

WEATHERFORD INAUGURATES NEW FACILITY IN EGYPT WITH KEY INDUSTRY LEADERS

BY MAI EL GHANDOUR – MOSLEM ALI

Weatherford officially inaugurated its new facility and office space in Cairo in a ceremony held on April 30 that gathered the company's global top management and key leaders of the Egyptian petroleum sector.

The inauguration ceremony was attended by Mark McCollum, Weatherford President and CEO; Eng. Mohamed Moanes, the Egyptian Ministry of Petroleum's First Undersecretary for Gas Affairs; Eng. Abed Ezz El Regal, CEO of the Egyptian General Petroleum Corporation (EGPC); and Eng. Osama El Bakly, CEO of the Egyptian Natural Gas Holding Company (EGAS). In addition to other important figures from national and international oil companies operating in Egypt.

The event started with the ribbon cutting ceremony at the facility's main entrance, followed by welcome remarks. "We are working better together. It will save us money, but in the end, it is all about better serving our customers and being more effective here in Egypt. We think there are a lot of good days to come as we work in this facility. We hope to be a leading service provider in Egypt. We have been here in Egypt for 42 years, and we will be here for many decades to come. Thank you all," said Mark McCollum, Weatherford President and CEO, commencing the ribbon-cutting ceremony.

Attending on behalf of the Minister of Petroleum H.E Eng. Tarek El Molla, the Ministry's First Undersecretary for Gas Affairs, Eng. Mohamed Moanes congratulated Weatherford on launching its new facility that will contribute to the development of the oil and gas sector in the country. "Egypt is rapidly becoming a key regional center for energy and a global player in the oil and gas industry. We have made a great progress in discovering and developing new sources. The Zohr gas field serves as a prime example, as it is the largest discovery ever made in the Mediterranean Sea. As we open the new facility, I wish Weatherford all the best." Moanes added.

"We are excited to show you what we have been working on to better serve our customers, as we open this base today. Our company is a multinational service provider in the global oilfield service market. We are in 90 countries around the world, we have around 30,000 employees, and we serve operators in the most important oil and gas markets across the world," McCollum said in his speech.

The CEO stressed that Weatherford adapts to modern technologies with its competitive portfolio and reputation for collaborative customer relationships. "We have a broad global infrastructure that enables us to respond rapidly to our customers. We have a high-caliber and diverse workforce, including some of the top engineering minds in our industry. We are



an adaptable and nimble organization, as evident by our transformation."

"We are used to change, and now we are creating more discipline in our organizational structure, so that we can take full advantage of our strengths. Part of that is optimizing our global footprint and consolidating facilities like this one to provide best-in-class service for our customers," McCollum added.

"Our portfolio features many market-leading technologies across all of our business segments. As for the production segment, Weatherford is the only company to provide complete production solutions for every form of artificial-lift in every environment. First, we offer all forms of lifts, so we can device true lift-agnostic solutions. Second, we are all for everything needed to optimize each form, from downhole components to service equipment, to intelligent production optimization systems, to the cloud. No other company has the capability to do what Weatherford does," McCollum pointed out.

Highlighting the company's leadership in the well construction segment, McCollum said, "We are the world leader in everything we do, tubular running services, fishing and reentry, and drilling tools. We have a long history of driving innovation for safer and efficient operations with the best service quality performance this year in all our product lines."



“WE HAVE MADE GREAT PROGRESS IN DISCOVERING AND DEVELOPING NEW SOURCES. THE ZOHR GAS FIELD SERVES AS A PRIME EXAMPLE, AS IT IS THE LARGEST DISCOVERY EVER MADE IN THE MEDITERRANEAN SEA. AS WE OPEN THE NEW FACILITY, I WISH WEATHERFORD ALL THE BEST.”

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"We were the first company to add mechanization to the tubular running space, and now we are the first to introduce automation. Doing so results in a step-changing safety for what used to be one of the most dangerous jobs in the oilfield," he added.

Weatherford drilling and evaluation segment and technologies deliver the advantage at the beginning of the oil and gas value chain, according to McCollum. "We obtain real-time information for our customers during drilling, even in extreme temperatures, using our logging and mud drilling tool sweep. We are also efficiently acquiring data after drilling, using truly differentiating wireline tools," the CEO further explained.

SUCCESS STORIES AND FUTURE INVESTMENTS

"As an industry leader in managed pressure drilling (MPD), Weatherford has capabilities ranging from basic pressure management to fully automated pressure response. We were the first company to offer the rotating control device (RCD), and we continue to set ourselves apart with the only pressure control system that can automatically control influxes to minimize their size from barrels to gallons," McCollum said.

Furthermore, McCollum discussed the company's well completion portfolio, "we provide an industry-leading sweep of products. We offer the oilfield leading safety valves, with a reliable record that includes zero failures





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PRESIDENT AND CEO, WEATHERFORD

attributed to the design in 20,000 cumulative years of service life."

Referring to the Single-Trip Completion System (TR1P), McCollum pointed out that "as a pioneer in radio-frequency identification (RFID) in downhole oil and gas equipment, we have developed an unprecedented system that enables installing the upper and lower completion in one trip that saves millions of dollars in offshore operations."

However, McCollum stressed the importance of other leading technologies offered by Weatherford. "We still believe it is important to improve on the legacy technologies proven for delivering customer value, case in point is our Magnus™ Push-the-Bit Rotary Steerable System (RSS)."

The CEO then elaborated on how the company recently launched the Vero Automated Connection Integrity System, which replaces error-prone human judgment with artificial intelligence (AI), while enhancing personal safety and eliminating the risk of catastrophic well failures.

"With Vero, tubulars are installed with the industry's first integrated system for precise makeup in software evaluation to ensure absolute consistency... Today we run Vero in four countries with more than 10,000 connections, and I understand that we are in conversations with our customers here in Egypt for

employing Vero as they progress in their offshore campaigns," McCollum pointed out.

Last year, Weatherford released its CygNet® and ForeSite® software platforms on Google Cloud to reduce costs and infrastructure requirements, providing a virtual network that allows operators to easily deploy and access the software and maximize uptime. Weatherford aims at bringing the Internet of Things (IoT), cloud computing, and advanced-edge analytics to the oilfield production space, according to McCollum.


"We decreased non-productive time (NPT) by 22% between 2017 and 2018," said McCollum, noting that consolidation activities in comprehensive facilities is part of the efforts aimed at increasing efficiency. "Optimization requires investment, and we are honoring that today with the investment that we made in Egypt. During 2019, we plan \$200-250 million in capital with a focus on new infrastructure and technology," the CEO concluded.

Following McCollum's speech, a short video was presented to highlight the company's successes in recent years.

THE STORY BEHIND THE NEW FACILITY

Walid Yassin, Weatherford Vice President for North Africa, followed with a speech that began by recounting the company's milestones in Egypt. Yassin explained that before creating the base, Weatherford had five different locations simultaneously. In addition, running different facilities requires an entirely different budget that could become an administrative burden and lead to many limitations. Yassin said that from here the idea of having one consolidated base was born. That way,

Yassin further discussed the obstacles that came along with having multiple locations for a single company including big administration issues, security issues, and service quality issues arising from controlling five different locations simultaneously. In addition, running different facilities requires an entirely different budget that could become an administrative burden and lead to many limitations. Yassin said that from here the idea of having one consolidated base was born. That way,



“WEATHERFORD DEEPLY BELIEVES IN THE EGYPTIAN MARKET AND THE FACILITY DOES HAVE ALL WHAT IS REQUIRED TO EXPAND IN EGYPT. THIS INVESTMENT IS BASICALLY A PROOF OF THAT.”

WALID YASSIN VICE PRESIDENT - NORTH AFRICA, WEATHERFORD

Weatherford can finally concentrate on doing their business the way they should.

"We came up with a plan to have a purpose-built facility following the highest environmental standards in the market today with the best service quality possible; and while doing this, we are also saving money. This is a very ambitious project, with the support of everyone in the top management, we managed to do it in a record time," Yassin noted, adding that this achievement is significant for the company's growth and success.

The land area of the previous five unconsolidated locations was around 30,900 square meters, however, now it is 41,000 square meters. Yassin clarified that as a result of expanding the area , more services, workshops and product lines are allowed to be brought into Egypt, as well as bringing all employees in the same place. With consolidation, all the processes are being streamlined from a single place, ensuring that the facility proposes value added propositions. According to Yassin, the entire building from scratch adapts to Weatherford's global policy and standards.

"Weatherford deeply believes in the Egyptian market and the facility does have all what is required to expand in Egypt," Yassin stated. The investment is basically a proof of that, since it built one of the largest warehouses in the country with numerous rooms, several training facilities, and an in-house catering facility that caters for everybody's needs.

After delivering his speech, Yassin hosted a tour around the facility, introducing attendees to what Weatherford is offering through its new facility.



WEATHERFORD TRANSFORMATION SEES NEW COMPREHENSIVE BASE IN EGYPT

BY MAI EL GHANDOUR, MARIANA SOMENSI, MOSLEM ALI

The new facility in Kattameya is part of a transformation process by Weatherford that started two years ago. Spanning across 40,800 square meters and employing approximately 230 people, the cost-effective initiative is estimated to save approximately \$1.5 million per year for one of the biggest international oil and natural gas service companies operating in the Egyptian petroleum sector.

The facility delivers various life-of-well technologies, such as drilling rental tools, tubular running equipment, liner hangers, cementing products, completion systems, managed pressure drilling, fishing tools, and a fully loaded and certified machine shop.

Weatherford presented the new facility to the guests of the opening ceremony, led by Eng. Mohamed Moanes, the Egyptian Ministry of Petroleum’s First Undersecretary for Gas Affairs; Eng. Abed Ezz El Regal, CEO of the Egyptian General Petroleum Corporation (EGPC); and Eng. Osama El Bakly, CEO of the Egyptian Natural Gas Holding Company (EGAS).

“We had world-class machine shops everywhere, but getting them together creates more efficiency,” said Mark McCollum, Weatherford President and CEO.

“The key thing for machine shop services is having the correct license, and it has to meet global standards, to renew it yearly, after going through strict auditing requirements. We are the only ones in Egypt to have all those multiple variations of licenses here in Egypt,”

commented Walid Yassin, Weatherford Vice President - North Africa.

Eng. Mohamed Moanes, the Egyptian Ministry of Petroleum’s First Undersecretary for Gas Affairs spoke to Egypt Oil & Gas on the sidelines of the tour, and explained that the new facility plays a part in sector’s modernization. “Once we have everything collected together, we are going to save time and do something better in order to make the production more efficient. This is going to work the most with the exploration and production (E&P) companies and drilling and completion (D&C) companies,” Moanes added.

Moving to the liner hanger department, Bassem Nour Eldin, Liner Hanger Operations Manager, explained that last year, “Weatherford ran the first 13 3/8-in liner in a well in the Noor gas field. It was the first that has ever been run in deep water here, and this due to our transformation and the availability of the equipment at all times, and we successfully ran it without any issues.” Moreover, the company’s staff explained that the Vero Automated Connection Integrity System system is being applied in the Zohr gas field, in cooperation with

the Balaeim Petroleum Company (PETROBEL), allowing for automation to increase operations efficiency.

Meanwhile, Saeed Abdel Moniem, Operations General Manager at Khalda Petroleum Company, told Egypt Oil & Gas that the artificial lift presented in the new facility has been successfully tried before in Egypt, noting that, “The new facility is excellent because it has everything in one place, everything is here.”

Presenting the completion department, Weatherford’s staff explained that it serves customers in the areas of completion, gas lift, and thru-tubing services, through the new and more fit-for-purpose area than what they had before. It gathers bucking machines, pressure test, and inspection in one area, before sending the equipment out to customers. “The pressure test facility is ready and working with 360-degree camera, cranes also cover the entire facility. In the past it took time to move to the machine shops, but now it is all here,” added Yassin.

When asked by the CEO of EGPC about the safety measurements and precautions at the new building,

Weatherford Vice President for North Africa said, “The facility itself is built in a way that allows it to stand in one single structure, so there are not much pillars as you can see. Of course, we also have all the safety standards in regards to escape routes and signs. By using overhead cranes in the right place, we are also avoiding many problems.”

“The entire facility is regularly tested for ISO certificates, [the American Petroleum Institute] API standards, and the Lean Six Sigma standards as well. There are also fire detectors everywhere with a central automatic alarm and extinguishing system, plus the portable system, and H2S detectors,” according to Yassin.

Abed Ezz El Regal, CEO of the Egyptian General Petroleum Corporation (EGPC), told Egypt Oil & Gas that expanding the presence of international oil companies (IOCs) and their activities in Egypt reflect their trust and the environment for investing in Egypt. Secondly, they are expanding the activities in the market with IOCs as well. They are advancing and improving their existence and they are willing to invest and stay in Egypt. They have an optimistic vision regarding the upcoming bid.

Weatherford has also invited partners to audit the facility, the company’s staff explained, and throughout the tour, which included other departments and warehouses, the staff highlighted that the focus is shifting to efficiency, and that all records are being computerized and stored on the cloud, replacing paperwork, thus saving time and enhancing asset integrity.

INNOVATIVE TECHNOLOGIES

Egypt Oil & Gas then spoke to Mark McCollum, Weatherford President and CEO, on the sidelines of the event and asked about the prospects for the new technologies he mentioned in his presentation, led by Tr1P, the system Weatherford calls the world’s first and only remote-activated, single-trip deep-water completion solution.

“The Single Tr1p Completion System is in its first stage gate of commercialization, where it has been running a series of wells under specific conditions. The new technology runs upper and lower completion in one a single trip, and it is designed for offshore environments. We are running more tests to use it in more broad applications,” said McCollum.

“Tr1p has been run in the North Sea, where we were able to save Shell about \$150 million on 20 wells, and in Algeria and it has been highly successful, saving 72 hours of rig time.” McCollum expects “it could achieve the same success here in Egypt.”



“We already introduced the Magnus™ Rotary Steerable System (RSS) and there will be some trial runs for it. Magnus is a Push-the-Bit system replacing a different one that we previously had that is still used in some applications, but it is not necessarily cost-effective as many customers would like it to be. It had to be repaired quite a bit as it had multiple tools. The Magnus is a simpler system, which takes all the best technologies out there and combine them,” McCollum told Egypt Oil & Gas.

When asked about the trial runs for the Magnus, the CEO of Weatherford said, “We have drilled several tests in the United States, in the Permian Basin and the Eagle Ford Basin where we did in fact drill an entire well with one tool.

“We also had successful tests in Saudi Arabia, where we have been able to steer through multiple challenging geologies with one single tool, and in Mexico, we used it offshore and drilled successful wells there as well.

“It is a highly adaptable system and is easy to repair, so the operating cost is significantly lower, and we are still trying to refine the edges. What we found is that from an efficiency standpoint, having to take tools on and off the rig, replacing any broken parts, wastes a lot of time, but using one tool that can drill the lateral sections, the curves and everything, saves all that time spent in switching tools. I believe the Magnus will be a game changer here in Egypt,” McCollum affirmed.

Another system that was presented during the launching ceremony of the new facility that Weatherford is introducing and is in talks for using

it in offshore rigs is the Vero Automated Connection Integrity System. “It uses auto-tongs. Previously, tongs would collapse and then the rig crew would spin a chain and twist the pipe that connects them, so instead of having this mechanical process, it is now automated. Laser is used to make sure that everything is perfect and pipes are symmetrical and sealed, to avoid any leak. This eliminates the risk of bad pipes and saves about 10% in time,” said the CEO.

Another Weatherford system that uses automation and artificial intelligence is the ForeSite platform. “What the system does is that once the wells are producing, whether with mechanical rod lifts or electronic submersible pumps, it provides information that lets operators know how the equipment is performing, failing or out of balance, allowing for preventive maintenance. It can also, with the use of advanced technologies, monitor the flow in the oil and water cut, and know if it is producing too much, starting to scale, or if production is going down.

“Actually, it can automatically inject chemicals to the well, which enhances precision and efficiency. Because customers can monitor everything, they have the ability to plan. No well is on one lift for its entire life, users will know exactly when to shift to different forms and get it done before the well stops and halts production for a period of time,” he further explained.

“Google and IBM are partners with us in that technology, and for our company, with lower global oil prices, more emphasis from investors in Wall Street is on returns and cash flows, and it is all about production. The biggest single that can be done to generate better returns is getting production up and cheaper, and that is where



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we can help, and where Weatherford is leading from a technology point of view, and we are pretty excited about that,” McCollum stated.

EGYPT AS AN INVESTMENT TARGET

Fredrico Justus, President of Eastern Hemisphere at Weatherford, told Egypt Oil & Gas that he first met the Egyptian Minister of Petroleum, Tarek El Molla, during the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC 2016), when the minister shed light on Egypt’s extraordinary potential.

“I then came to Egypt for the first time for the first edition of the Egypt Petroleum Show (EGYPS 2017). At that time, our base was still fragmented and not yet efficient, so we decided to have integrated operations

here in Egypt, and in two years, the facility is up and running,” said Justus.

Justus told Egypt Oil & Gas about what he considers a very successful transformation process that the company has been going through ever since McCollum came on board as a CEO in March 2017. The transformation set the way Weatherford plans to operate in Egypt, as it began operating in a more efficient way. Being integrated into a single place with a single management, Justus sees the base brings efficiency and boosts competitiveness to the market, also offering a platform where anyone can grow their business in a sustainable way. Which is aligned with the current strategies towards the growth in the oil and gas activities.

“WEATHERFORD WILL NOW BE BETTER POSITIONED TO BENEFIT FROM MORE ACTIVITIES AND INVESTMENTS IN THE EGYPTIAN MARKET.”
FREDRICO JUSTUS PRESIDENT - EASTERN HEMISPHERE, WEATHERFORD

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“We saw big discoveries in Egypt and we hope to see more operators coming to the country moving forward. Weatherford will now be better positioned to benefit from more activities and investments in the Egyptian market,” Justus said.

Looking at the existing activities in the Egyptian petroleum sector, Justus believes that from a commercial viewpoint, being more competitive and having a lower cost basis for operations makes the company more attractive, which is ultimately helping to grow its market share, and increases its chances in obtaining more contracts.

Discussing the top solutions and technologies that the company has been working on over the last two years during the downturn in the oil market, Justus explained that Weatherford has introduced the Managed Pressure Drilling (MPD) to the Zohr gas field, and will now be introducing the Vero Automated Connection Integrity System. Afterwards, Tr1P is the most likely to make it to the Egypt market, as there are now negotiations to apply it.

Justus also emphasized that because Weatherford really values the Egyptian market, he expects all the technologies to be coming here soon. Even the Maguns, although the company is yet to have contracts for logging-while-drilling (LWD) and rotary steerable systems (RSS) in Egypt.