



**KADE**

TECHNOLOGIES 1995 INC.  
PETROLEUM CONSULTANTS

## **RESERVOIR SIMULATION // RESERVOIR ENGINEERING ANALYSIS**

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Coalbed Methane & Shale Gas

**Primary & EOR**

Heavy Oil & Thermal Recovery Assessment

**Miscible Displacement**

Horizontal Well Technology Application

**Tight Gas Reservoirs**

SAGD & VAPEX

**CSS Steam Injection & Air Injection**

Expert Witness

# // RESERVOIR ENGINEERING SERVICES

## **HORIZONTAL WELL TECHNOLOGY APPLICATIONS**

- Optimum Reservoir Location for New Producers and Injectors
- Reserve Assessments, Production and Injection Rate Forecasts
- Reservoir Engineering Analysis of Existing Wells
- Conventional Oil, Gas and Heavy Oil / Layered and Heterogeneous Reservoirs
- Waterflood and Miscible Flood
- Analytical Models for Screening Reservoirs for Horizontal Well Potential
- Thermal and EOR Applications

## **PRIMARY & EOR**

- Conventional and Heavy Oil
- Sweep Efficiency Improvement
- Use of Horizontal Well Technology to Improve Production Performance
- Pattern Alteration
- Infill Drilling
- Formation Damage and Injectivity Analysis
- Waterflood Design
- Polymer
- Surfactant/Polymer
- Alkaline/Surfactant/Polymer

## **TIGHT GAS RESERVOIRS**

- Multiple Transverse Hydraulic Fracture Implementation
- Horizontal Well With Multiple Transverse Hydraulic Vertical Fractures

## **HEAVY OIL & THERMAL RECOVERY ASSESSMENT**

- Cyclic Steam Stimulation (CSS), Steam Flood Design and Analysis

- Steam Assisted Gravity Drainage (SAGD)
- Innovative Techniques Using Horizontal and Vertical Wells to Improve Oil Production and Recovery
- Recovery of Bypassed Oil
- Analytical Thermal Models for Evaluating SAGD and Cyclic Steam Processes (Screening/ Scoping Studies)

## **EXPERT WITNESS**

- Gas-Over/Near Bitumen/Heavy Oil
- CSS & SAGD

## **SAGD & VAPEX**

- Steam Assisted Gravity Drainage SAGD, Using Horizontal Well Pair
- SAGD With Horizontal Producers and Vertical Well Injectors Combination
- Solvent Aided SAGD
- Vapor Extraction (Vapex)

## **MISCIBLE DISPLACEMENT**

- Hydrocarbon Miscible
- Tertiary Oil Recovery
- Immiscible CO<sub>2</sub> Injection
- Immiscible Hydrocarbon Solvent Injection
- Solvent Injection

## **CSS, STEAM INJECTION & AIR INJECTION**

- Cyclic Steam Stimulation (CSS)
- Steam Drive (SD)
- Combination of CSS & Steam Drive

## **COAL BED METHANE & SHALE GAS**

- Gas and Water Production Forecast
- Depletion Strategies
- Multilateral/Horizontal Well Application

## // RESERVOIRS

**A PARTIAL LIST OF RESERVOIR FORMATIONS OR FIELDS WHERE  
KADE TECHNOLOGIES CONDUCTED RESERVOIR STUDIES.**

### **Conventional**

Acheson  
Baldonnel  
Banff  
Basal Quartz  
Belly River  
Boundary Lake  
Buick Creek  
Bluesky  
Cardium  
Carrot Creek  
Charlie Lake  
Debolt  
Doig  
Ellerslie  
Gething  
Glaucanitic  
Golden Spike  
Halfway  
Keg River  
Little Bow  
Jean Marie  
Jumpbush

Key Scrap  
Leduc  
Loon A  
Loon G  
Mannville  
Middale  
Mississippian  
Montney  
Pekisko  
Pembina Cardium  
Pembina Nisku  
Punta Rosada  
Rainbow  
Redwater  
Retlaw  
Sawtooth  
Shaunavon  
Sierra Blancas  
Slave Point  
Sparky  
Sukunka  
Sunburst  
Sundance

Traverse Limestone  
Triassic (Sunset B)  
Triassic F (Montney)  
Viking  
Worsley  
Winnipegosis  
**Heavy Oil/Tar Sands**  
Bluesky  
Bakken  
Colony  
Clearwater  
Dina  
General Petroleum  
Glaucanitic  
Grand Rapid  
Karazhambas G  
Lloydminster  
Mannville  
McLaren  
McMurray  
Mississippian Carbonate  
Oil Sands  
REX

San Miguel  
Sparky  
Traverse  
Wabasca  
Waseca  
**Coalbed  
Methane**  
Horseshoe Canyon  
Leahurst  
Mannville  
Mist Mountain  
Penhold  
**Shale/Tight Gas**  
Basal Doig  
Baldonnel  
Falher  
Horn River  
Horn River Basin  
Montney

## // THE FOLLOWING IS A PARTIAL LIST OF CLIENTS

Acclaim Energy  
Alberta Producers  
Group  
AltaGas Utilities  
Group Inc.  
Amoco Canada  
Resources Ltd.  
Anegada Energy  
Corp.  
Apache Canada  
Ltd.  
Anderson  
Exploration Ltd.  
Andora Energy  
Arc Resources Ltd.  
Athabasca Oil  
Sands Corporation

Baytex Energy  
Backer Petroleum  
Corp.  
Barrington  
Petroleum Ltd.  
Birchcliff Energy  
Ltd.  
BlackPearl  
Resources Inc.  
Bonavista  
Energycorp.

Canadian Natural  
Resources Limited  
Canadian  
Occidental  
Petroleum Ltd.  
Canbaikal  
Resources Inc.  
CanEra Resources  
Inc.  
Charro Energy,  
USA  
Cimarron  
Petroleum Ltd.  
Crestar Energy Inc.  
Crew Energy Inc.  
Columbus Oil and  
Gas, USA

Connacher Oil and  
Gas Limited  
Conoco Phillips  
Canada  
Corex Resources  
Ltd.

Deer Creek Energy  
Corporation  
Devon Energy  
Canada  
Corporation  
Dominion  
Energy Canada  
Corporation  
Delphi Energy  
Corp.

EnCana (Cenovus)  
Corporation  
Encana Oil & Gas  
Partnership  
Endev Energy Inc.  
Enerplus Petrofund

First West  
Petroleum  
Fletcher Challenge  
Petroleum Ltd.

Galleon Energy Inc.  
Gear Energy Ltd.  
Gulf Canada  
Resources Inc.

Harvest Energy  
Trust  
Harvest Natural  
Resources Inc.  
(UK)  
Husky Oil  
Operations Ltd.

Imperial Oil  
Resources Ltd.  
Intensity

Resources Ltd.  
Intrepid Energy

Jordan  
Petroleum Ltd.

Koch Petroleum  
Canada  
Korean National  
Oil Corporation

Laurasia  
Resources Ltd.  
Longshot USA  
Long Run  
Exploration  
Luke Energy

Maha Energy Inc.  
Marathon  
International  
Petroleum  
Canada Ltd.  
Mobil Oil Canada

NAL Resources Ltd.  
NCE Resources  
Group  
Newport  
Petroleum  
Corporation  
Norcen Energy  
Resources Ltd.  
Northern Alberta  
Oil Ltd.  
Northern Blizzard  
Resources Inc.  
Northrock  
Resources Ltd.  
Northstar Energy  
Corporation

OPTI Canada Inc.

Pace Oil & Gas  
Pan Atlas Energy  
Inc.

Patch  
International Inc.  
Pearl Exploration  
Pembina  
Resources  
PENGROWTH  
CORPORATION  
Penn West  
Exploration  
Petro-Canada  
Petrolifera,  
Argentina  
Petromet  
Resources Ltd.  
Petrorep  
Resources Ltd.  
Petrus Resources  
Ltd.

Peyto Exploration  
& Development  
Phillips Petroleum  
Canada Ltd.  
Pinnacle  
Resources Ltd.  
Pocaterra Energy  
Pointer  
Exploration Corp.  
Polarstar  
Canadian Oil &  
Gas, Inc.  
Provident  
Energy Inc.  
Pttep Canada Ltd.

Renata  
Resources Inc.  
Renaissance  
Energy Ltd.  
Response Energy  
Richland  
Petroleum  
Corporation  
Rio Alto  
Exploration Ltd.  
Rozsa  
Petroleum Ltd.  
RXO Energy Inc.

Saddle  
Resources Inc.  
Sandstorm Metals  
& Energy  
Second Wave  
Petroleum  
Sceptre  
Resources Ltd.  
Sherritt  
International  
Corporation  
SilverWillow  
Energy  
Sinovensa,  
Venezuela  
Sojourn Energy  
Solex Energy Inc.  
Sunshine Oilsands  
Surmont  
Producers Group  
Surmont Energy  
Ltd.  
Star Oil & Gas Ltd.  
Stellarton Energy  
Corporation  
Southern Pacific  
Resource Corp.  
Suncor Energy  
Sunwing Energy  
Suroco Energy  
Sword Energy Inc

Taurus Energy  
Thunder  
Energy Trust  
Trafalgar Energy  
Triton Vuko  
TXCO Resources,  
USA

Valence Energy  
Corp.  
Value Creation Inc

Wild Stream  
Exploration Inc.

**Dedicated reservoir engineer** with over 30 years of experience in the Alberta oil and gas industry. Has extensive **technical knowledge in conventional oil, gas and heavy oil recovery**. Conducted reservoir studies in numerous carbonate and sandstone reservoirs. He is recognized in the oil and gas industry for technical expertise in horizontal well technology applications, thermal recovery of heavy oil/oil sands and EOR, practical reservoir engineering and reservoir simulation. Kenny has served as Expert Witness at ERCB Hearing and Inquiries, a number of times, on issues relating to gas-over/near-bitumen, CSS and SAGD.

**1996-2010 Adjunct Associate Professor at the Department of Chemical & Petroleum Engineering at the University of Calgary.**



Kenny Adegbesan, PH.D., P.ENG.  
PRESIDENT

**KADE TECHNOLOGIES**  
Reservoir Engineer/Simulation  
Horizontal Well Technology Specialist

## // WORK HISTORY

### **KENNY O. ADEGBESAN, P.ENG., PH.D.**

1994 – Present, **President & CEO**

#### **KADE TECHNOLOGIES**

- Reservoir engineering / Simulation studies consultant to over 125 MULTINATIONALS, Medium and Junior Canadian oil & gas companies.
- Depletion studies: primary, waterflood, polymer, surfactant-polymer and alkaline-surfactant-polymer floods, heavy oil - cold flow & thermal, SAGD/VAPEX in reservoirs with complex fluid distribution, CSS, air injection, miscible and immiscible gas displacement, gas reservoirs, horizontal wells, complex reservoirs.
- Provides technical training in reservoir engineering and horizontal well technology applications for the oil & gas industry through the SPE, Petroleum Society, The University of Calgary (Petroleum Eng. Dept.), in Canada, USA, Saudi Aramco, China, Egypt, Libya, Romania and Nigeria.
- 1996-2010 Adjunct Associate Professor in the department of Chemical & Petroleum Engineering, The University of Calgary.
- Provides Technical expertise at the Alberta Department of Energy Hearings on issues relating to thermal recovery, Gas-over-bitumen (SAGD, CSS). Client list includes EnCana, Cenovus, Devon Canada, Canadian Natural Resources Limited.
- Mentor to Senior Reservoir Engineers - SAGD Projects.

#### **1988 - 1994 Reservoir Simulation/Modeling Project Leader & Consultant Imperial Oil Resources Ltd. (EXXON Canadian Affiliate)**

- Reservoir engineering/Simulation consulting services to pool teams.
- Depletion studies: primary, waterflood, thermal, SAGD/VAPEX, CSS, miscible, gas reservoirs, horizontal wells, complex carbonate reefs, sandstone reservoirs.

#### **1985 - 1988 Senior Development Engineer Imperial Oil Resources Ltd. ( EXXON Canadian Affiliate)**

- Reservoir engineering/Simulation consulting services to pool teams.
- Depletion studies: primary, waterflood, thermal, miscible, complex reservoirs, horizontal wells, production operations, coordination of new venture field projects, profitability analysis of new projects.

#### **1982 - 1985 Head Reservoir Engineer Texaco Canada Resources Ltd.**

- EOR: heavy oil/tar sands recovery, cold flow/thermal, horizontal wells.
- Supervision of Reservoir Engineers, advise VP engineering on new technologies.

## // EDUCATION

1982 Ph.D. • Chemical Engineering – University of Calgary, Calgary, AB  
1977 M.Sc. • Chemical Engineering – McMaster University, Hamilton, ON  
1975 B.Sc. • Chemical Engineering – University of New Brunswick, Fredericton, NB

## // PROFESSIONAL AFFILIATIONS

- Member, Association of Professional Engineers, Geophysicists of Alberta, Canada
- Society of Petroleum Engineers (SPE)

**For more  
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