

Edwin Jong

Project Manager – Reservoir Engineer
Epic Consulting Services Ltd.
1900, 540 – 5th Ave. S.W. Calgary, AB, T2P 0M2
Phone: (403) 444-1420
Fax: (403) 444-1424
E-Mail: edwin@epiccs.com

SUMMARY OF EXPERIENCE

- Reservoir Engineer with 3+ years experience in reservoir engineering and simulation.
- Work experience includes oil and gas reservoir simulation, waterflood optimization, CO₂ flooding, decline analysis, and material balance.

EMPLOYMENT HISTORY

Reservoir Engineer

May 2005 – Present

Epic Consulting Services Ltd., Calgary

Conduct analytical reservoir analysis and reservoir simulation for a variety of oil and gas reservoirs:

Alexis Banff A Pool

- Waterflood optimization simulation study.
- Performed volumetric calculations.
- Constructed a 3D eclipse model, input production/injection/location data for 66 wells, performed history match, conducted forecasts examining injector conversions/infills to improve waterflood efficiency.

Hamilton Lake Upper and Lower Viking Pools

- Waterflood optimization analytical study.
- Performed volumetric calculations, decline analysis, examined watercut trends, recovery factor vs. hydrocarbon pore volume injected plots, examined analog pools, and injector – producer communication.

Redwater D-3 Pool

- CO₂ Pilot Simulation Study.
- Constructed a 3D compositional model (GEM), input production/injection/location data for 20 wells, performed history match, conducted forecasts of CO₂ injection scheme.

Lloydminster Pool

- Developed a realistic box model of Lloydminster 'type' pools and evaluating a variety of development and recovery processes.
- Forecasted vertical and horizontal infills, waterflood, and CO₂ injection schemes.

Redwater D-3 Pool

- Single Well Simulation Study.
- Constructed a 3D radial single well black oil model (IMEX) to mimic typical historical well behaviour.
- Created and tuned equation of state based on swelling data, separator data, and PVT.
- Constructed a 3D radial single well compositional model (GEM) to forecast CO₂ injection scheme and near well bore phenomenon.

Swan Hills Beaverhill Lake A&B Pool

- Miscible CO₂ Flood study of pilot area in the Beaverhill Lake A&B pool
- Constructed a 3D compositional model (GEM) of pilot area, input production/injection/location data for 65 wells, performed history match, conducted forecasts of CO₂ injection scheme.
- Constructed 2D cross-sectional compositional models (GEM) to forecast recoveries

Rocanville Bakken Voluntary Unit 1 Pool

- Audit of waterflood optimization simulation study.
- Reran forecasts based on audited model.

Frobisher Pools

- Well spacing and recovery factor study.
- Performed volumetric calculations and material balance.
- Created two 3D Eclipse box models with type curve wells
- Forecasted various infill scenarios.

Mooney Bluesky A Pool

- Waterflood feasibility simulation study
- Constructed a 3D eclipse model, input production/injection/location data for 45 wells, performed history match, conducted forecasts examining injector conversions/infills to improve waterflood efficiency

Ferrybank Belly River G;H and Basal Belly River A Pool

- Conducted a waterflood feasibility study of the Ferrybank Belly River G;H and Basal Belly River A pool
- Performed volumetric calculations, material balance, decline analysis, examined watercut trends, conformance plots, recovery factor vs. hydrocarbon pore volume injected plots, examined analog pools.
- Constructed 3D eclipse model, input production/injection/location data for 220 wells, performed history match, conducted forecasts examining injector conversions/infills to improve waterflood efficiency.

Cranberry Slave Point D

- Waterflood optimization simulation study
- Constructed a 3D eclipse model, input production/injection/location data for 12 wells, performed history match, conducted forecasts examining injector conversions/infills to determine optimum development strategy.
- Converted final model to Exodus format for client

Redwater D-3 Pool

- Determination of MMP for CO₂ flooding.
- Created and tuned equation of state.

Nipisi Gilwood A

- Full field streamline simulation study
- Constructed a 420 well 3DSL model and obtained a history match regional level
- Evaluated waterflood optimization forecast scenarios involving infill injectors and producer-injector conversions
- Converted final model to Eclipse format for client

PTAC Increased Recovery Study

- PTAC Study Increased Recovery of Oil and Gas Business Case Project (10,000 Oil Pools and 40,000 Gas Reserves)
- Analyzed OOIP, OGIP, and reserves for light oil, heavy oil, and gas pools in Alberta.

ADOE Study of Mature Oil Pool Waterflood

- Determined the top mature (primary production) oil pool waterflood candidates in Alberta

Internship Student

Epic Consulting Services Ltd., Calgary

May 2003 – August 2004

Kakut Banff A & C Pools

- Constructed a 3D eclipse model, input production/injection/location data for 7 wells, performed history match, and conducted forecasts.
-

Foamy Oil Study - Cold Lake and Primrose

- Examined costs as well as reviewed current oil sands production.

Orito Field

- Performed analysis of production history

Hatton W.I. Lands

- Digitized maps and calculated volumetrics.

Surat Pool in Southwest India

- Digitized maps and calculated volumetrics.
- Created 3D Eclipse model.

Eden Yuturi Lower U Unit

- Digitized maps and calculated volumetrics.
- Created 3D Eclipse model.

Lashburn East Waseca Pool

- Examined analog pools and conducted spacing study of cold production wells.

Waterton Pool

- Digitized maps and calculated volumetrics.

Leahurst Glauconitic B Pool

- Performed log interpretations.

Halkirk Upper Mannville I

- Performed log interpretations.

Multipool Waterflood Assessment

- Performed decline analysis, examined watercut trends, conformance plots, recovery factor vs. hydrocarbon pore volume injected plots, examined analog pools of eight ongoing waterfloods.

PUBLICATIONS

- Baker, R.O., Fong, C., Jong, E., and McKishnie, R.A. - Epic Consulting Services Ltd., "Developing Rule of Thumb and Assessing Risk for Waterflood Forecasts", CIM paper 2006-119, presented at the Petroleum Society's Canadian International Petroleum Conference 2006, Calgary, Alberta, Canada, June 13 – 15, 2006.
- Baker, R.O., Jong, E.S.W., Virués, C., "Understanding the Enigma of Reserves Growth: The Whys", CIM paper 2004-272, presented at the Petroleum Society's Canadian International Petroleum Conference 2004, Calgary, Alberta, Canada, June 8 – 10, 2004.

EDUCATION

B.Sc. Degree **University of Calgary** April 2005

- Graduated in April 2005 with a Bachelor of Science degree in Oil and Gas Engineering

B.Sc. Degree **University of Alberta** April 1999

- Graduated in April 1999 with a Bachelor of Science degree in Chemistry

Relevant University Courses

- Reservoir Engineering
- Drilling and Well Completions
- Petroleum Engineering Geology
- Waterflooding
- Design for Oil and Gas Engineering
- Production Engineering

Relevant Industry Courses

- CMG Introduction IMEX/Builder/Results
- CMG Introduction to WinProp
- Coaching for Commitment - Coaching Skills for Engineers and Geoscientists

SPECIAL SKILLS

- Experience with ECLIPSE, IMEX, GEM, and 3DSL reservoir simulation software.
- Experience with CMG WinProp equation of state software.
- 3D modeling experience with FloGrid and CMG GridBuilder.
- Ample experience with formal technical presentations, software presentations and demonstrations, and client project presentations.
- Public production and pressure data gathering using GeoScout.
- Capable working individually and in a team environment.
- Excellent written and oral communication skills.

PROFESSIONAL MEMBERSHIPS

- Association of Professional Engineers, Geologists and Geophysicists of Alberta
- The Petroleum Society
- Society of Petroleum Engineers