



# **TO OUR SHAREHOLDERS**

# **CEO Opening Word**

In my name and on behalf of the management, we are proud to present MOG Energy's Annual Report for 2019. Over the last 2 years, we have faced many challenges in making MOG Energy a producing and active company in the oil and gas business on the national and international levels. The company along with its share and contribution to local and South-Sudanese markets is now well established. Persistence and hard work paired with vision of the management and the team made it possible to achieve remarkable objectives. MOG Energy is now resolutely turned towards the future.

Since the Concession Agreement was awarded to Amoco in1992, 2 major companies; BP and Perenco Egypt succeeded Amoco in owning the ONS concession. Neither of the 3 companies could undertake the project of developing and producing from the area. With the support of the parent company, Egypt Kuwait Holding (EKH), MOG Energy managed to meet the technical and economic challenges of such project.

The year that ends was marked by exceptional achievements with NOSPCO reaching a record production capacity rate of 100 mmscfd in December 2019; the actual production being 80 mmscfd due to the strategic decision took by national concerned high authorities to minimize Egypt's gas production. The stakes involved in the 2nd phase of the project, that started and was successfully completed in 2019, were high and we greatly appreciate that we managed to achieve what would have been impossible a year ago. I would like to seize this opportunity to congratulate the management members and the staff for their excellent work.

On the other hand, the positive results accomplished entail that we cannot afford backsliding and with success also comes a responsibility to continue pushing forward towards a brighter future for MOG Energy.

I cannot finish without emphasizing the contribution of everyone to the realizations presented in this report. My thanks also go to all our governmental and private partners, and the board of directors of EKH for their unwavering support to the TAO-Phase I and KAMOSE-Phase II projects.

# **MOG ENERGY PORTFOLIO**

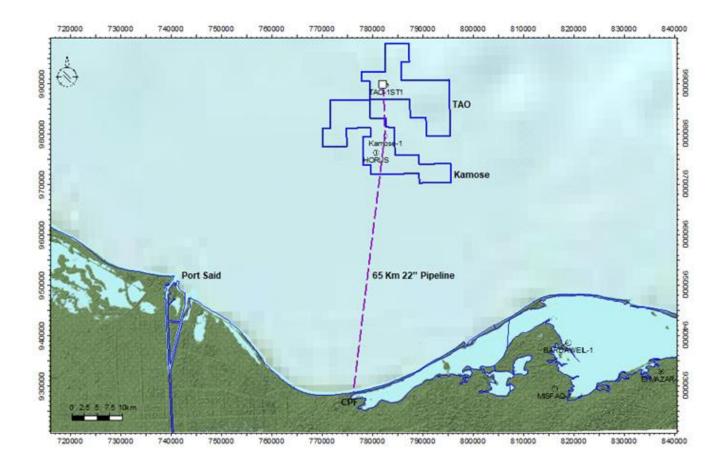
MOG Energy is a multinational energy company established in July 2006, active in oil and gas exploration & production. Headquartered in Cairo, we are harnessing our experience and dedication to build one of the Middle East and North Africa's first vertically-integrated energy companies. Currently MOG has assets in Egypt, Syria (Force Majeure) and South-Sudan.

A number of successful exploration and production projects in partnership with industry leaders have firmly established our reputation in the competitive upstream market.



# **EGYPT – OFFSHORE NORTH SINAI**

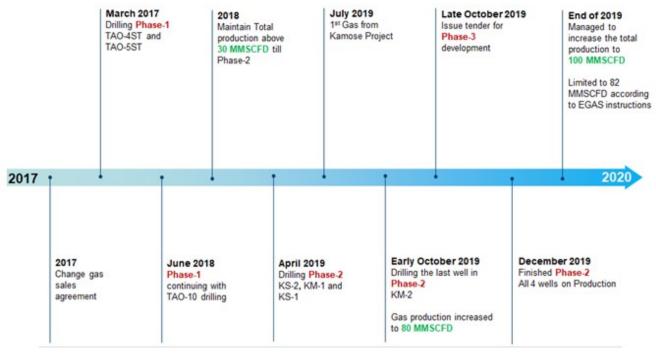
The Offshore North Sinai (ONS) development lease lies in the eastern flank of the Nile Delta basin, about 65 km north east of Port Said city. ONS concession is currently comprised of two separate areas, named Tao and Kamose with total acreage about 282 Km2 with shallow water depth; 30 - 90 m.



Offshore North Sinai Location Map

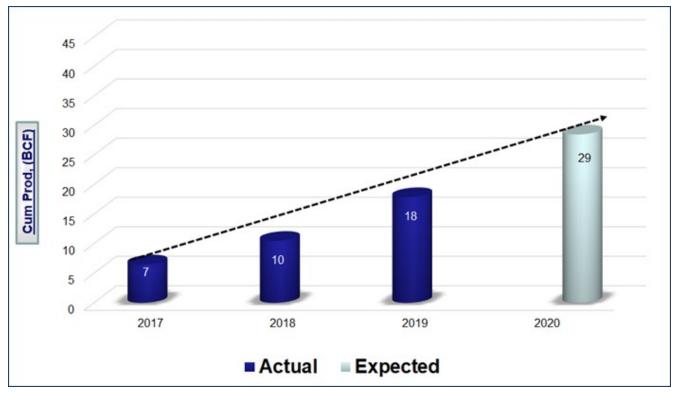
The in-house G&G study reinforced by the study conducted by Schlumberger lead to the assumption that the area seems promising with the occurrences of new prospects and leads analogues to the discovered fields and further confirmed by sizeable adjacent discoveries such as Temsah, Port Fouad and Nardine. In addition to Nour discovery, 1 km away from ONS development lease, that confirms the hydrocarbon potentiality in the Oligocene section.

Having established the perspectivity of the ONS concession, a strategic decision was made to divide the project to phases:



ONS Success History 2017-2019

Increased the annual cumulative production through 2019 to be 18 BCF, and expected to maximize the annual production by 60% in 2020:



Growing of Cumulative Gas production

Dividing the project to phases allowed for a better management of financial and human resources and enabled the company to conclude beneficial deals with contactors and guarantee the feasibility and the economic return of the project.

On the other hand, an integrated G&G study for ONS prospectivity was conducted by Schlumberger and Promote Energy companies. According to Schlumberger G&G study; the estimated ONS gas initial in place for post-Messinian prospects is 1.2 TCF and 1.5 TCF for Pre-Messinian Leads as most likely case; whereas Promote Energy estimated ONS gas initial in place for post-Messinian prospects to be 0.5 TCF and 7 TCF for Pre-Messinian Leads as most likely case.

An ongoing study is being conducted by Gaffney, Cline & Associates (GCA), a global oil and gas consultancy, to certify and validate the findings of the studies carried out by Schlumberger and Promote Energy companies.

## **Exploration Activities**

Reserves:

During 2019, MOG Energy managed to maximize the asset value through different integrated G&G studies, as follows:

- In-house,
- By Schlumberger,
- By Promote Energy.
- Shallow Gas Hazards Survey Kamose Field and Kamose SW prospect:

The Main Survey objective was to identify any possible risks which could affect the upcoming drilling and hammering activities. Data had been recorded with good quality and

survey Completed Successfully ahead of plan in addition to acquired 14.5 Km extra lines.

- Negotiations are ongoing to conduct seismic data reprocessing in order to enhance the Pre- Messinian seismic imaging for better mapping in the Oligo-Miocene reservoirs and to check all structure below salt and anhydrites.
- Deep potential Promote Energy's study revealed a well-developed prospect named "Marassi" of which a development plan was completed in view of performing prospect maturation activities. Promote Energy's also stated that there is interesting potential in the area between TAO and Kamose development leases.

MOG Energy started negotiations with the Oil Ministry to reobtain the relinquished area of the Offshore North Sinai Concession. The procedure would most likely be finished by 2020.

# **Operations Activities**

## Current Activities

- I. Major project start-ups (Kamose Field):
- We developed and delivered first gas from Kamose Field. It supports our commitment to help realize Egypt's oil and gas potential and meet the increasing demand.
- Performed all preparation work required in terms of CPT & Borehole Cores, Seabed Survey & Debris Removal, and El-Qaher-I Rig Audit;
- Kamose M&S Development plan includes four wells Back-to-Back with total budget of \$58 Million USD and 263 days of Drilling and Completions Activities including core sample;
- El-Qaher I Rig was safely moved to Kamose M&S Location April 15th 2019;
- o Drilled & completed KS-2, KM-1 & KS-1 wells ahead of schedule;
- Al Qaher I rig was safely moved and handed back to Abu Qir Company December 19th, 2019.

| Well Name      | Spud<br>Date | Total Days Drilling &<br>Completions | Well Status  |
|----------------|--------------|--------------------------------------|--|
| Kamose South-2 | Apr-19       | 55.1                                 | On production since July 13th 2019 with 25 MMSCFD      |
| Kamose Main-1  | Jun-19       | 79.2                                 | On production since August 29th 2019 with 20 MMSCFD    |
| Kamose South-1 | Aug-19       | 34                                   | On production since October 3rd 2019 with 15 MMSCFD    |
| Kamose Main-2  | Oct-19       | 75                                   | On Production since December 21st, 2019 with 15 MMSCFD |

## II. Intervention Activities (Tao Field):

- TAO-10 Well: Close GS-8A & Open GS-8:
  - The well was completed with CHGP on 2 zones;
  - The selectivity for production led to have 2 7/8 tubing;
  - The well bore has water column due to water production form GS-8a;
  - RIH with 2.6 GC with brush and tagged the x-over at 2544 m SL depth;
  - Isolate GS-8a by conventional plug at 2530 m SL Depth;
  - Equalize the well around GS-8 SSD and positive test of the plug with 3000 psi holding the pressure for 30 mins;
  - Vent and inflow testing of the plug to 1150 psi stabilizing at 1235 psi holding 130 psi under the SWHP of GS-8a confirmed zone is isolated;
  - RIH with shifting tool to open GS-8 reservoir at 2515 m SL Depth took around 13 Jar ups to open the SSD.
- TAO-4ST:
  - The well was completed with CHGP on 2 zones;
  - The well bore has water column due to water production form GS-1TB
  - RIH with 4.2 GC with brush and Tagged the x-over at 660 m SL Depth
  - Isolate GS-1TB by conventional plug at 640 m SL Depth
  - RIH with shifting tool to open Wastani-E reservoir ast 620m SL Depth Jar downs to open the SSD.

## III. West Gabel Zeit Concession P&A:

- Performed multiples visits to the wells to define the actual conditions of these wells and define the plan
- Established the P&A strategy and defined rigless vs rig activities in addition to the required rig capabilities
- Preparation of the Plug and Abandonment programs according to EGPC's guidelines;
- The total cost of P&A is (\$750 K) and activities are expected to be completed by mid- 2020.

## IV. Deep target well development plan:

In collaboration with the exploration department, the drilling team contributed the deep target well development plan:

- o Preliminary wells trajectories through different options proposed by exploration department;
- Preliminary Well Design including Casing Setting Depth Selection to be used for identification in generating time and cost estimate for the selected well;
- Time Depth Curves and Class I cost estimates based on regional data and offset wells drilled in the area targeting similar horizons;
- The estimated cost of drilling the first exploratory deep target well "Marassi" is 85 Million USD in case of dry hole and 95 Million USD in case of success.

## Future Activities

- In cooperation with Exploration Department, initiate the Wellbore Stability Studies for phase-3 wells (TAO-11, KSE, KSW & KNW);
- Finalize the Conceptual Well Design for the wells (TAO-11, KSE, KSW & KNW) and generate Drilling Design Documents;
- Participate in the preparation of the SOR documents for the wells (TAO-11, KSE, KSW & KNW);
- Secure all LLI's for (TAO-11 & KSE) in terms of Casing and Tubing, Wellhead & Gravel Pack Equipment & Casing Accessories.;
- o Initiate Rig Tender for Jack-up Rig to be used in the activities of TAO-11 & KSE;
- In coordination with Exploration Department, perform shallow gas hazards survey to define any shallow gas below the Platforms or across the well paths of TAO-11, KSE wells;
- Perform Seabed Survey & Debris Removal at the proposed locations of TAO-11 & KSE to guarantee safety;
- Generate the Drilling & Completion Programs for TAO-11 & KSE;
- Secure Yard and Jetty at Port-Said port to support the activities planned next year and install LMP;
- Start the Drilling Activities of TAO-11 & KSE wells according to the concept selection Study results and field development plan;
- Perform the required well interventions as per the wells production performance and production portfolio;
- o Follow the P&A Activities of WGEZ wells;
- Participate in the well planning of the deep target wells by defining the safest and most efficient operating model.

## **Projects Activities**

## Current Activities

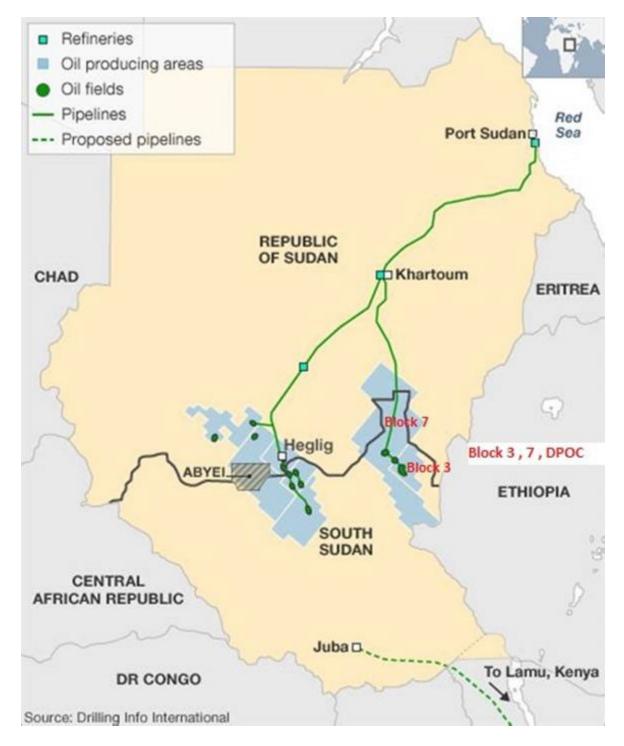
- Completed installation of mini platform and insuring it was ready for drilling April 13,2019.
- o Completed the new pipeline and subsea hot tap tie-in May 25th, 2019.
- Completed topside facilities onboard the MOPU and ready for startup August 12<sup>th</sup>, 2019.
- All Kamose wells on production, first gas in July 2019.
- Evaporation pit engineering activities completed December 20th, 2019.
- Issued tender for Kamose SW / NW / SE-1 / SE-2 concept & pre-FEED October 8<sup>th</sup> ,2019.
- Award the concept & pre-FEED contract for Kamose SW / NW / SE-1 / SE-2 to BASIS December 12<sup>th</sup>, 2019 with a preliminary cost of 370,000 USD;
- The total projects cost of KS-2, KM-1, KS-1, and KM-2 is around \$27 Million USD.

## Future Activities

- The future projects plan is to complete the evaporation pit, the Tao platform rehabilitation, and development of Kamose SW/NW/SE-1/SE-2/TAO-11;
- Complete the concept & pre-FEED scope for Kamose SE-1/SE-2 by February 2020 and for Kamose SW/NW/TAO-11 by May 2020.
- Issue and award tender for Kamose SW/NW/SE-1/SE-2/TAO-11 EPIC scope by July 2020;
- Issue the purchase order for the long lead items LLI for Kamose SW/NW/SE-1/SE-2/TAO-11 by July 2020;
- Complete the evaporation pit scope by September 2020;
- o Issue and award tender for the Tao platform rehabilitation scope by July 2020.

# **SOUTH SUDAN – DPOC**

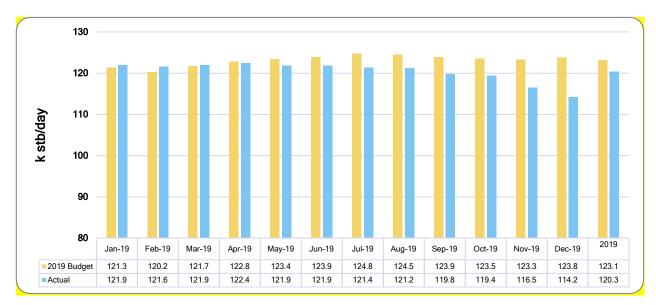
Blocks 3D, 3E and 7E in The Republic of South Sudan operated by DarPetroleum Operating Company (DPOC) - a joint operating company of CNPC China, SINOPEC China, Petronas Malaysia, Nilepet (South Sudan) and MOG Energy.



Block 3&7 Location Map

# Production:

- DPOC exported up to 13-Oct-2019 around 34.7 MMSTB oil to Marine Terminal in Port Sudan. The average oil production rate up to date is 121.4 kbbls/day.
- Drilling, completion and commissioning of 52 wells (43/52 well up to Oct-2019) and A total of 125 workover job has been completed, including 25 PE workover. All of these activities maintain the production rate at the planed level and prevent production decline.



Actual vs budget production performance

# Exploration:

# Exploratory wells

- The Exploration department drilled one exploratory well (Jammam-SE1) in 2019 to date and plan to drill two additional wells by end of 2019;
- Jammam SE1 well was drilled and completed in Q2. The well logs indicated oil discovery in Yabus Sand, 7.2 m & in Adar sand for the first time, 1.1 m;
- DST was conducted in Q3 in Yabus sand with 234 bpd oil, 18.9 API using PCP pump and in Adar using swapping with 5.2 bbls recovered oil & 14.7 API;
- The additional reserve based on the Jammam SE1 well is 5.0 MMSTB;

## Studies

- The exploration license will expire next year (16 February 2020), therefore block 3&7 G&G
  Prospectively and Strategy study was conducted in Q2&3 this year to evaluate the remaining
  exploration potential & develop clear exploration strategy before negotiating with South Sudan government.
- DPOC decided consult RAPID-NW center for the study and the results was presented to DPOC management in Jul-19 with the following highlights:
  - · Identified 8 potential plays and 47 prospects with the PIIP of 2.96 billion barrels;
  - Identified 20 key prospects with 10 new prospects compared to Lavender Project;
  - Suggested drilling JammamNW-1 and JammamW-1 as firm wells and drilling JammamW-2 as a contingent well before expiration;
  - Suggested getting a 3-year exploration extension and drilling 6 wells in North Melut Basin and deploying 200km23D seismic data acquisition in Jammam play, in case the EPSA is not extended;
  - Because of to the considerable remaining potential, the 3-year extension is too short and an extension of at least 5-year is required with the corresponding extension of EPSA;
  - Proposed to drill 10 exploration wells and conduct 600km2contingent 3D seismic data acquisition in Jammam, Kanshur, Labwa-Zummamand Ghanam Uplift plays in case the 5-year extension is approved;
  - Suggested carrying out a pilot study on seismic data acquisition and processing of igneous area.

# **KEY ACHIEVMENTS – ONS**

## 100% success ratio of the wells

with the totality of the prospects found to be gas bearing reservoirs and successfully drilled, completed, tested, & handed to production.

# Maintaining Preferential Gas Price

The company managed to maintain the gas new price stated in the third amendment of GSA signed 7th of November 2018.

## Cost optimization:

- A deal was made with Schlumberger and Baker to benefit from a total discount of 5,8 million dollars;
- Using old material in stock enabled to save 1.85 million USD in Phase#1 (TAO-4, TAO-5, TAO-10) and 1.75 million USD in Phase#2 (KS-2, KM-1, KS-1, KM-2); realizing a total saving of 3.60million USD which had a direct positive impact on the company cashflow;
- Maintaining Al Qaher I rig at its initial good rate \$45k for the first two wells and \$49.5k/day for the last two wells in addition to other points negotiated with EDC before Award such as equipment rental and number of personnel to be accommodated on the rig which enabled the company to achieve total savings of more than \$6.4 Million USD;
- The operations' team managed to clear Port said's yard and base in a record time during the same month of completion of KM-2 to avoid any extra related costs (rent, storage, logistics...etc.)

## NPV

in the 1st phase of the project TAO-4 and TAO-10 realized NPV of \$25.6 MM over a total Capex of \$18.4MM and OPEX of \$5.3MM.

## Valuation of assets

The ongoing G&G studies both inhouse and with consultancies' expertise allowed to enhance the value of the ONS concession assets by including more prospects with additional reservoirs in both the Pliocene and deep sections increasing the potential of the concession. The certification of such studies by Gaffney, Cline & Associates (GCA) is in progress.

### Cost recovery

- The company managed to successfully obtain EGPC's approval to allocate 3.1 million USD related to the MOPU daily operating and maintenance as OPEX. The total of the MOPU daily operating and maintenance cost represented 4 million USD, which means we ensured that more than 77% of it will be recovered in the same quarter;
- As to cash flows, we managed to collect a total amount of \$40 million from EGPC during 2019. This was boosted by implementing settlements of NOSPCO payables by EGPC directly (for EGPC owned companies). As of 31/12/2019 the due balance is around \$3m.

#### HR

• The company obtained EGAS's approval for the cost recovery of positions representing around 40% of the total payroll.

#### NPT

Time value was managed closely resulting in highly positive average NPT ratio of 8.9% for the totality of Kamose campaign; bearing my mind that the average NPT in the Mediterranean is 20%;

#### Production

Production rate reached 86 mmscf/D in mid-October 2019 which is a record in the history of the company.

#### Technological improvement and system update

- Using reamer shoe in KM-1 9-5/8 inches casing for the first time in Egypt as the casing was at a very high angle with high risk of getting stuck and not reaching bottom;
- Due to the relatively small reservoirs and their scattered locations, the company opted for the optimal option of using a Mobile Offshore Production Unit (MOPU) also used for the first time in Egypt;
- We have started the implementation of the new ERP system (Oracle Fusion) to be applied on all the MOG entities (16 entities) late 2018. The System was successfully implemented in July 2019 in parallel with the current IDEAS system to check its accuracy. Starting from January 2020 Oracle will be used to produce financial results.

#### Unit Cost

• The company managed to keep its unit cost at a yearly of average 0.32 compared to 0.44 in 2018;

#### Admin:

• The procedures related to the Deed of Assignment from Perenco name to Polar Star were completed, according to EGPC requirements. The signature of the Deed of Assignment is scheduled for January 2020.

#### Net Contribution to EKH Financial Statements

- The increasing production had a positive effect on EKH annual net profit, making North Sinai the top contributing company in the group:
- 2019 Net Profit of ONS is \$20 million. This was as a result of sustaining production of TAO field and starting KAMOSE during the 2<sup>nd</sup> quarter of 2019. Simultaneously, efforts were made in order to optimize costs in NOSPCO for both Capex and Opex and change the depletion cost methodology.
- Cash Calls received from EKH during 2019 were less than \$20 million; taking into consideration that KAMOSE project's actual cost is \$77 million. The strategy applied was to rely on internal sources of funding by maximizing EGPC collections, optimizing costs, and getting better payment terms vis-a-vis vendors and service providers.

# **KEY ACHIEVMENTS – SSTO**

## Production

Succeed to achieve production target rate of 48.1 mmstb of oil exported to Marine terminal at Port Sudan.

#### Unit Production Cost (UPC) 10.4 \$/bbls

Managed to keep the unit production cost at minimum for company aspiration.

### NCF & Cost recovery

Sustained a positive Net Cash Flow and Cost Recovery.

Leadership in improving business process and establishing cost optimization initiative to support company long term plan.

### Trust Fund for Social Insurance (TFSI):

Established Trust Fund for Social Insurance for DPOC Nationals and Direct Hires staff.

## Produced Water Management (PWM):

Handled more than 1373 mmbbls of produced water using current existing facilities & assets which minimized the production deferment.

### **New Well Drilling & Completion**

Succeed to drill 52 new development & exploration wells and completed 49 wells.

## De-BottleNecking Facility (DBN) project

Achieved 100% of the DBN project and ongoing handed over to production department for enlargement of facility handling liquids above 660 Kbbls/day.

### Average selling price for Dar Blend for 2019 was \$62.6 while average Brent was \$64

vs. \$66 in 2018. This was achieved through optimizing discount which was usually between 10- 15%. Through introducing new buyers for tendering of the Dar Blend, achieved to reduce discount to reach average of \$1.5 during 2019. In several months, it was even premium over Brent price. The financial impact on net income compared to 2018 where discount was \$5.5 amounts is around \$4m.

Achieved \$17 million net profit till November 2019 of Sudan operation vs. budgeted profit of \$10 million. This was a

result of sustaining production levels and lower discount.

As a result, an amount of \$4 million was paid to EKH to repay old balance due to IFIC. This has contributed directly to EKH profits.



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