Mehdi Tabatabai

Personal Information

Born: May 1980

Languages: Persian (Native), English (Full Professional Proficiency), Arabic (Intermediate)

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Email: mehdi.tabatabai@gmail.com;

Education

2016- 2020, Petroleum & Gas University, Ploiesti, Romania

PhD in Formation Evaluation in Low Resistivity Pay

2004 Sharif University of Technology, Tehran, Iran

M.Sc. in Reservoir Engineering

2002 Petroleum University of Technology, Ahwaz, Iran

B.Sc. in Petroleum Engineering

Summary of Experience

2017- Present IDRO, E&P National Company, Tehran, Iran

As Principal Petrophysicist

2014- 2016 OMV Company, Bucharest, Romania

As Senior Petrophysicist

2012- 2014 National Iranian Oil Company (NIOC), Tehran, Iran

As Senior Petrophysicist

2007- 2012 Tehran Energy Consultants (TEC), Tehran, Iran

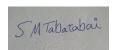
Consultancy Company

As Petrophysicist

2005- 2007 National Iranian Oil Company (NIOC), Tehran, Iran

As Junior Petrophysicist

2002- 2005 Center for Technology Study; Oil & Energy Group, Iran



As Junior Reservoir Engineer

Synopsis

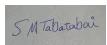
I have 17 years of experience in Formation Evaluation in Carbonates, Complex Lithology and Clastics in Gas, Gas Condensates, Oil, Heavy Oil and Fresh Water, Fractured, Vuggy, Thin Bed and Tight Fields.

The Highlights of my Experience are listed below:

- Field Development / Re-Development, Integrated Full Field Study and Review FDP, FFR, FFS, MDP Preparation for Onshore and Offshore Fields Experienced in Middle East and European Fields
- Petrophysical Log Interpretation; **Deterministic** & **Multi Mineral** (Probabilistic), Fullset / Complex Log Evaluation,
- Single Well and Multi Well Petrophysical Evaluation, Vintage log Evaluation, Standard Log Evaluation (SP-Res), Old GR Neutron (per ton ,cps) Evaluation, Log Quality Control (LQC) and Edit
- Low Resistivity Pay Evaluation (LRP), High Resolution (SHARP Processing) Evaluation Methods in LRP
- Shaly Sand Analysis, **Thin Layer** Petrophysical Evaluation (**LSSA / VLSA**)
- Developing Computer Code in **MATLAB** for Resistivity Modeling, Forward Modeling & Inversion (**SHARP Processing**) Evaluation Methods in **Low Resistivity Pay**
- Electro-Facies Analysis, Rock Typing, Hydraulic Flow Unit (HFU), Rock Quality Index (RQI)
- Image Log Interpretation by Geolog & TechLog, Deriving Geo-mechanical Parameters, Fracture Study
- NMR Log Evaluation by Geolog & TechLog, Permeability Estimation
- Cased (Close) Hole Log Evaluation, Cement Bond CBL/VDL, RST, Sigma, Carbon Oxygen, Spectrolith, ECS Logs
- Uncertainty Analysis, **Monte Carlo** Method
- Rock Physics: Fluid Substitution, Hydrocarbon Effect on Vp &Vs, Acoustic & Elastic Impedance
- Well Placement and Geo-Steering at Wellsite using LWD Data
- Wellsite Witness of Log Acquisition, **Wellsite Quick Look** Interpretation to Select MDT Point and Perforation Interval
- Designing Logging Operation Program
- Expert user of **Geolog**, **TechLog**, Interactive Petrophysics (**IP**) Softwares
- Core analysis CCAL & SCAL, Integration of Core and Log, Capillary Pressure Saturation (Pc Sw),

Saturation Height Function Modeling (SHFM), Relative Permeability, Static Pressure Analysis

- Wireline Formation Tester (MDT, XPT, RDT), Fluid Contact (WOC) & Free Water Level (FWL) Determination, Well Test Transient Pressure Analysis, Production Logging Tool (PLT) Analysis



- Interdisciplinary Activities between Petrophysics, Reservoir Engineering, Geology and Geophysics
- Preparing Logging Tender Document, Technical Assessment of Logging Company Competency
- Train, Mentor and Leading Junior Petrophysicists, Team Leading, Integration with all other Disciplines
- Application of Neural Networks and Fuzzy Logic and Genetic Algorithm in Reservoir Characterization
- Analytics and Machine Learning
- Expert user of MATLAB Software for Computer Programming

Experience

2017- Present IDRO Company

Susangerd Field; Heterogeneous Carbonate, Stratigraphic Trap

MDP Preparation for Susangerd Field

Supervision of Petrophysical Evaluation

Full Wave Sonic Evaluation

Strong Lateral Facies Alteration Challenge

FWL Determination; Saturation Height Function Model; CCAL Analysis

Leading and Training Junior Petrophysicists

2014-2016 OMV Company

Suplac Field; Fresh Water, Shallow Sandstone and Carbonate

The Most Successful In situ Combustion Field in the World

Ultra-Heavy Oil under Steam injection and In situ-Combustion

Field Redevelopment Project

Responsible for Petrophysical Evaluation; Integration of RST and FMI with Fullset Data

Interpretation of Deviated wells with Minimum Logging Strategy, Saturation Height Function Modeling (SHFM)

Leading and Training Junior Petrophysicist

Otesti and Poborou Fields, Full Field Review; Thin-Layer Sandstone Reservoir, Fresh Water Heavy Oil Field under Water Injection

Responsible for Petrophysical Evaluation of Fullset Logs, Standard Wells

Responsible for CCAL QC and Analysis, Core Description at Lab, Saturation Height Function Modeling (SHFM)

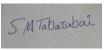
Responsible for Rock Physics; Fluid Substitution, Vp, Vs

Integration of RST C/O and FMI Logs with Fullset Data

First Team which Discovered Field was Thin Layered, Applying Thin Bed Evaluation (LSSA)

Leading and Training Junior Petrophysicist

Ciuresti and Bacea Fields, Full Field Study; 10 Sandstone and Carbonate Reservoirs



Responsible for Petrophysical Evaluation of Fullset Logs, Standard Wells

Responsible for CCAL QC and Analysis, Saturation Height Function Modeling (SHFM)

Integration of FMI Logs and Well Test for Fracture Study

Responsible for Rock Physics; Fluid Substitution, Vp, Vs

Applying Thin Bed Evaluation (LSSA)

2012-2014 National Iranian Oil Company (NIOC),

Petro Iran Development Company (PEDCO)

South Pars Offshore Field Oil Layer Reservoirs (Al-Shahin); Field Development

Well Placement and Geo-Steering at Wellsite, Best Record of Longest Horizontal Well in IRAN (2 Wells)

I supervised well placement of 2 km horizontal leg at wellsite through a sub seismic target (15m). By avoiding drilling in shales the expense for slotted liner completion was saved.

Low resistivity Petrophysical Evaluation & Electro Facies Analysis

Responsible for petrophysical evaluation and integration of ECS log in petrophysical evaluation.

NMR & FMI Interpretation

Responsible for interpretation of FMI and NMR. Vuggy porosities seen by FMI were not reflected on NMR. Geo-Mechanical Parameters derived from FMI.

Designing Logging Program to Evaluate Low Resistivity Pay

Cheshme Khosh Field Heavy Oil Carbonate Reservoir; Prepare MDP

Responsible for petrophysical evaluation. Bitumen reserve on well logs detected. OOIP Reduced.

Jufeyr Field, Carbonate and Sandstone Oil Reservoir; Prepare MDP and Field Development

Responsible for nominating a formation for a disposal well. I was also responsible for designing Logging program for all new wells.

12 Exploration Offshore Fields in Persian Gulf; Feasibility Study and Exploration

Responsible for nominating new target horizons in 12 Exploration Offshore Fields and performed petrophysical evaluation in neighboring fields at the same horizon for feasibility study.

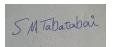
South Pars Offshore Gas Condensate Reservoir (North Dome); Single Well Evaluation

NMR & Fullset Log Petrophysical Evaluation

High gas saturation detected below FWL due to structure tilting.

Sepehr Field, Carbonate Reservoir; Single Well Evaluation

Fullset Log Petrophysical Evaluation



2007-2012 Tehran Energy Consultants (TEC)

Nowrooz Field, Offshore Sandstone and Carbonate Oil Reservoir; Fast Track Study and Full Field Study

Petrophysical Evaluation and Electro Facies Analysis

Challenging old logs were recalibrated to new data to perform an accurate evaluation of lateral property changes.

Responsible for CCAL/SCAL, Relative Permeability, Saturation Height Function Modeling (SHFM) MDT analysis, Rock typing (RT)

Fast Track Study

High water production after redevelopment was the main issue; Edge water or bottom water scenarios were addressed by integrated facies and pressure analysis.

South Pars Field, Offshore Carbonate Gas Condensate Reservoir; (North Dome)

Pre Phase and Full Phase Study for Phases 15&16

Petrophysical Evaluation

Complex lithology and gas bearing carbonate reservoir.

Formation Evaluation

Responsible for CCAL/SCAL, Relative Permeability, Saturation Height Function Modeling (SHFM) MDT analysis, Rock typing (RT) and determination of GWC, Well Tests Interpretations,

Well Site Well Logging and MDT Witness

Responsible for MDT points selection at well site after quick look interpretation.

Kish Field, Offshore Carbonate Gas Reservoir; Prepare MDP

Petrophysical Evaluation

Complex lithology and gas were the challenges.

Responsible for CCAL/SCAL analysis and Rock typing via Hydraulic Flow Unit concept.

Relative Permeability, Saturation Height Function Modeling (SHFM)

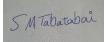
Salman Field, Offshore Oil and Gas Carbonate Reservoir; Full Field Study

Petrophysical Evaluation

Responsible for CCAL/SCAL analysis, Fluid Contact & FWL determination. Well Test Interpretation,

Relative Permeability, Saturation Height Function Modeling (SHFM)

Dynamic Simulation



Hengam (West Bukha) Field, Offshore Near Critical Oil Carbonate Reservoir; Full Field Study

Petrophysical Evaluation

Fluid contact & Free Water Level determination.

Reshadat Field, Offshore Carbonate Oil Reservoir; Fast Track Study

Petrophysical Evaluation

Responsible for re-evaluation of old wells.

Band-E-Karkheh Field, Offshore Carbonate Oil Reservoir; Review and Endorsement of MDP

Petrophysical Evaluation

Nar Field, Gas Carbonate Reservoir; Full Field Study

Electro Facies Analysis

Neutron log was reconstructed by a special technique to be used in Electro Facies Analysis.

Cheshme Khosh Field, Sandstone and Carbonate Oil Reservoir;

Electro Facies Analysis

Yaran Field, Oil Carbonate Reservoir; Prepare MDP

Petrophysical Evaluation

Naft Safid Field, Oil Sandstone and Carbonate Reservoir; Full Field Study

Petrophysical Evaluation

Forooz Field, Offshore Gas Carbonate Reservoir; Prepare MDP

Petrophysical Evaluation

Mond, KaKi and Bushgan Fields, Heavy Oil Carbonate Reservoirs;

Review and Endorsement of MDP

Petrophysical Evaluation

2005-2007 National Iranian Oil Company (NIOC), Research Institute of Petroleum Industry (RIPI)

Naft-Shahr Field, Oil Carbonate Reservoir; Full Field Study

Petrophysical Evaluation

Sarajeh Field, Oil Carbonate Reservoir; Full Field Study

Petrophysical Evaluation

Bankul Field, Oil Carbonate Reservoir; Single Exploration Well Evaluation

Petrophysical Evaluation

Babaqir Field, Oil Carbonate Reservoir; Single Exploration Well Evaluation

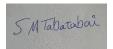
Petrophysical Evaluation

Gachsaran Field, Oil Carbonate Fractured Reservoir; FMI Interpretation

As on job training I evaluated FMI log.

Kkangiran Field; Gas Sand Reservoir; Full Field Study

Petrophysical Evaluation



2002-2005 Oil & Energy Group Co.; Center for Technology Study

CCAL Analysis, MDT/XPT Analysis, PVT Lab.

Professional Courses

CCAL/ SCAL by Weatherford

Well Placement and Geo-Steering using LWD data by Schlumberger

Fundamentals of Buyback Contracts by NIOC

NMR Log Interpretation by NIOC

Eclipse 300 by NIOC

CMG IMEX by NIOC

Prosper by NIOC

Well Test 200 by NIOC

UNIX Solaris O/S by NIOC

HUET/BOSIT by NIOC

Publications

-"Prediction of permeability from well logging data using artificial intelligence" by S.M.Tabatabai, R.B.Boozarjomehry, A.Badakhshan, 11th National Iranian Chemical Eng. Conference .Nov. 2006

-"Applications of Nano Technology in upstream industries", by S.M.Tabatabai, "Nano Technology and oil industries Conference". Held in Sharif University of Technology, Tehran, Iran, Nov. 2004

