



N610: Introduction to the Canadian Oil Sands

Tutor(s): Clayton Phair

2 Days

Competence Level:
Basic Application



Classroom Course

Summary

This two-day course provides a comprehensive introduction to the Canadian oil sands industry. The sessions examine the entire industry value chain from subsurface resources through to the marketplace, and how the various segments of the industry interact. Participants will gain an understanding of oil sands resources and reserves, industry regulation, in-situ and mining/extraction bitumen recovery processes and projects, bitumen upgrading processes and projects, present and future product markets, existing and proposed pipeline systems, product pricing mechanisms, the competitive landscape and major industry players. The course reviews the major challenges facing the oil sands industry and provides forecasts for industry growth.

Learning Outcomes

Participants will learn to:

1. Understand the nature of the Canadian oil sands deposits (“oil sands”) and the oil derived from them (“bitumen”).
2. Assess the quantity of bitumen in the oil sands and learn the implications to the Canadian oil industry of such a large resource.
3. Recognize and understand commonly used oil sands technical terms.
4. Understand the regulation of the oil sands at the provincial and federal levels and the way in which the regulatory framework is evolving.
5. Discover where mining versus subsurface (“insitu”) methods are used to produce bitumen.
6. Understand both insitu and mining bitumen production methods.
7. Understand the process for refining (“upgrading”) bitumen into petroleum products and how the products are moved to market.
8. Predict future growth of bitumen production and the resultant importance of pipelines to that growth.
9. Appraise major current issues and challenges facing the oil sands.
10. Gain perspective on the reasons behind some of the opposition to continuing oil sands development.
11. Describe the oil sands industry with confidence.
12. Knowledgeably discuss the impact of continued bitumen production growth on the oil industry, Canadian economy and global energy supply.

Duration and Training Method

Two classroom days providing 1.6 CEU (Continuing Education Credits) or 16 PDH (Professional Development Hours)

Who Should Attend

It is suitable for both technical and non-technical personnel looking to gain an overview of the Canadian oil sands industry. Past course attendees have included engineers, finance and accounting personnel, HR staff, business development, project managers, operation managers, land men, lawyers, marketing, and regulators

Course Content



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Course Agenda

Day One

1. Introduction and Oil Sands industry overview
2. Basic concept
3. Resources and Reserves
4. Regulation
5. Surface and Mineral rights
6. Project Approvals-Royalties
7. Oil Sands Mining and Bitumen extractions
8. Recovery techniques
9. Projects

Day Two

1. In Situ Bitumen Recovery
2. Processes
3. Projects
4. Upgrading: Converting Bitumen into valuable products
5. Markets: Canada, The United States and Beyond
6. Market access/Pipelines
7. Market Fundamentals
8. Industry Challenges
9. Oil sands Industry Outlook
10. Conclusions