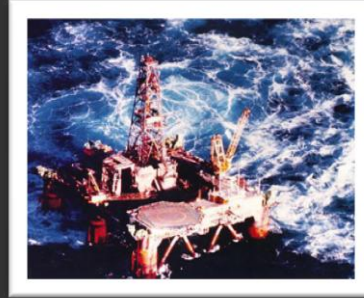




The 8<sup>th</sup> Middle East Oil and Gas Conference

# MENA 2010

Offshore MENA: The Last Frontier



Day One: Monday 20 September 2010

## Offshore & Onshore Middle East: Developments, Petroleum Systems and Oil & Gas Habitat

8.00-8:55 Registration

A. 9:00 Offshore and Onshore MENA: New Opportunities

Chairmen: Dr. M. Al-Chalabi and Dr T. Al-Uqaili

9:00 (A1) Opening Remarks

Dr. M.W. Ibrahim.

R&D Manager, Target Exploration, London, UK.

9:20 (A2) Technology's Impact on the Future of Off-Shore Exploration.

Mr. Chris Faulkner.

CEO, Breitling Oil and Gas, Irving, Texas USA.

9: 50 (A3) Exploration and Development of Iraqi Oil & Gas Fields are Generating New Business Opportunities for Service Companies.

- Introduction.
- Awarded PSAS and Updated Activities in Kurdistan, NE. Iraq. (Map)
- Awarded PSCS Bid Round 1&2, Updated Activities in Central & Southern Iraq.
- Gas Bid Round 3 in September 2010: Akkaz, Mansuriyah and Siba Gas Fields.
- Legal, Administrative Challenges and Disputes.
- Standard Service Contracts Requirements. Modern Data Management & Storage Services.
- Infrastructures Requirements and Services, Challenges versus Realization.
- Update Active Available Services in Kurdistan and other Parts of Iraq (List Of Companies).
- Progress in Security, Insurance and Banking Services.
- Future of Oil and Gas Industry of Iraq. Conclusions & Recommendation.

Mr. Hama-Jaza Salih Kadir

Senior Vice President for Technical and Business Development, WZA Petroleum Company Ltd., Sulaimani, Iraq.

10:30 (A4) *the Fiscal Regime of Upstream Oil Contracts*

- The significance of the fiscal regime for the contracting parties.
- Comparative analysis of the fiscal regimes of the Model Contracts and their implications.
- The main variables, caps and conditions of the fiscal regimes:
  1. Signature bonus,

2. Remuneration fee,
3. State partner,
4. Corporate Income Tax,
5. Splitting formula,
6. R-factor (progressivity),
7. Stabilisation clauses,
8. Administrative overhead charges,
9. Commencement and caps of payments,
10. Deemed revenues,
11. Baseline production,
12. Depletion rate,
13. Performance factor.

- Computation of how much each IOCs get in Remuneration fees.
- The importance of early recovery of invested capital in the economics of the fields development.
- Rumaila oilfield as case study.
- Basic parameters of the awarded oilfields.
- Concluding remarks

**Mr. Ahmed M. Jiyad.**

Petroleum Development Consultant, Vaksdal, Norway

#### **11.00-11.25 Morning Coffee and Poster Presentations**

Chairmen: Dr. A. Fenghour

#### **B. 11:30 Petroleum Systems and Habitat (I): The Gulf (Session1)**

Chairmen: Dr. M. Al-Rawi and Dr. M. Ala

#### **11:30 (B1) Emergent Salt Plugs of the Southern Arabian Gulf (Offshore Abu Dhabi); their Mode of Origin and Hydrocarbon Potential.**

- Regional setting of the emergent salt plugs in the Southern Arabian Gulf.
- Mechanical and geological problems associated with their origin.
- A proposed mechanism of salt intrusion and origin of the salt plugs.
- Geological field evidence supports the proposed mode of origin.
- Hydrocarbon potential of the emergent salt plugs.

**Dr Mohammed Warrak.**

Consultant Structural Geologist and Associate Lecturer Open University, Milton Keynes, UK.

#### **12:00 (B2) Petrography and Diagenetic Characteristics of the Upper Oligocene – Lower Miocene Ghar Formation in SE Iraq.**

- Introduction.
- Geological Background.
- Sedimentology and Depositional Settings.
- Petrography, Minerology and Diagenesis of Sedimentary Facies (Facies A and B).
- Petroleum Geology.
- Discussion, Summary and Conclusions

**Prof. A. Al-Juboury<sup>1</sup>, J. S. Al-Ghrear<sup>2</sup> and M. A. Al-Rubaii<sup>3</sup>**

<sup>1</sup> Research Centre for Dams and Water Resources, Mosul University, Iraq.

<sup>2</sup> Geology Department, Mosul University, Iraq.

<sup>3</sup> Iraqi Oil Exploration Company, Baghdad, Iraq.

#### **12:30 (B3) Prospective Anomalies Offshore North-eastern Arabia.**

- Introduction.
- Stratigraphic Section.
- Available Source. Reservoir and Cap Rocks.
- Discoveries and Exploration Plays.
- Geophysical and GIS Anomalies.
- Conclusions.

**Dr. M. W. Ibrahim.**

R&D Manager, Target Exploration, London, UK.

### 13:00-14:00 Lunch and Poster Presentations

Chairmen: Dr. A. Fenghour

### C. 14:00 New Exploration, Production and HSE Regulations: Updates

Chairmen: Dr. M. Ala and Dr M Al-Chalabi

#### **14:00 (C1) The Big-push Strategy for Upstream Petroleum Development in Iraq: Profiles of Production, Depletion and Revenues Scenarios.**

- Between November 2008 and May 2010 the Ministry of Oil adopted a big-push strategy by signing 12 long-term technical service contracts (LTTSCs) comprising 14 brown and green oilfields.
- Total proven reserves of these oilfields mount to 68 billion barrels (BBLs), representing 59.1% of Iraq's currently proven reserves.
- Based on these contracts the profiles of production, depletion and revenues are calculated for each of the oilfields.
- When fully developed their total production capacity would reach a plateau of ca 12 million barrels per day (MB/D) sustainable for six/seven consecutive years 2017-22/3.
- They could generate substantive influx (trillions) of oil export revenues during a duration of 20 (25) years.
- But depleting the country's most prized oilfields rapidly.
- Discussion of the feasibility of attaining these objectives, identifies critical determinants and challenges and outlines the main schools of thoughts pro and against the adopted fast tempo big-push strategy.
- Four development scenarios are conceptually explored and components of relevant coping strategy to face such eventualities are proposed.
- Conclusions: Since the nature of the LTTSCs impose significant risks on Iraq, the Iraqi side should start earnestly preparing for such eventualities as soon as possible to mitigate any negative effects and take predetermined precautionary measures at the right time/stage.

**Mr. Ahmed M. Jiyad.**

Petroleum Development Consultant, Vaksdal, Norway.

#### **14:30 (C2) HSE Management of Oilfield Service Contractors via Effective Mitigation of Risk in the Tendering Process.**

- Background.
- Summary of OGP Guidelines for Contracting Processes.
- Intent of OGP Guidelines.
- Generic Processes for Contractor HSE Evaluation.
- A Focused Approach to HSE Evaluation.
- How Can Contractors Professionals Achieve Best HSE Performance on Site.

**Mr. Gamal Abou-Elkhair and A. Al-Haidar**

Kuwait Oil Company, Ahmadi, Kuwait.

### 15:00 – 15:25 Afternoon Tea and Poster Presentations

Chairmen Dr. A. Fenghour

### D. 15:30 Petroleum Systems and Habitat (II): The Gulf (Session 2)

Chairmen: Dr. M Ala and Dr M. Al-Warrak

#### **15:30 (D1) Oil Fields Scale Deposition Prediction Methodology.**

- Water Problems in Oil Fields: Scale Deposition, Corrosion, Water Production and Pollution.
- Preventing vs. Removing Scale Deposition.
- Types of Scale Deposition in Studied Fields.
- Methodology of Oil Fields Scale Deposition Prediction.
- Water Analysis, Down-hole Conditions, Scale Index Calculations.
- Case Studies: Field A and Field B.
- Conclusions.
- Recommendations.

**Mr. M. I. Refaei and I. Abdul-Karim Al-Kandari.**

Kuwait Oil Company, Ahmadi, Kuwait

**15:50 (D2) Cathodic Protection and Anti-Corrosion Treatments of Galvanic and High Temperature Corrosions.**

- Introduction
- Cathodic Protection
- Anti-Corrosion Treatments.
- Galvanic Corrosion.
- High Temperature Corrosion.
- Conclusions and Recommendations

**Mrs. M. Dehghani.**

Petroleum Engineering Department, Islamic Azad University, Omidieh Branch, Iran.

**16:10 (D3) Oil Production and Environmental Damage.**

- Introduction.
- Brief Description.
- Impact of Oil Production on Rainforest.
- Impact of Offshore Oil and Gas Production and Transportation.
- Impact of Peak Oil.
- Conclusions.

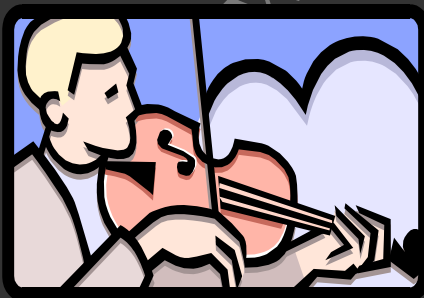
**Mr. Abdollah Esmaeili,**

National Iranian South Oil Company (NISOC), Iran

**16.30 –17.00 Panel Discussions, First Day Summary and Chairmen Closing Remarks**

*Panel: Dr M. Al-Chalabi, Dr. M. Ala, Dr. M Jiyad, Dr. T. Al-Uqaili and H. Qader, Dr. A. Fenghour*

**Participants and Spouses are invited to 8<sup>th</sup> MENA Oil and Gas Conference dinner**



- **Time : 20.00-22.30 Hrs**
- **Date: Monday 20th Sept. 2010.**
- **Place: TBA.**



The 8<sup>th</sup> Middle East Oil and Gas Conference

# MENA 2010

Offshore MENA: The Last Frontier



Day Two: Tuesday 21 September 2010

## Offshore and Onshore North Africa: Developments, Petroleum Systems and Oil & Gas Habitat

8.00-8:55 AM Registration

E. 9:00 Petroleum Systems and Habitat (III): Eastern Mediterranean

*Chairmen: Dr. M. Al-Chalabi and Dr. M. Al-Warrak*

**9:00 (E1) Opening Remarks**

**Dr. M.W. Ibrahim**

R&D Manager, Target Exploration, London, UK.

**9:20 (E2) Hydrocarbon Exploration Activities in the Republic of Cyprus and Exploration Opportunities Offshore Cyprus.**

- Offshore Cyprus – a deep-water frontier area (51,000 km<sup>2</sup>) of 13 Exploration Blocks located south of Cyprus
- Regional hydrocarbon system and geology
- Main Prospects
- 1<sup>st</sup> Licensing Round
- International Bilateral Agreements with: Egypt and Lebanon (further negotiations with Israel, Syria and Greece pending)
- Available Data
- Licensing
  - Hydrocarbon Prospecting License
  - Hydrocarbon Exploration License
  - Hydrocarbon Exploitation License
- Prospected 2nd Licensing Round
- Guidelines on General Procedures for submission of application
- General Guidelines on Applications
- Main criteria for evaluation
- Production Sharing Contract Outline
- Potential Gas Market Outlets
- Attractive terms offered (zero taxation on revenues from offshore hydrocarbon exploitation)
- Cyprus offers a stable business environment within the EU
- Access to the EU market and the Greater Mediterranean Region market
- Big hydrocarbon discoveries in the region
- Known hydrocarbon system in the vicinity

- Several structures identified

**Mr. Solon Kassinis.**

Director, Energy Service, Ministry of Commerce, Industry and Tourism, Cyprus.

**9:50 (E3) 3d Seismic Structural Modelling in the Onshore Nile Delta, Egypt.**

- Introduction.
- Geological background.
- Paleo-geographic maps of Egypt and surrounding areas.
- Stratigraphic geology.
- Tectonic framework.
- Hydrocarbon potential.
- Exploration activities.
- Seismic studies.
- Seismic investigations.
- Seismic interpretation.
- 3D seismic modelling.
- Conclusions.

**Mr. Moataz Barakat<sup>(1,2)</sup> & Wilhelm R. Dominik<sup>(1)</sup>**

<sup>(1)</sup> Exploration Geology Department, Institute for Applied Geosciences, Technical University of Berlin, Germany. <sup>(2)</sup> Geology Department, Faculty of Science, Tanta University, Tanta, Egypt.

**10:30 (E4) A Brief Survey of Exploration in the Easternmost Mediterranean, With Emphasis on what has worked and what Hasn't.**

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**Dr. Everett Rutherford, Jr. and Dr. Walter H. Pierce.**

Directors, StartExp, Cypress, Texas, USA.

**11.00-11.25 Morning Coffee and Poster Session**

Chairmen: Dr. A. Fenghour

**F. 11:30 Petroleum Systems and Habitat (IV): Rift Basins South of Mediterranean**

Chairmen: Dr. M. Al-Warrak and Dr. Fenghour

**11:30 (F1) Electrical Properties of Reservoir Rocks (Nukhul Formation), Abu Zenima Area, Gulf of Suez, Egypt.**

- Introduction.
- Brief description.
- Objectives.
- Stratigraphic setting.
- Stratigraphic column.
- Rift System.
- Structural setting.
- Tectonic evolution.
- Petrophysical properties of Nukhul Formation.
- Petrophysical discussion.
- Petrophysical relationships.
- Hydrocarbon potential.
- Conclusions.

**Mr. Moataz Kh. Barakat<sup>(1,2)</sup>-Nader H. El-Gendy<sup>(1)</sup>**

<sup>(1)</sup> Geology Department, Faculty Of Science, Tanta University, Tanta, 31527, Egypt.

<sup>(2)</sup> Exploration Geology Department, Institute For Applied Geosciences, Technical University Of Berlin, Germany.

**12:00 (F2) Deep-Water Gravity-Flow Deposits: End Members, Architecture and Depositional Setting with Examples from Ancient Systems.**

- Types of gravity flow deposits and end members: Turbidity, debris and transitional flows.
- Insight into flow mechanics: How does the flow behave at the time of sediment deposition? What sedimentary structures tell us about parameters of the flow?
- Sedimentary units: Classical Bouma (1962) and Lowe divisions (1982) Recognition in outcrop and in core.

- Architecture of deep-water depositional systems: Slope and basin floor deposits; confined (channel, LAP, etc) and unconfined (overbank, lobes, etc) deposits.
- Deep-water deposits and hydrocarbon exploration: Reservoir quality, continuity and sand abundance in the deep-water systems.
- Source of the sediments and its influence on architecture of deep-water deposits.
- Tectonics: How does basin tectonics influence the sediment transportation and accumulation?

**Miss. Larisa Masalimova.**

Stanford Project on Deep-Water Depositional Systems, Stanford University, Palo Alto, California, USA.

### **12:30 (F3) Gas Accumulations, Reserves and Future Potential of Onshore and Offshore Libya.**

- Introduction
- Gas Accumulation in All Onshore and Offshore Basins of Libya.
- Libyan Gas is Underexplored and Underexploited.
- Sirt Basin Holds 55% of Discovered Gas Reserves to Date.
- Total Recoverable Gas Reserves.
- Prospective Areas for Gas.
- Summary.
- Conclusions.
- Recommendations.

**T. K. Barsoum.**

Exploration and Development Consultants, Bucks., England.

### **13.00-14.00 Lunch and Poster Presentations**

*Chairmen: Dr A. Fenghour*

### **G. 14:00 Mature Fields of MENA: Operation Problems and Solutions**

*Chairmen: Dr. M. Al-Chalabi and Dr T. Al-Uqaili*

### **14:00 (G1) The Implications of Possible Additional UN Sanctions for the Future Development of the Iranian Oil and Gas Industry.**

- Introduction: A Review of Iran's Oil and Gas Reserves.
- A Brief Survey of the Sanctions and their Consequences.
- Effects of 'Undeclared' Sanctions on Oil Exports.
- Natural Gas and Gasoline Imports.
- Effects of Sanctions on Iran's Gas Production and Export Potential.
- Summary and Conclusions.

**Dr. M. Ala.**

Department of Geology, Imperial College, London, UK.

### **14:30 (G2) Impact of US Troops Withdrawal on Oil Operations in Iraq.**

- The withdrawal of American troops from Iraq signals the adoption of a new strategy based on the creation of a regional "contractor" in the area to look after American interests.
- The absence of moderate regional political movements signals the extension of the current sectarian scene in Iraq to other parts of the region.
- Non-political, non-corrupt professional forces need to be mobilised to breathe new life into civil society and bring about a new types of politics in the region more in tune with its socio-political constituency.
- The oil industry (and other strategic industries) has been placed by these exceptional circumstances in the position of a moral guardian whose values and ethics need to be re-introduced to a political scene from which they have been totally absent.
- Conclusions: The prospects for the oil industry, the economy, universities and other civic institutions.

**Mr. Rabea Al-Hafidh.**

Head of Arab-Turkish relations desk, Forum of Muslim Thinkers FMT

### **15.00-15.25 Afternoon Tea and Poster Session**

*Chairmen: Dr. A. Fenghour*

## **H. 15:30 MENA Oil and Gas Resources: The Local and Regional Strategic Plans.**

Chairmen: *Dr. M. Al-Chalabi and Dr T. Al-Uqaili*

### **15:30 (H1) Untapped Hydrocarbon Reserves in Stratigraphic and Strat./Structural Traps in Onshore and Offshore Libyan Basins.**

- Introduction
- Recent Important Strat./Structural Traps Discoveries of Libya.
- Favourable Conditions for Stratigraphic and Strat./Structural Traps in Sirt Basin.
- Worldwide Giant Hydrocarbon Accumulations in Stratigraphic Traps.
- Summary, Conclusions and Recommendations.

**T. K. Barsoum.**

Exploration & Development Consultants, Bucks., England.

### **15:50 (H2) Production Optimization of an Iranian Oil Reservoir**

- Introduction.
- Analysing Well Performance.
- PI Test Analysis.
- Analysing Production Conditions.
- Tubing Size Analysis.
- Nodal Analysis.
- Wellhead Performance Analysis.
- Chock Size Analysis.
- Reservoir Pressure Effect.
- Skin Effect.
- Case Studies; Well A and Well B.
- Conclusions.

**Mr. Abdollah Esmaeili.**

Petroleum Reservoir Engineer, National Iranian South Oil Company (NISOC), Ahwaz, Iran.

### **16:10 (H3) Reservoir Permeability Estimation Based on Petrophysical and Seismic Data, Using Artificial Neural Networks.**

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**Mr. Ahamd Afshari<sup>1\*</sup>, Dr. Mohammad Ali Riahi<sup>2</sup> and Dr. Seyyed Reza Shadizadeh<sup>3</sup>.**

1. M.Sc. student on Petroleum Engineering, Petroleum University of Technology, Abadan, Iran.
2. University of Tehran, Tehran, Iran.
3. Petroleum University of Technology, Abadan, Iran.

## **16.30-17.00 Panel Discussions, Conference Summary and Final Remarks**

Panel: *Dr. M. Al-Chalabi, Dr. M. Ala, Dr. M Jiyad, Dr. T. Al-Uqaili, H. Qader and Dr. R. Al-Hafidh*

## **Standby Paper Presentations**

### **SB1. Hydrocarbon Prospectivity of Offshore Iraq**

- Introduction.
- Prognosis of Probable Stratigraphic Section.
- Prognosis of Source. Reservoir and Cap Rocks.
- Projecting Proven, Probable and Possible Exploration Play Fairways.
- Geophysical and GIS Anomalies.
- Conclusions.

**Dr. M.W. Ibrahim.**

Target Exploration, London, UK.



**SB2. Diagenetic Traps of Kuwait**

•

**Dr. M. Al-Rawi.**

Director, Carta Energy, County Kildare, Ireland.

**SB3. Revisiting the Dead Sea Rift.**

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**Dr. M. Al-Rawi**

Director, Carta Energy, County Kildare, Ireland.

**SB4. An intelligent solution/multiple regression/geostatistical approach to NMR log derived porosity and permeability prediction from 3-D seismic attributes.**

•

**Mr. Mohammad Amin Mousavi<sup>1\*</sup> and Dr. Mohammad Ali Riahi<sup>2</sup>.**

<sup>2</sup>. Petroleum Engineering Department, Petroleum University of Technology, Abadan, Iran.

<sup>2</sup>. University of Tehran, Tehran, Iran

**SB5. Investigation of effect of Associate gas injection on recovery efficiency in an Iranian field using compositional simulation model**

•

**Dr. Hojjat Nowroozi and Mr. Mohammad Mardi\*.**

Petroleum Engineering and Development Company, Tehran, Iran.

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