

## RATHNAKAR REDDY PEESU

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### KEY COMPETENCES

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- 11 years professional work experience with nearly 10 years' experience as petrophysicist in appraisal and Field development projects
- Well versed in all aspects of formation evaluation in diverse lithology such as Clastics, Carbonates, Diatomites, fractured basement and volcanics
- Proven experience in integrated reservoir studies using rock typing with advanced logs such as NMR, image, core and capillary pressure based saturation height modelling
- Characterization of tight oil reservoirs and petrophysical inputs to Reservoir models for recovery assessments. Predictive 1-D Geomechanical Model for Hydro-frac optimisation
- Delivery oriented for optimizing Field Development plans and proactive support for building business cases for maximizing Field potential
- Designing and execution of RCA, SCAL, Geomechanical tests on conventional cores and integration of the results into petrophysical models
- Experience of Reservoir management studies for production enhancement in mature oil fields under strict OPEX limitations and facility constraints.
- Experienced in Peer assist and Discipline reviews for functional assurances to leadership and Business teams
- Demonstrable enterprise, stakeholder focus and functional leadership in driving best petrophysical practices and standard processes across wider subsurface teams
- Planning, QC and monitoring of logging jobs in both onshore and offshore wells
- Technical bid evaluation, scope of work preparation and contract management

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### WORK EXPERIENCE

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#### **Principal Petrophysicist, Vedanta Ltd (Cairn oil & Gas)**

**(January 2018- present)**

Asset petrophysicist responsible for wells and reservoir management studies of MBA fields (Mangala, Bhagyam & Aishwariya).

- Monitoring performance of ongoing Polymer flood in MBA fields. Cased hole saturation monitoring, cement evaluation and Corrosion evaluation for well integrity and work over jobs/recompletions, PLT and stimulation jobs for conformance enhancement in injectors.
- Reservoir characterization and field studies for ASP pilot study in MBA fields. New well evaluation through full field ASP implementation of ASP project.

#### **Lead Petrophysicist, Vedanta Ltd (Cairn oil & Gas)**

**(July 2016 – January 2018)**

Lead Petrophysical assistance and guidance to broader subsurface teams in delivering annual subsurface KPIs

- Prepared and Implemented Petrophysical guidelines and best practices to be followed in characterization of conventional clastic rocks to tight oil & gas reservoirs across Cairn assets
- Associated and Assisted in Delivery of integrated petrophysical models (rock typing studies, permeability and saturation-height functions) for three tight oil reservoirs for preparing 3D static and dynamic models
- Managed and executed an extensive and quality controlled SCAL program in more than 200m of cores in porcellanites reservoirs
- Mentoring and Training graduate trainees through a customized Subsurface training program called **Barrels Of Learning per Day (BOLD)**

#### **Lead Petrophysicist, Cairn India Ltd.**

**(June 2014 – July 2016)**

Asset Petrophysicist in Tight oil team for appraisal and phased development of Barmer hill tight oil formation in Mangala Oil Field, largest onshore field in Northern Barmer basin, Rajasthan

- Delivered integrated formation evaluation of 350 wells which were earlier drilled in lower producing member.
- Designed and executed fit for purpose SCAL studies in Diatomite reservoir cores for calibrating petrophysical model
- Built rock types based on core derived lithofacies & Pc entry heights for permeability modelling and saturation height modelling
- Petrophysical uncertainty analysis to build uncertainty cases in reserves.
- Prepared predictive 1-D Geomechanical models for attaining effective hydro-frac designs
- Key contributor to the phased FDP for efficient recovery and extraction of oil from Mangala Barmer hill formation.

#### Reservoir management of Bhagyam and Aishwariya Fields

- Executed reservoir monitoring studies for production enhancement through cased hole RST logs, PLT and temperature surveys in 118 wells in B & A fields.
- As a key member, delivered fast pace 58 infill well campaigns with three rigs simultaneously.
- Carried out EOR studies for remaining oil saturations in the field through continuous sweep monitoring and managed core flood experiments.
- Monitored Pilot test results after early polymer EOR implementation in the field. Provided inputs to FDP for full field Polymer EOR project.

#### **Senior Petrophysicist, Cairn India Ltd. (March 2013 – June 2014)**

Asset Petrophysicist in fast track development of an onshore oil field: Greater Aishwariya Project.

- Part of subsurface team that delivered 51 wells to First Oil
- Petrophysical inputs & support to Static and Dynamic models, development drilling and coring operations.
- Integrated Field studies & Petrophysical Evaluation with log, core and well test and production results.
- Planned and executed fit to purpose Core Analysis and SCAL studies for Reservoir Characterization.
- Interacted with various Core analysis labs for RCA and SCAL analysis and managed a budget of 0.6 M USD
- Petrophysical Support and planning of for completion of infill wells and work over jobs with optimized perforations and cased log interpretation and RST Results.

#### **Petrophysicist, Reliance Industries Ltd. (June 2008 – March 2013)**

Petrophysicist in Reservoir Management Group for Reservoir characterization and Development of Deepwater blocks (in KG & Cauvery basins, India) and shallow water blocks (NEC basins, India).

- Reservoir Characterization & Initial Development plans for Deep water gas Field in KG Basin India
  - Delivered Integrated Petrophysical Evaluation through RCA and SCAL analysis of Core data and well test results - Facies prediction from Core and Facies modelling through Neural Networks - Facies wise Permeability Modelling and Saturation Heights Functions to support Geologist in building reservoir static model.
  - Designed and executed core analysis program of 100 m core in deep water turbiditic reservoir for revised FDP submission
- Operations Petrophysicist for producing oil and gas fields (KG-D6 D1-D3 & MA Fields)
  - Contributed in well planning and logging programs of 18 Gas production wells and 4 Multi-lateral Horizontal wells for oil.
  - Real time monitoring and post well petrophysical evaluation.
  - Open hole gravel evaluation in 16 wells after completion for sand control

Technical Member for supporting Overseas and JV activities

- Petrophysical evaluation of carbonate reservoirs in exploratory wells of Kurdistan Blocks. Study results saved well costs through optimizing well test intervals in Extended well testing program.

- Technical Member in RIL JV team of Panna, Mukta (Carbonate reservoirs)& Tapti fields for technical collaboration with operator. Full field petrophysical evaluation of Carbonate reservoirs in Mukta Field.

**Project Associate in IIT Bombay, India (Experience: June 2007–May 2008, 1year as part of M.Sc. curriculum)**

**Project:** Structure and Tectonics of Krishna Godavari Basin based on Gravity and Seismic Data

- Delineated the Basin architecture and configuration of Krishna-Godavari Basin through detailed integration of Gravity, DSS Seismic and Well data

## PROFESSIONAL TRAININGS

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- Petroleum Economics and Risk Analysis, Trainer: AGR Tracs, June 2017.
- Leadership and Management Training, Trainer: Harvard Manage Mentor, 2016-2017.
- Geomechanics: Exploration to Field Rejuvenation, Trainer: Nautilus, November 2015
- Structural and stratigraphic image log interpretation, Trainer: Petroskills, March 2014.
- LWD and Wireline logging operations and data acquisition, Trainer: Schlumberger, October 2008.

## EDUCATION

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**M.Sc. in Applied Geophysics from Indian Institute of Technology Bombay, India** **May 2008**  
(Average grade: 8.35 on scale of 10)

**Bachelor of Science in Physics, Kakatiya University, Warangal, India** **May 2006**  
**Gold Medal** awarded in B.Sc.(Average grade: 85%)

## PERSONAL INFORMATION

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- Date of Birth - 25.05.1986
- Nationality - Indian
- Marital status - Married
- Passport No - Z3419913
- Address - H. No 10-57/1/1, Husnabad, Karimnagar  
Telanghana, India, Pin No: 505467
- Languages - English, Hindi and Telugu

## DECLARATION

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*I hereby declare that above information is correct to the best of my knowledge.*

Date: 20/06/2018

**Rathnakar Reddy**

Place: Gurgaon