

Maximizing Success using a Risk Reduction Approach to Integrated Geophysics

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Summary

How do you plan your capital expenditures in order to maximize your project or company's success? What geology and geophysics costs are appropriate for your unconventional resource, oil sands, or conventional property?

In Newendorp's (1975) book, *Decision Analysis for Petroleum Exploration*, he describes the choice to set aside geophysical information as a gamble in oil and gas development projects. Do you gamble on your projects by not using available geoscience tools, or do you use all of the data at your disposal to increase your chance of success?

This presentation will provide you with grounded examples that will illustrate the business value of integrated geophysics through case histories.

In each case presented, applying specific geophysical techniques to the geology and engineering data helped to improve financial metrics. By metaphorically loading the development dice with geophysical information, each team was more successful than had they gambled on their projects. They were rewarded with increased capex-efficient drilling, more completed operations, improved type curves, and other production metric improvements.

From the project geophysicist, geologist, petrophysicist or engineering point of view, each of these case histories will illustrate the value in integrating geophysics into your project workflows and business plans.