



Reserves Evaluation

Over 35 Years of Reserves Evaluation

- Evaluation of conventional and unconventional properties
- Annual corporate reserve reports
- Audit of company reserves to satisfy lender or financial requirements
- Corporate and property mergers, acquisitions, and divestitures
- Resource appraisals and audits
- Qualified reserve evaluators and auditors
- Integrated petrophysics, geology, and geophysics
- Assessment of prospective or undeveloped lands
- Expert witness



Methodology

Our evaluation engineers start by identifying and addressing the key technical and economic issues. We then use our considerable in-house experience and specialized expertise including sequence stratigraphy, pressure transient analysis and interpretations, wellbore and gas gathering system analysis, production optimization, simulation, etc. The full spectrum of Fekete's software and expertise is applied to truly understand your reservoirs and to more accurately model and forecast production.



Tools

Fekete Reserve Evaluations utilize the F.A.S.T. software suite, providing practical and advanced solutions. F.A.S.T. Harmony™ incorporates a production toolkit of traditional decline, volumetrics and gas material balance analyses to create individual and consolidated forecasts. F.A.S.T. RTA™ provides advanced decline analyses, utilizing production rates and flowing pressures to provide accurate forecasts under both transient and boundary dominated flow. F.A.S.T. Piper™ allows for field based modeling of gas gathering systems to predict the effects of future operating scenarios.



Reports

Fekete prepares professional NI 51-101 compliant corporate reserve reports for security administrator and banking requirements as well as individual property evaluations for mergers, acquisitions and divestments. Fekete's reports are recognized and accepted as reliable, highly competent evaluations by North American regulators and financial institutions.

Engineering & Geology Consulting Services

Fekete Associates Inc. is a consulting company based in Calgary, Alberta, Canada. We provide integrated reservoir management services and software to the oil and gas industry worldwide. Founded in 1973, the company has grown on the basis of its technical excellence and client service. Our client list includes over 1,000 companies worldwide. Fekete currently has a full-time staff of over 150 engineers, geologists, technologists, programmers and support personnel.

Geological Studies

Fekete's geoscientists have evaluated prospects around the world. The strength of our expertise is the interdisciplinary co-operation between Fekete's geological, petrophysical, geophysical and reservoir engineering staff and the integration of their results to arrive at a practical and technically rigorous reservoir interpretation.

The geoscience team's interpretation of oil and gas reservoirs incorporates all pertinent stratigraphic, structural and petrophysical analyses. Gross and net pay analyses and the areal extent of reservoirs are determined through detailed correlations of hydrocarbon zones and surrounding strata. As well, the stratigraphy, lithology, depositional environment and subsurface structure are assessed. Fekete determines reservoir parameters from petrophysical logs, core analyses, drillstem tests and well completion information. Mapping and modeling of reservoirs is completed utilizing all available information for a study area.

Pipeline Optimization

Fekete's abilities in gas gathering system optimization have been recognized as a truly unique and valuable service to the oil and gas industry. Using our F.A.S.T. Piper™ software, Fekete's engineers are able to build a model of a gas gathering system that includes the surface gathering system, wellbores, and reservoirs.

From multiple zone/multiple pressured systems in Alberta, coalbed methane systems in Wyoming, high pressure gas in Pakistan, to tight gas in Australia our engineers have accumulated a vast range of experience and valuable insight. Many clients have chosen Fekete's expertise because our recommendations generate immediate production increases at minimal cost and risk.

Production Optimization

Fekete's Production Optimization group investigates and identifies upside reserve and production potential which can then be developed and added to your booked reserves. We have developed a comprehensive Opportunity Banking Database process which incorporates geological, reservoir, completion, production and economic analyses into a comprehensive summary of your asset. Specifically, the process includes petrophysical evaluation of bypassed pay including offset analogies and recommended perforation intervals, testing programming, remedial workover programming for under-performing wells, assessment of optimal well spacing, abandonment liabilities and project economics. All projects are managed in a knowledgeable database with additional information appended as operations advance.

Reserves Evaluation

Fekete's qualified reserves evaluators identify and address key technical and economic issues. We then use our considerable in-house experience and specialized expertise, such as rate-transient analysis, pioneered by Fekete. The full spectrum of Fekete's software and expertise is applied to truly understand your reservoirs, to more accurately model and forecast production, and to provide reserves estimates with confidence. We prepare professional NI 51-101 and SEC compliant reserve reports for Canadian and United States regulators.

Reservoir Engineering & Simulation

Fekete provides an integrated team of reservoir engineers, geologists, geophysicists, petrophysicists, production engineers, simulation engineers and computer specialists for detailed reservoir studies. The results combine all aspects of static and dynamic modeling into a comprehensive reservoir model that yields additional reserves and successful drilling locations. A sample of past projects include waterflood design and optimization, EOR optimization, oil material balance, infill drilling and pool depletion strategies, low permeability gas deliverability studies, gas cap blowdown studies, gas storage, water disposal and acid gas disposal.

Regulatory Application

Fekete assists oil and gas companies in their reservoir management plans by pre-planning and obtaining the necessary regulatory approvals. We have completed and received approval for thousands of applications. Our applications are technically complete and accurate thereby ensuring a favorable evaluation by the regulatory authorities. By using Fekete to handle your regulatory applications, your staff can concentrate on their core responsibilities. We can also provide expert witness testimony at government and court hearings.

Unconventional Gas Studies

Fekete helps clients, engaged in coalbed methane (CBM), shale development and tight gas exploration, to optimize their production from new or existing wells. In the past few years, Fekete has been involved in numerous projects such as industry funded initiatives to study shale gas, green field development, and engineering reports to determine a CBM-specific development strategy. Other typical projects include the reserve estimation of tight gas, production forecasting of CBM and shale gas reservoirs, reservoir evaluation, and production optimization of existing CBM wells.

Fekete uses its F.A.S.T. CBM™ software to estimate reserves and generate production forecasts for new plays. F.A.S.T. CBM™ allows us to analyze production and pressure data for producing CBM reservoirs. It is the ideal tool for determining expected ultimate recovery and gas-in-place.

Well Test & Production Data Analysis

At Fekete, we approach our business with a dynamic, technical and practical attitude. We have seen significant client value in combining our well test (Pressure Transient) and advanced decline (Rate Transient) analysis services under one common umbrella called *Well Test & Production Data Analysis*.

Results obtained from combining both services allow a more comprehensive understanding of the reservoir, completion efficiency and optimization potential. Our expertise is further strengthened by our interdisciplinary co-ordination between these services and with Fekete's geological, petrophysical, geophysical and reservoir engineering staff.