Major Projects in the Canadian Oil Sands – Past Experiences and Future Expectations

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Worth discussing

- About COAA
- The Opportunity and the Oil Sands (*they’re both still there*)
- Make the most of it
About COAA

- Founded in the 1970’s
- Owner leadership in a fragmented industry
- ~ 20 principal members & 140 associate members
- Annual Best Practices Conference since 1993
About COAA – Our impact

All Injury (FA, MA, RW, LTI) Frequency
As of March 31, 2009

Year

Frequency Rate

2005 2006 2007 2008 1Q 2009

Member Co. Contractors
About COAA - Best Practices

Four areas
- Safety
- Workforce Development
- Productivity
- Contract Documents

- 23 best practices issued, 8 in development
- Our website – www.coaa.ab.ca
The Opportunity – The oil is still there

The Opportunity – Firebag … one of many projects
The Opportunity – U.S. market demand

U.S. Imports by Country of Origin

- Canada
- Mexico
- Saudi Arabia
- Venezuela
- Nigeria
- Algeria
- Angola
- Iraq
- Russia
- Virgin Islands

- Petroleum Products
- Crude Oil

thousand bbls/d
The Opportunity – Impact of the recession

![Graph showing industrial construction projects and construction craft personnel](image-url)
The Opportunity – Impact of the recession (cont.)
The Opportunity – Looking ahead

Canadian Engineered Construction (in 2002 $)
The Opportunity – The long-term view

- Environmental stewardship
- Shift from capital construction to maintenance
The Opportunity – The long-term view

Combined Oil Sands Expenditures

12008 construction capital expenditure estimate for all Alberta oil sands projects, including related pipeline, upgrader and co-generation projects – original estimates (January, 2008) and adjusted (January 26, 2009) per public announcements.

Source: Construction Capital: CAPP and Nichols Applied Management, Operating Expenditure – Nichols Study
Make the most of it – COAA can help

- Workforce Planning
- Contracts
- Supervisory Skills
- Rework
- Workforce Development
- Bench marking
- Safety
Make the most of it – COAA can help

WorkFace Planning
- The right people
- In the right place
- At the right time
- With the right tools & materials

What’s it worth?
Make the most of it – WorkFace planning

10% more tool time = 25% improvement in productivity
Less wait time improves safety, morale, predictability
Make the most of it – COAA can help

WorkFace Planning in real life

- Two identical hydrotreater projects
  (click here to read the study)

- COAA Award nominations

- Results = better productivity, better schedule predictability, plus others
Make the most of it – COAA can help

Benchmarking

- 37 projects
- Average installed cost = $368 million
- 8 projects > $1 billion
Make the most of it – COAA can help

Benchmarking

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Results

- Best practices clearly connected to outcomes (e.g. constructability assessment, project risk assessment, planning for start up, detailed engineering complete)
WorkFace Planning – 2010 Conference

www.wfpconference.com
www.coaa.ab.ca
Discussions and Questions

www.coaa.ab.ca
www.wfpconference.com

Thank you!