ministry. More than 180 rigs also operate in the Red Sea and the Gulf of Suez, according to the oil ministry, although production from the area has declined in the past decade.

"There should be training from the oil and gas companies to the engineers and labours working in the offshore platforms so as to repair leaks without problems that would have a bad impact on the environment," Eng. Hamdy Abul Naga, a petroleum advisor, told Egypt Oil and Gas.

Abul Naga emphasized that it is difficult to determine the source of the oil spill but by a high-level quality analyzing.

He also required that there should be "A specific criteria for how to deal with oil spill at the beginning, which called act rapidly in order to avoid this problem in the future."

Such crisis has to be dealt with as a wakeup call in order to be aware of how to prevent or even to deal with it in the future. Nevertheless, it's not the first of its time in Egypt as in 2008 an oil slick was discovered floating on the River Nile on 14 July near the districts of Manial and Helwan, resulting in highly polluting the water and causing three water refineries to suspend operations. At least, the spill, which covered an area of two kilometres, had an owner as it was spotted at different locations due to a leak in the main pipeline of the Helwan Cement Company (HCC).



Egyptian definition of Field Development

Why do we need foreign assistance to develop our fields? Is not the Egyptian expertise capable of conducting field development plans, which have been a key focus in the industry?

By Sama Ezz Eldin



"If you asked me my opinion, there would be hands trying to obliterate the General Petroleum Company (GPC)," Eng. Ibrahim Zahran, the former CEO of Khalda Petroleum Company and the petroleum expert, answered the question about the reason behind GPC signing agreements with foreign companies to come and conduct development work in its own fields.

Zahran's words continue to show more distress over the idea of that a day may come and GPC would be offered for selling, just like the other state owned companies that were sold before in another sectors, according to his words.

The petroleum expert was trying in his own way to explain the restrictions being made over GPC, especially the governing control, "GPC has enough finance coverage and will not need any foreign hands to be in business with it."

"They need to think of the future, to leave the only state-owned company that develop its own fields in the hands of Egyptians," he added.

The statements that might leave some angry crowd need to be looked at from the other side of the story, which is the legislative side. "The only outer agreements made with foreign companies in GPC are made in certain circumstances," said an official source at the Egyptian General Petroleum Corporation (EGPC) that

asked to be held anonymous.

"The Steam Injection method is a complicated operation, and we do not carry it out here in Egypt, so we need the expertise that own the needed technology to conduct this operation," the EGPC source explained.

Steam injection is an increasingly common method of extracting heavy oil. It is considered as an enhanced oil recovery (EOR) method and is the main type of thermal stimulation of oil reservoirs. There are several different forms of the technology, with the two main ones being Cyclic Steam Stimulation and Steam Flooding. Both are most commonly applied to oil reservoirs, which are relatively shallow and also contain crude oils, which are very viscous at the temperature of the native underground formation. Steam injection is widely used in California, USA.

The EGPC source also enlightened the reason of brining the foreign companies into GPC fields is to increase the production rate of these fields, "We should be supportive to GPC decision of mixing with foreign experiences that would boost Egypt's oil production."

"The existence of the major oil companies in Egypt would bring more investments into the country. Those companies are in to spend lots of money, because they know the benefits that come in return from producing more oil," a source

from Borg al Arab Petroleum Company, that refused to mention his name, agrees with the EGPC source on the profit from allowing more foreign companies in the Egyptian market.

"If you look at the bigger picture, each company of those come with its own high technology, finance, amenities, expertise, and willpower to construct the whole infrastructure of the area that yet to be developed. So how can you refuse such offer?" the Borg al Arab source wondered.

He also added that foreign companies not only come to execute development operation, but they build the entire facilities needed for the area, and for the workers in the field, "These facilities will not only help the current projects, but will also help in more future project in the same area."

"These companies come and bear all the risk that comes with developing, without GPC paying for anything."

"The development and service contract include GPC paying for everything the foreign partner paid for in the development process, and even this is not a problem. As the agreement include GPC paying them on a long period of time," the Borg al Arab source further detailed.

"We are very proud of the GPC work through the years, but sometimes it need some exterior supply in order to boost its production rates,"

the EGPC source added.

On the other side, Eng. Zahran replied back to the two officials claiming that positive benefits are the reasons behind field development agreements with foreign companies, highlighted that the GPC has enough financial blanket that can be provided through banks and without letting foreign elements more into the section.

"If they really want to work for the sake of the GPC, they can gather all these small fields under the supervision of the company, to cut the high cost of the companies established on each of those small fields."

"The GPC was always able to deal with anything since it was established, and always had the needed experiences to deal with the Egyptian fields, and still has the required experts to deal with those small fields," Zahran elaborated.

Zahran find GPC lacking the mandatory minds that appreciate the working force, "The workers are the heart and soul of this industry, yet, if we compare their wages, they get the low salaries, while the high salaries are given to Chairmen," Zahran speculated.

On the other hand, an official source from the Ministry of Petroleum said that field development needs the financial support from the Egyptian government in order to be able to stand fully on its own, "This financial support can be supplied through bumping funds into the Field De-

velopment Company (FDC)."


"The elements of this support can be divided into two points, the financial supply blanket and the technical contribution, which help the most in raising the production rate through using the latest technologies and the minds that can deal with the nature of our fields," the ministry's source pointed out.

"We must also keep our working force, and provide them with continued training to be up to date with the latest technologies," the ministry's source added.

A drilling operations manager at one of the major companies agreed with the ministry's source that well trained workers are also the basic to reach a high production rate.

"The Geological studies and 3D survey are also important to the development operations and enable to detect the unexplored oil that lies in deep in the field and the right ways to extract it," the drilling operation manager added.

Latest technologies, foreign investments, and maintaining the well trained workers are the three main elements in the development industry. We need to keep our fields producing to meet our domestic needs, so if it's going to come through foreign investments then it's welcomed. If we cannot do it on our own, so let's get the people who can place us on the road of our destination.



Seismic Processing Reservoir Studies Data Managment Consultancy

HEAD OFFICE
Egypt - Cairo
Free Zone - Nasr City, Street 14-Block 3B,
Tel : +20 2 2273 1829
+20 2 2271 9132, 133
Fax: +20 2 2275 2348
info@petrographics-eg.com

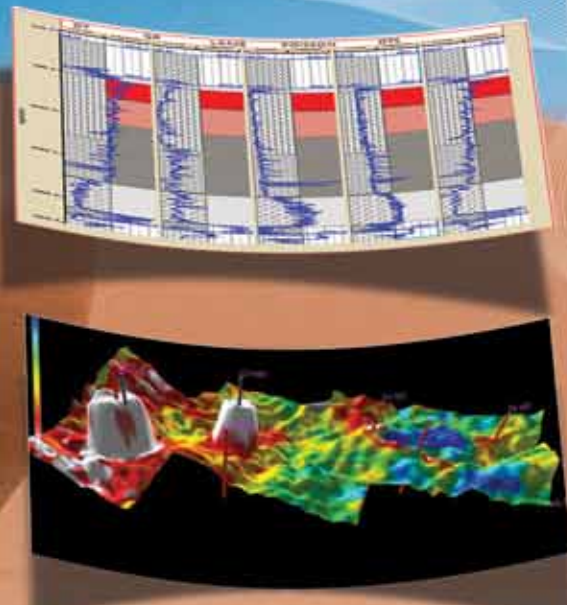
LIBYA - Tripoli
164 Nasr Street,
Tel : +218 21 333 1902
Fax: +218 21 333 1902
libya@petrographics-eg.com

ALGERIA - Alger
70 Lotissement La Bruyere,
Villa No: 11, Bouzareah
Tel : +213 21 925285
Fax: +213 21 925285
algeria@petrographics-eg.com

SYRIA - Damascus
10 Taha Hussein st,
El Mazza, Villat Gharbia
Tel : +963 11 613 1414
Fax : +963 11 613 5383
syria@petrographics-eg.com

KUWAIT - Al Ahmadi
Al Ahmadi Governorate
Mangaf, Block 1 No 33
Tel : +965 9721 7564
Fax : +965 9721 7564
kuwait@petrographics-eg.com

www.petrographics-eg.com



OPTIMIZING PRODUCTIVITY



Productivity gains at every step

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

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

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

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

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

Drilling Solutions | Wellbore Productivity | Production Technologies | Environmental Solutions

*Mark of M-I LLC

M-I SWACO

Customer-focused, solutions-driven

www.miswaco.com

More development on its way

Throughout the past eight years, the Ministry of Petroleum has been implementing an ambitious plan to develop its fields, whether the newly discovered ones or the brownfields. The results of this strategy reflect the value of the country's fields that are still fruitful. More development plans are yet to come

By Shady Ahmed
Tamer Abdel Aziz

Comparing the areas of interest in terms of their needs for development wheel, the Gulf of Suez comes first as it accommodates lots of old fields that have been producing for nearly 40 years. Currently, major companies have allocated huge budgets to renew the production facilities of this area's fields, such as the General Petroleum Company (GPC), the Gulf of Suez Petroleum Company (GUPCO) and its partner BP.

Throughout the fiscal year of 2009-2010, the number of discoveries attained played a major role in enhancing the rate of oil and gas production in the country. the area of Western Desert enjoyed the largest number of achievements as 15 discoveries were hit. The U.S Apache was ranked first in terms of its discoveries that counted for six, followed by Merlon Fayyoun with five and then Shell Egypt, Edison, Naftogaz and Enap Sipetrol each had one discovery.

In the second place comes the Nile Delta with two discoveries achieved by Melrose, followed by the Eastern Desert and Sinai in the third place, each with one discovery.

The Ministry strategy to increase the oil and gas production rate was not solely supported by the number of discoveries attained, but also by the number of development projects held during this fiscal year. The list of development plans approved by the Ministry included, but not limited to:

1- Developing South Khelala (a discovery that was achieved by Melrose): the plan is to develop the gas discovery of South Khelala-1, located in the Nile Delta

2- Developing Apache's Sohba-1X in

the company's concession area of East Beni Suef, situated in the Western Desert

3- Developing Apache's North Neith with a total investment of \$84 million for drilling operations and production facilities

4- Developing the oil discovery of NTRK-CIXST4 well (Apache) in the concession area of North Tarek in the Western Desert

5- Developing West Wadi Al-Rayan (an oil discovery hit by Italian Edison in which the WWER-2X well to be developed), located in the Western Desert

6- Developing North East Abu Al-Gharadiq-3 in the Western Desert (an oil discovery by Shell Egypt), including the development of NEAG C6-1 well

7- Developing Apache's oil discovery of Phoebes -6 in the concession area of Shushan in the Western Desert

8- Developing West Kalabsha field in which both oil and gas discoveries of WKAL A-2XST and WKAL 1-X to be developed with a total investment of \$10 million for the drilling and production facilities

9- Developing the oil discovery of Geyyad achieved by Vegas Oil & Gas, in the concession area of North West Gemsa with investments worth \$2.9 million for drilling and production facilities

"Following the Ministry's field development strategy, we succeeded to repair and maintain a large number of wells and put them back on production line. We have also drilled five new development wells in the western area of Ras Fanar field with a total investment of \$30 million. The daily production rate reached up to 4000 barrels," said Eng. Abdel Khalek Al-Tahawy, Operations Manager at the Suez Company for Oil (SUCO).

He further added that such plans contributed to boosting the production rate

and developing the proven reserves despite the challenges that confronted the company. "During the fiscal year of 2009-2010, the company's production rates reached 6 million barrels of crude oil, 6 million barrels of condensate in addition to 2 million tons of butagaz."

Al-Tahawy highlighted that the three fields of SUCO holds wells that require different production techniques; wells with natural crude oil flow, wells producing with natural gas injection and a third type producing through water injection to maintain the tank pressure. "Due to the ageing productive wells of SUCO, the company has recently signed contracts for an offshore repair unit, two offshore rigs and another onshore one in order to be utilized in drilling development and exploratory wells," said Al-Tahawy. "The first phase of this development plan was fully completed in the fiscal year of 2009-2010 and now we are ready for the second phase."

As for the new 2010-2011 fiscal year, SUCO plans include the development of seven wells in the fields of Ras Badran, Oil Gulf and Ras Fanar, in its concession area in the Gulf of Suez with total investments of \$58 million.

"SUCO aims at intensifying its development activity by the end of this year through the repair of 25 development wells in its concession area. That is why the company allocated \$32 million for this year's plan compared to last year, during which only five development wells were drilled at a cost of \$30 million."

In addition to SUCO's plans, Petro Shahd set its plan as well to drill four development wells in the East Ras Qatara field in the Western Desert, which reflects the company's attempts to maintain its daily crude oil production of 6520 barrels through the new offshore platforms.

Rashid Petroleum Company has also commenced the implementation of the eighth phase of its development plan for its concession area in Deep Marine West Delta by developing eight fields. The full completion of Rashid's plan is due to end in 2014.

"This year, Rashid is expending \$2 billion to develop eight fields, which will serve the company's plan to maintain its daily crude oil production," explained Eng. Taher Abdel Rahim, Assistant Operations Manager in Rashid Petroleum Company. "We are intensifying our development activity, especially after the successful cooperation with Saipem through which eight development wells were drilled using one rig only, with total investments of half a million dollars."

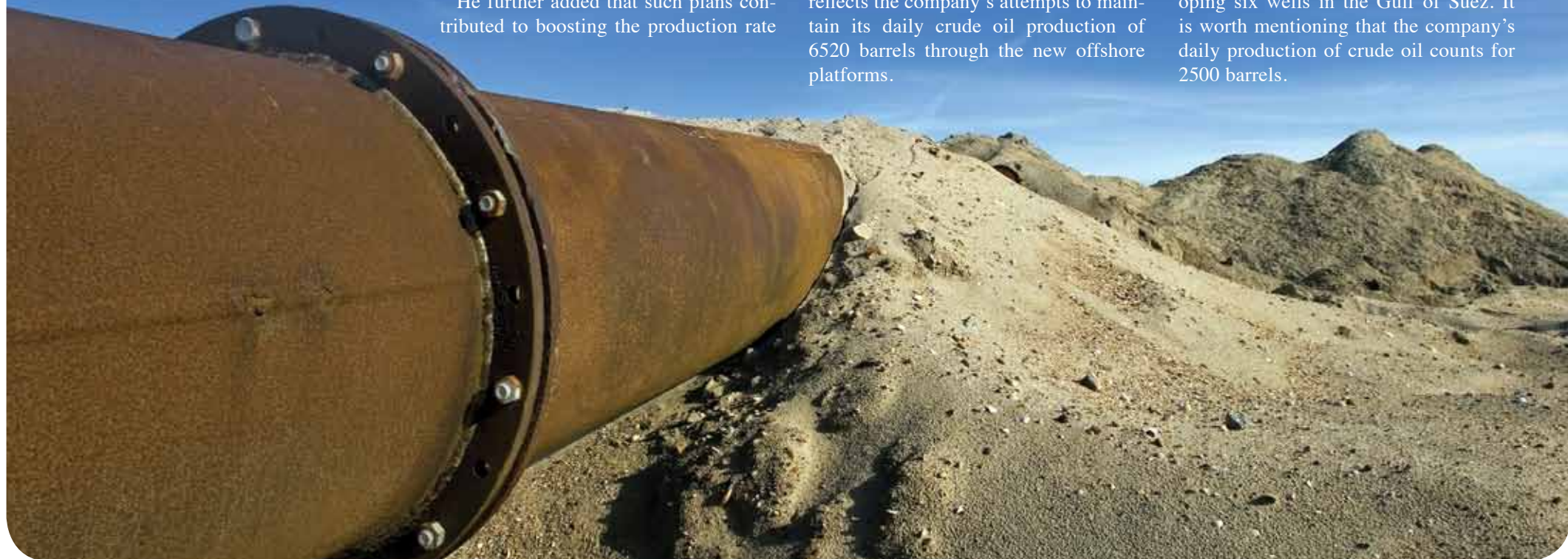
Zafrana Oil Co. prepares to drill two new exploratory wells in the Zafrana field in its acquisition area in the Gulf of Suez.

The company plans to utilize the Transocean rig in case it will not be able to rent another offshore rig.

Egypt Oil & Gas newspaper (EOG) learned that the total investments of the offshore exploratory wells are estimated at \$30 million.

This plan serves Zafrana's target to raise its production rate of heavy oil from the Zafrana field to reach 6600 barrels of oil per day (bopd), compared to the last fiscal year of 2009-2010 of 4950 barrels of oil per day (bopd) from the marine platform (A).

On the other side, Gemsa Petroleum Company (GEMPETCO) approved the EGPC plan to develop Zafrana field during the fiscal year of 2010-2011, a top official told Egypt Oil and Gas. GEMPETCO is currently preparing for developing six wells in the Gulf of Suez. It is worth mentioning that the company's daily production of crude oil counts for 2500 barrels.



**OUTSTANDING IDEAS
SHARED SUCCESS**



**WHAT CAN MILLIONS OF IDEAS,
thousands of patents and
hundreds of nationalities deliver?**

SUCCESS.



Schlumberger

Abdel Aziz: Our goal is to reduce the cost recovery of the foreign partner

"Tanmia has been established not just for developing the Egyptian fields and reduce cost recovery, but it is also developing the humanitarian force pushing the industry forward by protecting and maintaining Egyptian experts and professionals working in the country," that is how Eng. Mostafa Abdel Aziz, President of Tanmia Company, puts in plain words the role of the company, describing it as a sacred national goal

By Tamer Abdel Aziz

Eng. Mostafa Abdel Aziz, President of Tanmia Company

With the aim of breaking the field development sector known for decades to be monopolized by foreign companies, the Tanmia Company was established in June 2008 to become the first national company to carry out developmental projects in the country. Tanmia has been technically and financially supported by the Ministry of Petroleum as well as other various holding companies, such as the Egyptian Natural Gas Holding Company, the Egyptian Petrochemical Holding Company and Ganoub El-Wadi Holding Company in addition to ENPPI and Petrojet.

The establishment of Tanmia serves the ambitious strategy of the Ministry of Petroleum for supporting national industries as an attempt to lure more positive revenues and benefits to the country's economy.

What are the company's major achievements since its establishment?

We can list at the beginning the Ukrainian Naftogaz' East Allam Al-Shawish field, in the Western Desert, which has been put on production on April 18, this year. We made an early installation of production facilities in the location of HG34-3 well, with a production capacity of up to 5000 barrels per day and currently operated by experienced technicians. We have succeeded to maintain a stable daily production rate of 1000 barrels thanks to our experienced team in addition to the tests of "Oil Test" for exploratory wells and "Bottom Hole for Service",

which are held on regular basis.

Another significant attainment of our company is providing a technical stabilization for other companies. In other words, we solved the shortage of technical expertise through developing the skills and capabilities of Egyptian personnel in accordance with the international standards. We follow the strategy of Eng. Sameh Fahmy, the Minister of Petroleum who is attributing a special attention to train our young calibers to be as professional as international experts and create a catchy working environment and various incentives to bring the brain drain problem to an end.

In the context of Tanmia's main objectives, we have succeeded in luring a number of distinguished expertise and technicians to work locally in major companies, such as Edison, Sea Dragon. Arabian Oil Company...etc.

"Our objective is to decrease the cost recovery of the foreign partner by putting the discovery on production line as early as possible"

How did you accomplish all these attainments in such a short period of time?

All our progress is due to the continuous support of Eng. Sameh Fahmy who is eager to develop and revolutionize the local industry. We have been granted the opportunity to be part of this national plan and

have worked hard from the beginning to build on our credibility among the petroleum sector.

What is your strategy concerning human development?

Actually, we are coordinating with top officials in the sector, distinguished by their long-years of experience, whether technically or scientifically to work closely with young graduates and help them develop their skills and strengthen their knowledge to be ready to join the work force needed in the petroleum industry.

Did you cooperate with Egyptian experts from other companies at the beginning?

We do appoint some Egyptian experts in each project we start, but for a limited period of time, to help the company professionally implements the operations and train more young personnel and develop their skills.

Getting assistance from professionals serves one of the company's targets, which is limiting the number of experts emigrating from the country seeking better job opportunities and incentives. We are providing appropriate work packages and better wages for them in order to keep these knowledgeable calibers in the country, which will by their turn create new generations of skilled young Egyptian personnel who would develop the industry.

Does Tanmia have specific enrollment plan for the graduates of Petronas Scholarship in the company?

We are ready to receive the graduates of Petronas Scholarship and enroll them in suitable positions that match their field

of studies, especially petroleum engineering students. In fact, this is one of the company's core values; hold the scientific skills of our youth in the country.

What is the work criterion of Tanmia?

The basic objective of founding this company is the attempt to reduce the "Cost Recovery" expenses, which are considered as heavy financial burden on the country's economy. This objective can be cat-

"We carry the burden of compensating for the lack of technical experts in the companies"

egorized as a national target and as mentioned previously, we received the support and assistance of experienced officials to formulate our company's core values and targets to better help the industry. Also, they set flexible work criteria characterized by the ability to easily adopt the on-going changes taking place, whether locally or internationally, such as:

- Speeding up the development operations of new fields by initiating large working groups in cooperation with other companies, such as ENPPI, Petrojet and Petroment that are characterized by their enormous work capabilities
- Attracting the knowledgeable and experienced personnel to work in the country and avoiding their migration to other countries
- Sealing strategic coalitions with major service corporations in order to exchange expertise and be up-to-date with latest technologies, which

would therefore strengthen our abilities to compete in and outside the country

- Re-managing the production facilities owned by the Egyptian General Petroleum Corporation (EGPC) to maximize their effectiveness and create a work harmony between service companies in order to increase the production rates. Such strategy leads to quick revenues to the Egyptian economy, as we do not need to waste time establishing a joint venture to start the production phase. Moreover, the technical and geological studies are carried out by well-trained Egyptian calibers

who would save the country more expenses

Some argue that Tanmia plays the role of a behind-the-scenes contractor in its current projects. Comment

Firstly, such argument is completely fake! All our current projects are the result of contracts signed with E&P companies.

Does Tanmia receive the projects' agreements through tenders or by direct orders from top officials?

I confirm that all the projects we won were received through tenders.

Being a state-owned company would affect and decrease the competition level between service companies. Comment

Such speculations are completely wrong. On the contrary, we have always been treated like any other company in any bid rounds. We always compete to win more

projects to be added to our list of achievements. This proof that we are working hard to get ourselves a distinguished place in the ongoing competition between companies in

and they are also an open channel to be updated with the changes occurring everywhere.

What is the company's 2010-2011 plan?

We have an ambitious plan that we ought to implement over the year. In addition to executing our current projects, we are

aiming at strengthening our credibility and position in the Egyptian market by sealing more new agreements in the different fields of drilling and production. Besides, the company works hard to reach highest investment revenues in order to increase the profits of our shareholders. Tanmia is also eyeing the possible expansion of our services abroad.

Currently, we own two land rigs and coordinating with the EGPC and the holding companies for developing the fields in which the

"Fighting the phenomenon of brain drain tops our list of priorities"

the Egyptian market.

In fact, we do encourage competition as it reflects how healthy is our industry and how capable we are to take off challenges. Moreover, positive competition brings many benefits to the industry and serves the petroleum industry's goals of cost recovery and decreasing the production cost of one barrel.

Also, competition is always in the sake of the petroleum industry; the more service companies in a country, the more amelioration of services provided, lower pricing, larger number of explorations and more E&P investments.

It is worth mentioning that luring foreign investments to the industry is one of the basic plans of the Egyptian Ministry of Petroleum as such investments would bring along the latest techniques and technologies utilized in the exploration and production operations

"The service market needs more companies to join in... we have strategic alliances with major service companies"

foreign investor could not keep their work commitment and complete their operations through the Integrated Services agreements.

What is the volume of the company's investments?

Our total investments count for approximately \$50 million.

Would Tanmia have any role in the Eni-Ministry of Petroleum contract to develop Al-Zubair field in Iraq?

at the moment, I cannot tell what company will be chosen to carry out the work commitment of this agreement, yet all the Egyptian companies are cooperating together and we are the Ministry's working force inside and outside the country. We do have all the needed expertise and capabilities appropriate for this type of projects and we are skilled enough to implement this project if chosen.

What are Tanmia's utilized technologies?

We have initiated various technological alliances with most of multi-national companies operating in Egypt to get their assistance in our current projects. However, this is just a preliminary phase for us as we would be forming our own technological fleet to depend on.

What are your upcoming most vital projects?

As a matter of fact, we have several major projects just around the



Egypt Oil and gas while interviewing Eng. Abdel Aziz

"... Ready to expand abroad"

to maintain their work commitment in the areas of the Gulf of Suez and Western Desert. This is one of the challenges we believe we can succeed in.

Besides, we will implement another development project for the EGPC Gazorina Field that aims at maximizing the fields' productivity through the utilization of early production units.

INTEGRATED SERVICES

DRILLING, TESTING, COMPLETION & WORKOVER

Applying years of engineering experiences and innovative designs; our experienced team of project managers, engineers and designers provides different drilling programs with risk mitigation scenarios tailored to the most demanding requirements of our customers. They deliver optimal quality drilling solutions (Aided by sophisticated engineering database management) based on materials selection, services applications, and performance criteria.

"Our objective is not only to meet the budget or save time, but foremost to deliver an 'integral well' capable of sustained production, and easy to work over in the future."

STAT

TESTING TECHNOLOGY

A division of PICO Petroleum Integrated Services established in 2008; a company utilizing & implementing the full fledge of Slick Line Services, Testing (Down Hole Testing Services, Surface Testing Services & Early Production Facilities), Acquisition Memory Gauges and TCP Services, worth to mention that our equipment manufacturers list includes but not limited to Well Testing, Technip, Cameron, Himech, Anson, Spartech & Ingersoll Rand as well as Lee Specialties and Hunting Energy Services. STAT team members enjoy successful histories and past experiences in local & international markets, yet they congregate the most experienced personnel, who have extensive experiences exceeding 20 years.

ACSPT

CT & STIMULATION TECHNOLOGY

A division of PICO Petroleum Integrated Services established in 2008; providing a variety of advanced Coiled Tubing, Stimulation and Pumping Technologies. ACSPT team members have a leading edge determined by their capability to provide superior technology and best service quality, they have very competitive skills and are able to design and render legible stimulation solutions to improve reservoir economics and enhance the original permeability of the pay zone. Coiled Tubing are available in 1 1/4", 1 3/4" and 2 1/4" sizes for low pressure and high pressure reservoirs as well as standard and H2S reservoir conditions.

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 HEAD OFFICE: Tel. : + (202) 276 88 100 Fax : + (202) 276 88 130

KATAMYIA OFFICE: Tel. : + (202) 275 93 445 + (202) 275 93 446

WARP Fluids Technology gives you high fluid weights, low rheologies with no barite sag and more

M-I SWACO

Application

Onshore and offshore wells where tight control must be maintained over fluid weights, rheologies, Equivalent Circulating Densities (ECDs) and barite sag.

Problem

Extended-reach, HTHP and small-bore drilling with narrow mud-weight windows, require sufficiently high viscosity to suspend barite, but not so high that ECD management is compromised. For high-density completion and workover fluids, the choices have been either conventionally weighted fluids with potential settling problems or high-density, very costly, solids-free brines.

Solution

The micron-size particles used in WARP* Advanced Fluids Technology from M-I SWACO* can be used in all water and oil-base drilling and completion fluid systems to increase density without compromising rheology or promoting particle settlement.

Economics

For faster drilling, WARP Fluids Technology reduces torque, drag and particle settlement. For completions and workovers, WARP Advanced Fluids Technology is more cost-effective than some high-density brine systems.

The micron-size weighting materials developed for WARP Fluids Technology are much smaller than standard API barite, allowing them to flow easily through 300-mesh shaker screens, so that virtually 100% of drilled cuttings can be removed on the first pass. Their ultra-small size, combined with their proprietary treatment, ensures that fluids formulated with WARP Fluids Technology do not settle or sag.

PressPro RT - Real-time engineering answers for technically demanding, high-cost wells

The PRESSPRO* RT service from M-I SWACO provides unprecedented remote and wellsite engineering support with a unique, specifically de-

signed suite of software. Proprietary programs use surface measurements to calculate downhole pressure profiles and fluid properties in real time during drilling, tripping and other critical operations. This unique technology not only provides up-to-the-second Equivalent Static Densities (ESDs) and Equivalent Circulating Densities (ECDs) at any point in the wellbore during drilling, but also delivers surge and swab pressure measurements, Equivalent Dynamic Density (EDD) while tripping drill pipe or setting casing. The PRESSPRO RT system is a real wellsite service. The PRESSPRO RT system and dedicated computer aboard the rig are maintained by an M-I SWACO critical-well analyst, an experienced fluids specialist trained in all aspects of drilling the most demanding deepwater, HTHP, extended-reach and multilateral wells. The virtual sensor package provides ESD, ECD, and other key values for display at the driller's station as if they were measured values. Using the PRESSPRO RT package is like running the VIRTUAL HYDRAULICS* software

package in real time.

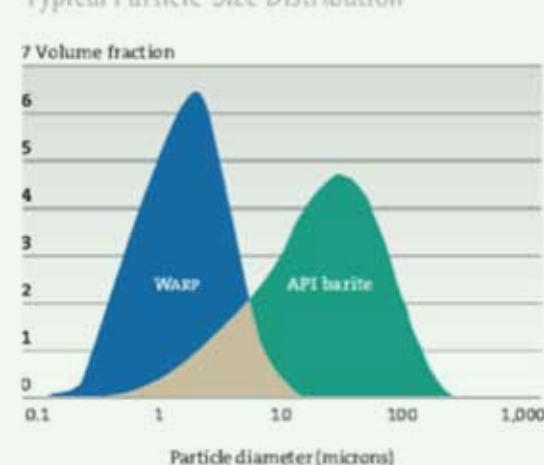
Features

- Managed by a specially trained, onsite, critical-well analyst
- Can be operated from remote Operation Centers
- Monitors drilling and tripping parameters
- A dedicated computer can be interfaced to an existing data acquisition system with the data-acquisition source on the rig
- Predefined screens for targeted drilling/tripping components
- Downhole profiles calculated and updated every second and displayed as virtual sensors

Benefits

- Prevents/minimizes down-hole fluid losses due to lost circulation
- Early detection of impending problems by providing
- "What should be" data to com-

Typical Particle-Size Distribution



pare with "what is"

- Minimizes mud-related non-productive time
- Helps reduce drilling costs
- Provides real-time monitoring for immediate response
- Enhances ECD management by providing downhole pressure profiles during drilling, tripping, and other critical operations
- Complements PWD when available and substitutes for PWD when the data is not available.

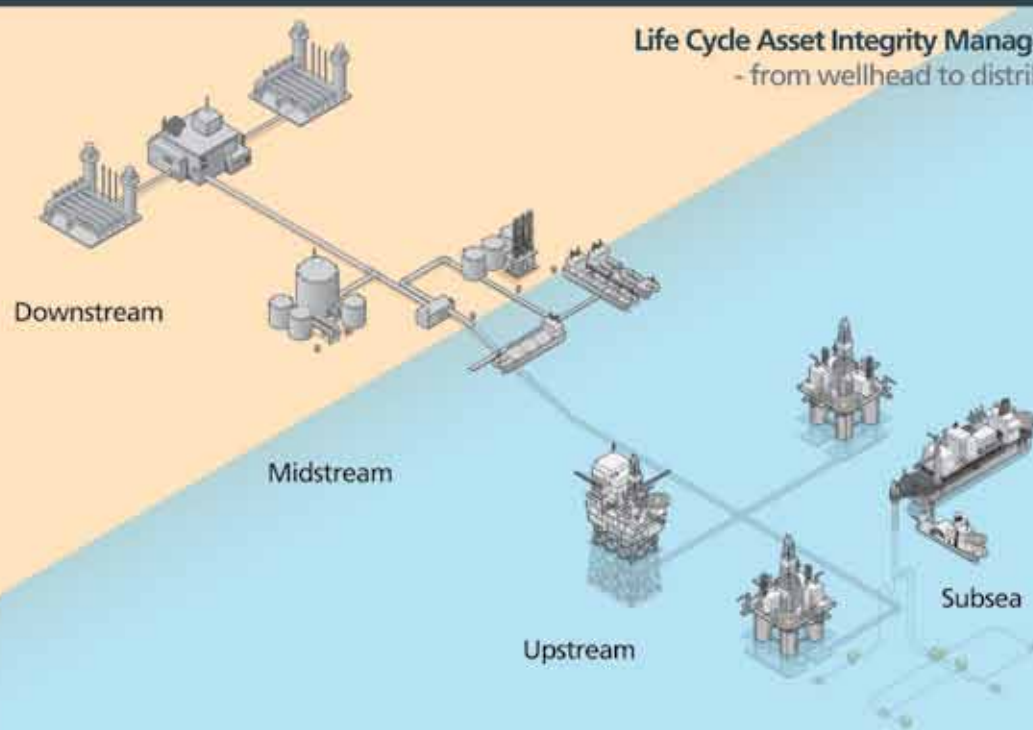
The global independent technical advisor

GL Noble Denton



Global Technical & Operational Excellence in Asset Integrity Management

Life Cycle Asset Integrity Management
- from wellhead to distribution



Our four step holistic approach to asset integrity management

- Strategy & philosophy development
- Policy development & roles and responsibilities
- Implementation of the integrity management system
- Delivery of life cycle integrity management

Our intelligent and dynamic software tools for AIM

- GALIOM – plant asset integrity
- UPTIME – pipeline asset integrity

www.gl-nobledenton.com

Email: glnobledenton@gl-group.com

U.S Natural gas shale amazes the world

Gas shale has become an important source of natural gas in the United States over the past decade, and interest has spread to potential gas shale in Canada, Europe, Asia, and Australia. One analyst expects gas shale to supply as much as half the natural gas production in North America by 2020

By Mostafa Mabrouk, Vice Chairman Assistant for Economic Affairs, Ganope

Some analysts expect that gas shale will greatly expand the energy supply worldwide. A study by the Baker Institute of Public Policy concluded that increased gas shale production in the U.S and Canada could help prevent Russia and Persian Gulf countries from dictating higher prices for the gas they export to European countries. U.S experts believe that increased gas shale development will help reduce greenhouse gas emissions. Gas shale areas are often known as resource play.

The U.S Department of Energy (DOE) stated that the natural gas production rates in 2007 was about 19.3 trillion cubic feet (tcf), the current recoverable resource estimate provides enough natural gas to supply the U.S for the next 90 years. Separate estimates of the gas shale resource extend this supply to 116 years. Production of gas shale is expected to increase from the 2007 U.S total of 1.4 tcf to 4.8 tcf in 2020. The DOE report states that gas shale production potential of 3 to 4 tcf per year may be sustainable for decades.

Shale gas blasts open world's energy market

In terms of supply, the gas shale revolution has had a huge impact, in less than five years; the U.S has gone from seeking new sources of gas from overseas to being self-sufficient. A stretch of coastline on the Texas-Louisiana border provides a startling glimpse of Europe's energy future. There, where Lake Sabine empties into the Gulf of Mexico, a giant port was completed last year. Built at a cost of \$1.5 billion, it was meant to be a vital new part of America's energy infrastructure. Giant tankers from places such as Qatar and Sakhalin Island in Russia's far east were meant to dock there to inject their cargoes of liquefied natural gas (LNG) straight into the national pipeline network.

Oil companies have known about it for decades but always dismissed it because it was too expensive and difficult to extract. In the past few years, new technologies that pump water underground to fracture the rock and free the gas have been perfected. The breakthrough has opened a new frontier for the energy industry and turned long-held assumptions about the world's dwindling supplies on their head.

Chief executive of BP, said "a revolution in the gas fields of North America". In a report this summer, the U.S potential gas committee increased its estimates of American reserves by a third. The Department of Energy now predicts that shale gas could meet half America's demand within two decades and turns the country into a net exporter.

Population density is also a factor. Drilling into shale is a large, invasive operation and Europe does not have as much wide-open space as North America.

The shale is cracked by rigs that drill down thousands of feet. They are able to turn 90 degrees and continue horizontally to follow gas-rich seams. Once a hole is drilled, explosive charges are inserted and detonated to create a series of openings in pipes laid to keep the well open. A mixture of water and sand is then shot down at high pressure. When it spurts through the open-

ings in the pipes, it shatters the surrounding rock and the gas is released.

The process uses vast quantities of water and American regulators are only now coming to grips with the environmental impact. The prize, though, is huge. Burning gas produces far lower carbon emissions than oil or coal. For governments struggling to hit pollution targets, that is important. So is security of supply. Countries are scrambling to get new supplies. Companies in Britain have spent billions on new LNG terminals on the Isle of Grain in Kent and at Milford Haven in Wales to make up for the North Sea's decline. Croatia and Poland are also working on plans to build new port capacity. Construction on the £7 billion Nabucco pipeline from Turkey to Austria — meant to reduce Europe's dependence on Russia — is set to begin next year. Researchers at Texas University estimate world reserves could increase ninefold. U.S natural gas shale could serve a critical role in supplying domestic gas needs if offshore drilling in the U.S. Gulf of Mexico remains at a standstill due to the ongoing oil spill and debate over whether drilling should continue.

However, the rise in shale production and level of gas in U.S. storage, coupled with decline in energy demand in recent time, has depressed domestic gas prices from levels seen a few years ago. As a result, companies focused on shale are switching to shale plays such as Eagle Ford in Texas, which have associated condensate production to improve project economics. Industry observers remain cautious on the natural gas price outlook, noting that supply has not fallen due to E&P companies having hedged a significant amount of this year's gas production to reduce volatility.

Chesapeake, which holds significant positions in gas shale plays such as Barnett, Haynesville, Marcellus and Bossier, has begun to focus primarily on oil and liquids-rich areas when seeking new plays, although the company said in 2008 it would seek to develop new unconventional oil plays. Chesapeake CEO said the company would redirect capital from its gas shale plays to focus more on oil due to continued low natural gas prices and the ongoing success in the company's liquids-rich play.

Despite the short-term plummet, the long-term outlook for U.S. shale gas remains optimistic, with U.S. shale gas still expected to draw attention of additional foreign companies and domestic majors. While the exact number of shale reserves in the U.S. is still being debated, industry consensus is that a large number of shale gas reserves exist that could fuel the U.S. for decades.

It was noticed that shale gas resources could play a critical role in the U.S. economy going forward in terms of power generation, transportation and job creation, but that tremendous investment in mid-stream infrastructure and storage capability is required.

The wave of U.S shale development has started to ripple across the world as shale gas resources are identified in Europe, Asia, Africa, and other parts of the world. European governments are seeing shale gas as a means of breaking dependence on Russian

and other sources of gas.

U.S Shale Gas could play considerable role in future production

U.S onshore shale natural gas could potentially become a large portion of future U.S. gas production with an assumed 347 tcf of technically recoverable shale gas, provided that significant growth occurs in future U.S. gas demand. A few years ago, most analysts anticipated a growing U.S. reliance on imported sources of gas, and significant investments were being made in regasification facilities for imports of liquefied natural gas, EIA said. That outlook has changed as a wave of exploration and production companies over the past five years have sought to explore for and produce U.S. shale gas, which has been described as a clean-burning, secure energy source that can meet future U.S. energy demand. In 2009, ExxonMobil agreed to buy XTO Energy to enhance ExxonMobil's position in unconventional gas resources. Earlier this year, Chesapeake Energy formed a \$2.25 billion joint venture with Total E&P USA, a subsidiary of Total S.A. to develop Chesapeake's upstream Barnett Shale assets. Overall, U.S natural gas production is

expected to grow from 20.6 tcf in 2008 to 23.3 tcf in 2035. With technology improvements and rising gas prices, gas production from shale formations is expected to grow to 6 tcf in 2035, more than offsetting declines in other production and representing the largest contributor to production growth. Shale gas is expected to provide 24 percent of total U.S. gas production in 2035, according to the EIA. While U.S shale gas production increases, total onshore gas production declines slightly in the Gulf Coast region, by 27% in the mid-continent region, and by nine % in the Southwest from 2008 through 2035. Total gas production in the Rocky Mountain region is expected to increase by 8%, largely from tight sands formations, while West Coast regional production will see the largest decline of 63%.

The true potential of U.S shale gas resource remains

uncertain, however, as estimates vary and experience continues to provide new information on the seven shale plays in the U.S., which include the Antrim, Barnett, Devonian, Fayetteville, Woodford, Haynesville, and Marcellus plays. Growth in gas production from shale formations will offset declines in other supply sources nationwide, and is expected to grow significantly in the Northeast, Gulf Coast and Midcontinent regions.

The Antrim shale play, a formation of the Upper Devonian age found in Michigan and parts of Ohio and Indiana, has produced gas since the 1940s, but was not active until the 1980s. Drilling activity picked up significantly in the 1990s; to date, the shale has produced over 2.5 tcf from over 9,000 wells.


Prior to 2000, low production gas wells were completed in the Marcellus shale, which is found in New York, Pennsylvania and other states that are part of the Appalachian Basin. Several companies that successfully drilled the Barnett shale play near Fort Worth, Texas, several companies are applying this technology and experience to drill the Marcellus shale. While initial drilling costs are higher, horizontal wells being drilled here are producing at twice the

rate of vertical wells and at a slightly lower overall cost.

In 2008, the Haynesville shale made headlines after Chesapeake Energy reported it had made a significant Haynesville shale gas discovery in northwest Louisiana, leading to a rush of activity as energy exploration companies began to lease property in north Louisiana for possible drilling and production. The formation was once considered too costly to explore, but rising energy costs and newer technology and processes changed this situation.


The Haynesville play is expected to become a major contributor in the Gulf Coast region, and shale gas production here compensates for nearly 91 % of the decline in other gas production. Other shale plays found in this region include Eagle Ford, which has become active due to its oil-gas mix, and Barnett shale play.

Although production from the Antrim shale has started declining, and development in parts of the Marcellus shale has been inhibited somewhat by limitations on the issuance of drilling permits, shale gas production in the Northeast region will be more than triple from 2008 to 2035, according to EIA said.




Providing The Most Suitable Cable For Each Need


Infrastructure




Local Area Networks

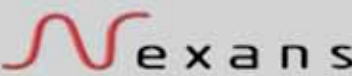


Industry



Building





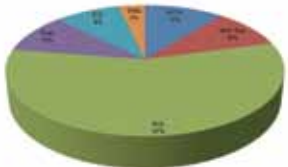
Head Office:
 17 Al Ahram st., Heliopolis, Cairo, Egypt.
 Tel: + (202) 22 90 6371
 Fax: + (202) 22 90 4900
 E-mail: icc@intlcables.com

Egypt Statistics

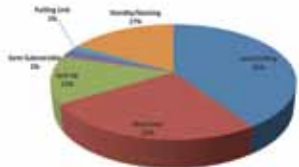
Table 1 Egypt Rig Count per Area -July 2010

RIG COUNT			
Area		Total	Percentage of Total Area
Gulf of Suez		12	11%
Offshore	12		
Land			
Mediterranean sea		11	10%
Offshore	11		
Land			
Western Desert		63	57%
Offshore			
Land	63		
Sinai		11	10%
Offshore	11		
Land			
Eastern Desert		10	9%
Offshore			
Land	10		
Delta		4	3%
Offshore			
Land	4		
Total		111	100%

Rigs per Area



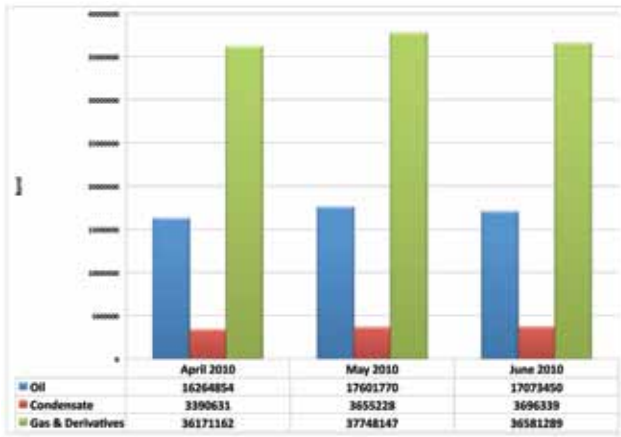
Rigs per Specification



Production - June 2010

	Sold Million cubic feet	Planned Million cubic feet	%	Oil Barrel	Equivalent Gas Barrel	Condensate Barrel	Liquefied Gas Barrel	Ton	Total Gas & Derivatives Barrel
Upper Egypt				18330					18330
E.D.	126647	156270	81.04		25329400	1516874	368441	32750	27214715
Med. Sea	35247	36810	95.75	7304517	7049400	1864679	536341	47675	16754937
W.D.	13644	8160	167.21	131735	2728800	201735	110390	9812	3172660
Delta	765	3090	24.76	5235014	153000	63985	159838	14208	5611837
GOS	320	450	71.11	2048530	64000	49066	81679	7260	2243275
Sinai				2335324					2335324
Total	176623	204780	86.25	17073450	35324600	3696339	1256689	111706	57351078

	Actual	Planned	%
Oil	17073450	17301840	98.68
Condensate	3696339	3454530	107.00
Gas & Derivatives	36581289	42242640	86.60
Total	57351078	62999010	91.03



Source: Egypt Oil & Gas

Average Currency Exchange Rate against the Egyptian Pound
(June 2010/ July 2010)

US Dollar	Euro	Sterling	Yen [100]
5.675	7.062	8.517	6.346

Stock Market Prices
(June 2010/ July 2010)

Company	High	Low
Alexandria Mineral Oils [AMOC.CA]	41.54	38.94
Sidi Kerin Petrochemicals [SKPC.CA]	12.19	11.17

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

	Libya	Sudan	Other	World	OPEC ¹	Persian Gulf ²	North Sea ³
2009 September	1,650	500	2,385	72,509	30,942	20,616	3,314
October	1,650	500	2,380	72,914	30,993	20,577	3,595
Novemer	1,650	495	2,409	73,158	30,940	20,542	3,753
December	1,650	495	2,464	72,993	30,834	20,464	3,644
2009 Average	1,650	483	2,411	72,248	30,639	20,402	3,673
2010 January	1,650	500	2,414	73,152	31,068	20,571	3,689
February	1,650	510	2,435	73,513	31,163	20,650	3,600
March	1,650	515	2,451	73,622	31,074	20,581	3,682
April	1,650	521	2,431	73,552	31,048	20,607	3,622
2010 4-Month Average	1,650	511	2,433	73,458	31,087	20,601	3,649

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

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

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

Table 2 World Oil Supply¹ (Thousand Barrels per Day)

		United States ²	Persian Gulf ³	OAPEC ⁴	OPEC ⁵	World
2009 September	E	9,297	23,184	24,094	34,270	84,682
October	E	9,279	23,167	24,061	34,343	85,173
November	E	9,354	23,136	24,022	34,286	85,486
December	E	9,398	23,083	23,950	34,199	85,374
2009 Average	E	9,056	22,890	23,805	33,873	84,240
2010 January	E	9,275	23,208	24,076	34,457	85,468
February	E	9,540	23,290	24,148	34,560	86,124
March	PE	9,587	23,261	24,102	34,507	86,269
April	PE	9,542	23,311	24,148	34,508	86,185
2010 4-Month Average	PE	9,484	23,266	24,118	34,507	86,007

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

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

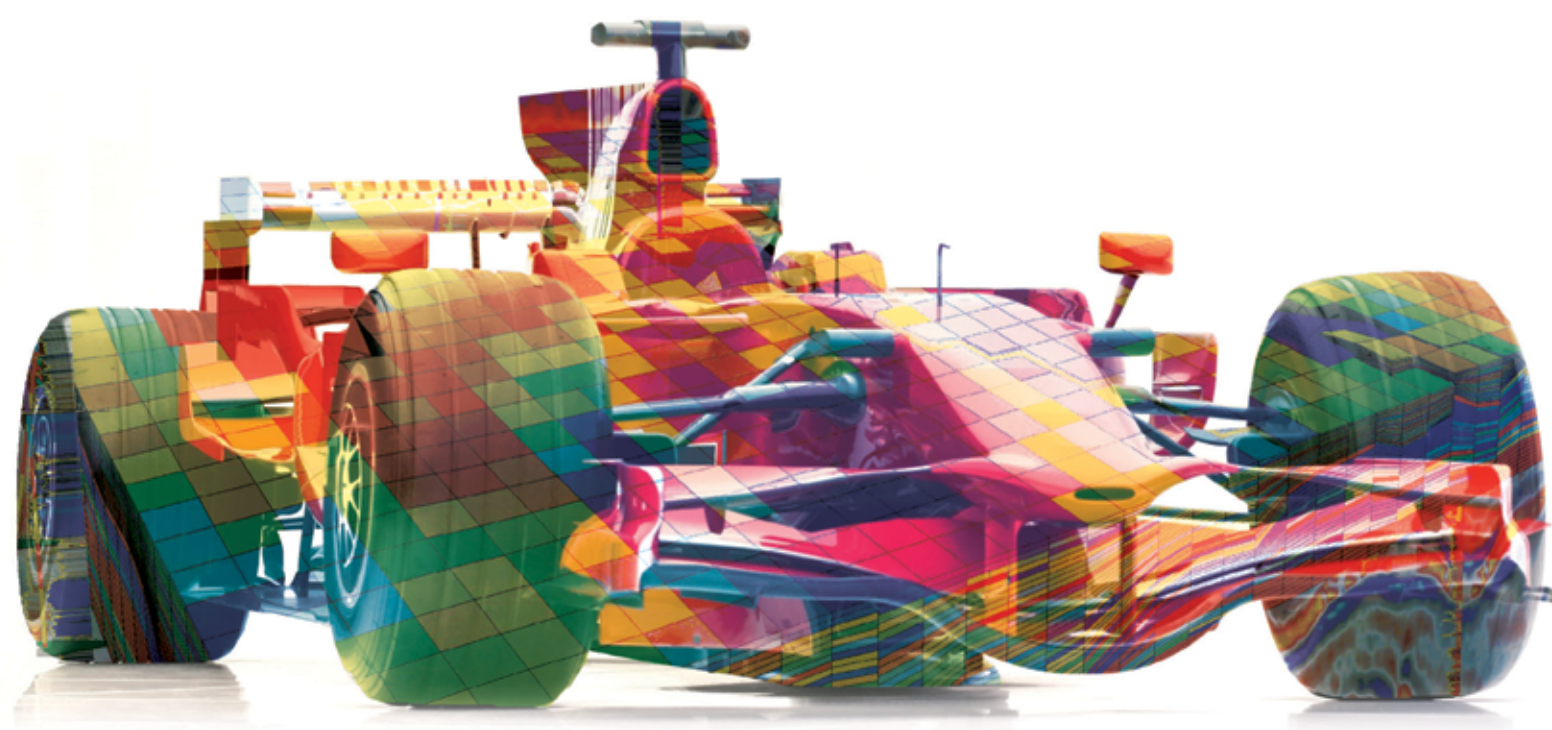
³ The Persian Gulf countries are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Kuwait-Saudi Arabia Neutral Zone is included in Persian Gulf production.

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

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

E=Estimated data. RE=Revised estimated data. PE=Preliminary estimated data. Revised data are in **bold italic font**.

Need a solution that will take you
to oil faster? **Accelerate**



Introducing the DecisionSpace® Desktop unified workspace

Now your entire asset team can collaborate in real time using one unified workspace.

Accelerate analysis and interpretation by sharing a common subsurface framework.

Reduce cycle time and improve accuracy by examining more scenarios faster.

Improve your returns in the field and in the office with industry-leading science and unmatched usability. Learn more at Halliburton.com/decisionspacedesktop.

Or contact your local representative at 202-759 1000.

High Science Simplified™

HALLIBURTON | Landmark Software
& Services



The Middle East's
first regional and
private-sector
natural gas company

أول شركة إقليمية
من القطاع الخاص
بالشرق الأوسط
متخصصة
في مجال الغاز الطبيعي

Clean Energy
for a Better Tomorrow

طاقة نظيفة
لمستقبل أفضل



Khor Mor Gas Plant
Kurdistan Region of Iraq



El Wastani Plant - Egypt



Khor Mor Gas Plant -
Kurdistan Region of Iraq



SAJGAS Plant - UAE



UAE Gas Project

www.danagas.ae