RESERVOIR SIMULATION
// RESERVOIR ENGINEERING ANALYSIS

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 (Vaex)

MISCIBLE DISPLACEMENT

- Hydrocarbon Miscible
- Tertiary Oil Recovery
- Immiscible CO₂ 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
- Glauconitic
- Golden Spike
- Halfway
- Keg River
- Little Bow
- Jean Marie
- Jumpbush
- Key Scrap
- Leduc
- Loon A
- Loon G
- Mannville
- Midale
- 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
- Glauconitic
- Grand Rapid
- Karazhambas G
- Lloydminster
- Mannville
- McLaren
- McMurray
- Mississippian Carbonate
- Oil Sands
- REX

San Miguel
- Sparky
- Traverse
- Wabasca
- Waseca

Coalbed
- Methane
- Horseshoe Canyon
- Lealhurst
- 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.
CanAlkal 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 Defiant 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.
Harvest Energy Trust Harvest Natural Resources Inc. (UK) Husky Oil Operations Ltd.
Imperial Oil Resources Ltd.
Intrepid Energy Jordan Petroleum Ltd.
Pace Oil & Gas Pan Atlas Energy Inc.
Taurus Energy Thunder Energy Trust Trafalgair 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 O. ADEGBESAN, P.ENG., PH.D.
1994 – Present, President & CEO
KADE TECHNOLOGIES

WORK HISTORY

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 information, please contact:

Dr. Kenny Adegbesan, P.Eng.

BANKERS HALL RPO, BOX 22470
Calgary, Alberta, Canada T2P 5G7
Phone: 403-620-8732
Email: Kade@Kadeinc.Com

www.kadeinc.com