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Consultant Geoscientist

Profiles

- Geoscientist, with over 35 years successful professional career in exploration and field development with **ELF** Oil Company in the UK North Sea, Norwegian North Sea, West Africa (Gabon), Iran and the Persian Gulf, and further 14 years Consultancy experience in the North Sea and Persian Gulf.

Professional Highlights:

- Professional experience in basin evolution analysis and depositional setting and structural evolution analysis.
- Professional experience on depositional setting of carbonate sediments and distribution of carbonate reservoir.
- Professional experience in seismic structural/seismic stratigraphic interpretation from regional, semi regional, prospect definition and field development.
- Professional knowledge in advance seismic reservoir analysis, seismic facies analysis and reservoir characterisation using most advanced seismic attributes.
- Professional experience in turbidite depositional analysis and their seismic facies analysis and mapping
- Professional experience in interpretation of Salt tectonic basins.

Consultancy Activities:

- 2014 to 2015- I had the opportunity to perform a comprehensive regional and semi-regional geological review of the Middle East covering Persian Gulf Basin, Zagros folds , Makran, Oman, United Arab Emirate, Saudi Arabia and Northern Iraq (Kurdistan). The review of the recent publications on the petroleum geology allows better understanding of detail geological history of the Middle East sedimentary basins.
- Mid 2013 to early 2014: I had the opportunity to review extensively the Broadband marine seismic acquisition and processing presented by geophysical companies. Reviewing and analysing most technical papers on the Broadband seismic data.

I had also the opportunity to review and analysing most advanced seismic attributes for accurate reservoir description such as AVO analysis, seismic inversion, 3D curvature analysis, semblance, continuity, Spectral decomposition, Neural network and extraction of Geobody .

- Mid 2011 to mid 2013: Performed a comprehensive regional and semi-regional geological & geophysical review of the North Sea Basins (Central Graben, Viking Graben, Moray Firth Graben), Faroe-Shetland Basin and Norwegian Margin to investigate the possibility of remaining prospectivity within the area of interest.
- (2010 to Mid 2011). Worked for IOC (Iranian Oil Company UK) on reassessment of the prospectivity of the Block 3/29 (IOC/BP 50-50 partnership). The Block was considered as a Fallow Block by DECC and expected to be relinquished by the end 2010. The work was a comprehensive G&G reinterpretation, evaluation of the remaining prospectivity of the Upper Jurassic turbidite deposits along the west flank of the Viking Graben. The studies resulted in a successful petroleum assessment of the block, demonstrating the presence of a potential gas prospect of Upper Jurassic turbidite reservoir. This study was recognised by DECC as a **study of significant** and the statue of Fallow Block was lifted by DECC.
- (2007-2010 part time contract). Worked for ADL (Asset Development and Improvement Limited) as senior geoscientist on several projects on reassessment and reappraisal of marginal discoveries within Rotliegend Reservoir. A comprehensive review and analysis of the regional geological setting and seismic interpretation of the fields within Southern Gas Basin were also performed.
- (2005-2010 Part time contract). Senior geophysicist for the Iranian Oil Company UK (IOC) on G&G studies and further exploration of Blocks 15/13a. The studies resulted to the discovery of commercial oil accumulation within the turbidite sand reservoir of the Tertiary in the Block 15/13a (IOC UK 100%).
- (August 2002 to April 2004). Consultant Senior Geophysicist for **Iranian Offshore Operating Company (IOOC)** to supervise 3D seismic interpretation and seismic inversion studies by Jason UK on carbonate reservoir characterization for Sirri C/Sirri D, Reshadat/Resalat , Aboozar and Hengam oil Fields in the Persian Gulf. In addition detailed Mishrif reservoir extension and reservoir facies was mapped more accurately.
- (January 2002 to June 2003) Geophysical Advisor for the **Petroiran Development Company (PEDCO)** in the supervision of 3D seismic interpretation and seismic inversion studies for the Farzam carbonate stratigraphic trap of the Mishrif reservoir in the Persian Gulf near Sirri fields.
- (June 2000 to November 2002) Geophysical Advisor for the Iranian Oil Company UK (IOC) in the **Enterprise Oil/IOC 50-50 partnership** monitoring the G&G studies performed by Enterprise Oil in UKCS Block 15/13a.

- (June 2000 to December 2001). Worked as Senior Geophysicist for the **BP/IOC 50-50 partnership** in Block 3/29a and performed interpretation of 3D seismic structural and seismic facies analysis of the Upper Jurassic turbidite reservoir over the Rhum gas field.

Achievements with the Elf Group:

Elf UK. As Senior Geophysical Advisor , I was involved in the successful appraisal and development of the HP/HT Elgin/Franklin gas/condensate fields. I have also Performed exploration and prospect identification in the greater Elgin/Franklin area within the Central Graben. I was responsible for the discovery of Glenelg HP/HT gas/condensate in the Central Graben.

Elf Norway. As Senior Geophysicist, I was involved in the 3D seismic interpretation of the Oseberg Field for appraisal/development and the exploration of its satellites and further exploration within the deep Viking Graben. I discovered the famous “Bright Spot” at the base Brent reservoir within the hydrocarbon bearing zone and performed comprehensive seismic reservoir characterisation of the Etive reservoir over the Oseberg field.

Elf Gabon. I was involved in the regional 2D seismic interpretation of the pre-salt, post-salt and deep-sea fan turbidite sand reservoirs. I have performed prospect identification in both pre-salt and post-salt sediments.

Elf Iran. I was involved in the exploration and discovery of the giant gas fields in the Zagros Mountain range (Permian Khuff carbonate reservoir), representing ca. 4% of the world gas reserves. Also involved in the discovery of the Sirri A, C & D oil fields in the Cretaceous carbonate reservoir and responsible for the discovery of the Sirri E oil field with 750 million bbl of oil reserves. I was also involved in the Sirri C&D field development projects.

Regional Experience

Faroe- Shetland Basin: Late 2011

- Extensively reviewed the structural and depositional setting of the Tertiary sediments and analysis of the prospectivity of the Faroe- Shetland Basin and its extension into Norwegian margin.

Inner & Outer Moray Firth: Late 2011

- Extensively reviewed the structural and depositional setting of the Inner & Outer Moray Firth for further exploration and prospectivity.

Upper Jurassic Turbidite reservoir: 2010- mid 2011

- As Consultant Geoscientist, worked extensively on the exploration and prospectivity of the Upper Jurassic turbidite reservoir along the west flank of the Viking Graben.

Southern North Sea Gas Basin

- Extensively reviewed and worked on the most recent publications and reports on the Southern North Sea gas basin for further prospectivity.

North Sea Central Graben

- **(1992-2000):** As senior geophysical Advisor for Elf UK, worked on the Exploration, appraisal/ development of the Elgin/Franklin fields and exploration of the greater Elgin /Franklin area. I have generated numerous prospects within the Upper Jurassic Fulmar reservoir. The Glenelg gas/condensate discovery was one of the results of my prospect identification.

North Sea Tertiary

- **(1989-1991):** Participated actively for two years in the regional seismic sequence stratigraphy interpretation of the Tertiary sediments of the North Sea. I have obtained a wide range of knowledge and experience of the seismic stratigraphy interpretation, depositional setting and sedimentary basin filling. This resulted in a clearer understanding and definition of the zone of interest within the Lower Tertiary interval. The depositional setting, evolution of basin filling and related seismic stratigraphy and seismic facies analysis has been clearly resolved.

North Sea Viking Graben

- **(1984-1989)** As a senior geophysicist, worked on the Norwegian side of the Viking Graben on the appraisal/ development of the giant Oseberg oil field and the exploration of its satellites. The discovery of famous “Bright Spot” at the Base Brent reservoir and seismic reservoir characterization of Etime interval was one of the results of my seismic interpretation on the Oseberg Field. I worked also on the exploration of the deep Viking Graben within Blocks 30/10&30/7 and exploration of Block 25/3, identifying new prospects

West Africa

- **(1980-1984)** As a regional geophysicist in Elf Gabon. I had the opportunity to work and interpret the most interesting passive margin sedimentary basin and associated pre-salt tilted fault blocks, turbidite deposition and complex salt tectonics which extend offshore Gabon, Equatorial Guinea, Congo and Angola,

Iran & Persian Gulf Region

- **(1965-1980)** As a geoscientist with Elf Group, I worked in the Persian Gulf, Zagros Mountain Range and Central Iran and participated in a vast range of activities, accumulating a great deal of knowledge and experience in the petroleum exploration of carbonate reservoirs, the main prolific reservoir in the Middle East. I acquired a professional experience on well site geology, subsurface geology, field geology, seismic acquisition/processing supervision and seismic interpretation and integrating geological/geophysical study.

The results of these activities led to the discovery of important oil and gas reserves in Iran, including the Sirri oil fields within the Mishrif reservoir in the Persian Gulf, and the gas fields within the Khuff formation in the Zagros Range. The petroleum exploration within the shallow Asmari fractured limestone, Cretaceous reef limestone or chalk, Upper Jurassic dolomitic reservoirs and deep Permian Kuff limestone with high pressure gas accumulation, all presented their own challenges.

Education

- 1979-1980 6 months Petroleum Management program (Arthur D. Little Management Education Institute in Boston, USA)
- 1962-1964 Master degree in Petroleum Geology and Geophysics (French Petroleum Institute)
- 1958-1962 Graduate in Petroleum Geology (Engineering School of Tehran University)

Affiliation

- Member of Society of Exploration Geophysicists (SEG)
- Member of European Association of Geoscientist & Engineers (EAGE)
- Member of British Exploration Society of Great Britain (PESGB)

Publications

- Co-author of the paper on the hydrodynamic activity within the Mishrif reservoir of the Sirri Fields in the Persian Gulf presented in Houston in SPE convention in October 1979.
- Author of the Paper on the “Contribution of Seismic Stratigraphy Interpretation to direct hydrocarbon detection within the Brent reservoir of the Oseberg Field in the Norwegian North Sea. Presented in SEG, Dallas November 1989.
- Co-author of the Elgin Franklin Field study in the Barbican Conference in 1998