Amit Namjoshi

Australian Citizen. Perth based.

Summary

I have 25 years of international experience with large & small companies both offshore & onshore.

My recent experience (past 8 years) is on Australia's 2 largest LNG projects - 'Ichthys' & 'North West Shelf'. I am highly experienced in Field Development Planning, Reservoir Management & Well Surveillance activities. I have many years of hands-on experience of well-testing/DST & production logging interpretation, design & on-site supervision.

I have been a mentor to many young engineers of various nationalities.

My core technical skills: Sub-surface uncertainty identification & mitigation, Experimental Design studies, 3D model building with multi-disciplinary input, well-test interpretation, PVT/EoS modelling, Reservoir simulation (Eclipse/Petrel, OFM/Prosper/MBAL etc), Multi-disciplinary knowledge (G&G, drilling & production) & Reserves assessments.

I am a practical engineer. My focus is on achieving results.

Competencies

- Leadership ability & can also work independently. Prior responsibilities have included identification of relevant reservoir studies, preparing work scope/schedule for team, task assignment/execution & quality control, identification of key results, recommendations and documentation.
- Prior experience of providing close support to LNG marketing, business planning, budgets, economics & finance functions. Prior experience of JV interactions, operated & non-operated.
- Reservoir Engineering skills:
  - Field Development Planning: Reservoir characterization by integration of multi-disciplinary data. Reservoir Simulation. Evaluation of subsurface uncertainties & risk management.
  - Reservoir Management: Operations Reservoir Engineering, well surveillance activities, production forecasting. Good experience in well-test analysis & production-log (PLT) interpretation & on-site supervision of cased-hole logging and DST.
  - Water-Flooding: Reservoir Management & phased development of mature waterfloods.
  - Experienced in developing guidelines/processes for key Sub-Surface activities – Reservoir Management Planning, Uncertainty Management & Resource Estimation.
  - Knowledge of SPE PRMS Reserves System & basic economic analysis.
  - SCAL / PVT analysis & planning. Wellbore hydraulics.
- Reservoir Software skills:
  - Eclipse, Petrel-RE, tNavigator, Saphir (Ecrin), Emeraude & Geo2Flow.
  - MBAL, PROSPER, GAP, PVTSim, Oil Field Manager (OFM)
  - Petrel-RE, Uncertainty Management / Experimental Design. CrystalBall.
- Personal skills:
  - Leadership of & also working as a member of multicultural multi-disciplinary teams.
  - Mentoring: Trained/mentored 15 Japanese young engineers over 6 years with Inpex.
  - Network with experts in well-testing/production logging, geo-modeling & petro-physics.
  - Ability to work constructively with geology/petrophysics & production technology.

- International experience: UAE, Oman, Egypt, Australia, India, and short term assignments in Syria, Yemen, Qatar, Iran, Indonesia, Thailand, New Zealand and Malaysia.

Career Aspirations

I am seeking a technical leadership role and exposure to business aspects of the energy industry.

Work Experience

Consultant Reservoir Engineering Advisor, Central Petroleum, Brisbane, Australia (April 2015 – current)

- Assessment of opportunity to acquire majority stake & operatorship of a mature (25 years/60 wells) onshore oil/gas asset to redevelop the gas-caps & supply gas to the east coast market.
- My responsibility is to enable Senior Management to make a business decision in a limited time frame by identifying value opportunities such as reserves additions (bypassed pay), production optimization projects (additional perfs/re-perfs/stimulation candidates) & proposing a field redevelopment plan to mature undeveloped reserves & contingent resources.
- Activities: rapid analysis of reserves reports, geo/simulation models, logs and well/field production. Preparing work plans for all team members including scope of works for studies & workover plans. Managing subsurface studies & history matching multiple models: resource volume re-evaluation.

Senior Consultant Reservoir Engineer, BHP Billiton, Perth, Australia (Feb 2014 – March 2015)

- Reservoir engineering responsibility for BHP's 1/6th non-operated interest in the 'North West Shelf' gas and oil assets (LNG ~16MTpa/200MMboe pa: ~2.7 Bcf/d Gas, 70,000 bbl/d Condensate & 30,000 bbl/d Oil). This was a senior level hands-on engineering role which also provided close support to LNG marketing, business planning, budgets, economics & finance functions.
- Responsible for BHP's internal technical assessments, SEC reserves, production forecasts & documentation to support project funding for major project sanction.
- Field-development Planning Studies: Conducted independent development planning simulation studies & reservoir management simulation studies on 4 multi-TCF producing gas fields (~60 current producing wells), 4 producing oil fields (13 current producing wells) & future projects for plateau extension (10 gas fields/17 wells online between 2015 & 2020).
- Reservoir Management Studies: review performance & well surveillance on 60+ gas/oil wells. Validate & reconcile mapped GIIP & volumes accessed by producing wells. Identify opportunities for infill wells & well reentry (bypassed pay).
- Field Studies included: sub-surface data review (well production histories, well logs, cores, SCAL, well tests, PVT, pressure data & geological concepts), QC of Operator's static/dynamic models, history matching & probabilistic studies, independent evaluation of project phase timing, development well counts, well locations & designs to optimize recovery, reserves & resource evaluation (SPE & SEC) & development of reservoir management plans.
- Key aspects of the role included influencing JV decisions to align with BHP's business drivers & building professional relationships with numerous sub-surface personnel from 5 JV partners.

Senior Consultant Reservoir Engineer, INPEX Browse Ltd, Perth, Australia (June 2007 – Feb 2014)

- 'Ichthys' (20 Tscf GIIP/50wells/LNG ~8.4MTpa) Gas-Condensate Reservoir - LNG development – association from Concept Selection to Execution Phase.
- Developed guidelines/process documents for key Sub-Surface activities – Reservoir Management Planning, Uncertainty Management & Resource Estimation.
- Mentor to 15 young Japanese Engineers over 6 years.
- Reservoir Management Plan (primary author): Developed reservoir management strategy & Data Acquisition Plans to justify logs, core, MDT pressure, samples, well-tests using VoI methods.
- Field Development Studies: QC of basic data (SCAL/PVT) to develop appropriate range of relative permeability models & PVT models for input to simulation models & uncertainty studies.

Analysis of DST/Well-tests with Saphir (incl. DST history matching using numerical models) & incorporation of results/insights into building alternative geological/reservoir models.
- Field Development Simulation Studies (various): 'Screening Studies' for Conventional Depletion vs. Partial Gas/Full Gas Recycling. 'Development Optimization' studies for optimum development well number & sequence, well location and optimum well trajectories/lengths for various geological scenarios. Simulation of likely long term well-test responses of 'early producer' wells.
- Experimental Design Uncertainty Studies: Leader of a multi-discipline reservoir characterization study to generate multiple reservoir scenarios. Uncertainty impact assessment using 'Experimental Design'. Reserves updates - SPE-PRMS.
- Reservoir Characterization Study Leader: Evaluated an alternative method of static/dynamic model building using the J Function approach to integrate Logs/SCAL/Pressure/Geo-concepts.
- Contributed to integrated contingency planning prior to development drilling: identifying alternate well locations & potential in-fill well locations to manage unexpected sub-surface outcomes.
- Peer Review geo-models & reports of other sub-surface disciplines including geology, geophysics & petro-physics. Make constructive comments and contributions.
- Enabled Inpex to simplify a pre-approved long-term flow-testing program on Plover reservoir & reduce appraisal program on 'Plover' by 1 well – potential cost reduction ~$200 Million.
- Provide reservoir engineering advice to Exploration & New Ventures department as required. Represent Inpex for JV meetings: ConocoPhillips (Bayu-Undan), Total, ENI, Apache and BHP.

Senior Reservoir Engineer, Woodside Energy Ltd, Perth, Australia (March 2006 – June 2007)

- 'Enfield' Offshore Oil Water-flood (~80,000 bbl/day, 5 producers/5 injectors) - Multi-tasking role requiring integration of multi-disciplinary data (including 4D seismic), operations reservoir engineering, reservoir simulation and field development evaluation in a fast paced environment.
- Reservoir Management: Multi-disciplinary review of all well performance data (logs, pressures, temperatures, rates, WaterCut trends etc) to gain insights into producer/injector connectivity & optimize offtake rates & distribution of injection water. Analysis of PBU & Fall-Offs. Integration of insights into geo-model updates. Develop targeted data acquisition recommendations for future development wells (saturation logs, pressures, cores) based on production insights.
- Field Development Phase-2 Evaluation: Identification of uncertainties & risks following initial production. Review & QC of basic data such as existing SCAL & PVT to develop alternate range of relative permeability models & PVT models for history matching & uncertainty studies. History matching simulation models & evaluation of alternate Phase-2 development options. Proposing infill development well opportunities. Desk top screening study to evaluate EOR options post-waterflood. Inputs to acquisition/interpretation of 4D seismic survey & well proposals.
- Annual Reserves Reporting. Support to annual business planning & production forecasting.

(Contract) Senior Reservoir Engineer, Shell E & P / PDO, Oman (December 2003 – March 2006).

- 7 carbonate fields (2 major/5 minor, ~25,000 bbl/day) – Responsible for all reservoir activities.
- Mentor to 2 young Omani engineers assigned to Well & Reservoir Management team.
- Main responsibility: Optimizing 2 water-floods (~25 producers/15 injectors).
- Reservoir Management Conventional Studies: Material balance, Analysis of PBU/Fall-Off. Decline Curve Analysis for UR/Reserves & production forecasting.
- Integrated Team Studies: Objective was to develop production & injection policies to optimize field recovery. Monitored performance of producer/injector patterns (rate/water cut trends, ESP pressure/temperature trends/changes to identify fracture short circuits & fracture opening pressures, injectivity change monitoring with Hall plots). Identified & implemented methodical surveillance plan supported by VoI analysis (WFL, PL, tracer tests, saturation logs, LOT, PBU & sensitivity tests to identify ESP optimum point, injection water quality & chemistry monitoring). Identified 'water shut-off' opportunities to increase production.
- Field Development Simulation Studies: History matching existing simulation models & evaluating various infill development options. Design of pilot water-flood in undeveloped reservoir areas.
- Annual Reserves Reporting – internal/external (SEC compliant). Annual business planning.

Staff Reservoir Engineer, Santos Ltd, Brisbane, Australia (November 2001 – November 2003).

- Multi-faceted role: reservoir modeling, simulation, surveillance & mentoring.
- Training less experienced engineers in well-test analysis and production log analysis.

- Field Development Studies: Multi-disciplinary field development planning studies of Petrel/Tern (offshore gas fields, ~3 Tcf GIIP). This included review & reinterpretation of PVT/SCAL, DST, RFT & identification of key uncertainties, multi-scenario reservoir modeling, evaluation of field development options, probabilistic evaluation of resource range based on multiple geo-scenarios & development of reservoir surveillance/data acquisition plans.
- Roma / Palm Valley onshore gas fields (low rate gas fields, ~2Bcf/year, ~40 wells): Surveillance and performance analysis. Well-tests for reservoir pressures, MBAL & Prosper models for deliverability evaluation, forecasting & reserves update. Identification of production enhancement opportunities (wellbore/surface network optimization).
- Mereenie oilfield (onshore, gas injection): Individual well studies to optimize performance and recovery. Assess efficiency of gas re-injection. History match updates of existing Eclipse model to evaluate re-development options for bypassed oil. Reconciled gas & liquid reserves from Eclipse model with the results of decline curve analysis.

Specialist Well-test Engineer, Sigma Consulting, Australia / SE Asia (Oct 1997 – Nov 2001).

- Reservoir Surveillance: Specialist support to well-testing operations for various clients in SE Asia. Well-test analysis (Saphir), integrated DST test design, onsite execution and supervision.
- Reservoir Management/Surveillance and well performance evaluation of 'Tunu', a giant gas-condensate field in Indonesia (~120 producing gas wells). Objective:
    - Production enhancement
    - Analysis of production logs and well-tests to identify water producing sands, derive reservoir pressure & productivity index. Integration into analytical reservoir models.
    - Identify production enhancement opportunities (water shut-off, tubing/packer leaks, re-perforation/stimulation, bypassed pay).
    - History matching, material balance, production forecasting and depletion studies.
    - Identification of poorly drained areas in various geological units.
    - Cost Savings based on Depletion Studies: identified redundant planned in-fill wells & optimized infill well locations in poorly drained areas.

Field Engineer, Schlumberger Oilfield Services Ltd, Middle East (February 1990 – May 1997).

- Design, execution and interpretation of production logs and well-tests. Cased-hole logging, well-testing, DST: on-site operations and planning including real-time pressure transient analysis.
- Multi-Well & Multi Reservoir Production-logging campaigns - about 50 logs conducted annually.
- Responsible for operations training of younger engineers.
- Well-testing, sampling and electric-line operations in UAE, Syria, Egypt, Qatar, Yemen and Iran

Professional Development (Various Software and Technical Training)

- Petrel-RE, ECLIPSE, PVTSim, Saphir/Ecrin (Kappa software). PETEX (Prosper/MBAL/Gap). COUGAR, Geo2Flow.
- Well Test Interpretation, Production Log Interpretation, Experimental Design (on the job experience), Reserves (SPE-ATW), Shell's Integrated Water-Flood Management Course, Decline Analysis, Introduction to Streamline Simulation, Introduction to ESP Systems.
- Various fundamental courses: Geological Field Trip – Book Cliffs, Utah, USA, Rock Mechanics, Core Analysis, Fracturing, Formation Water Interpretation.
- Various Operational Training Courses: DST (Drill Stem Testing), Well Testing, Cased Hole Logging, Safety (Explosives, Radiation, Pressure Control & H2S).

Education

1988 - 1990 Master's Degree in Telecommunication Systems Engineering. Indian Institute of Technology, Kharagpur, India.

1984 - 1988 Bachelor's Degree in Electrical Engineering. Indian Institute of Technology, Bombay, India.