CCQTA Project Activities
Update for the COQG

February 23rd, 2006
CCQTA Update for COQG
February 2006

• CCQTA membership is expanding, currently have 48 member companies
• Association is considering a bylaw change to promote the public release of project information after five years
Projects List

- Heavy Oil BS&W
- Phosphorus in Crude
- TAN Project
- NGL Contamination
- Heavy Oil Emulsion Viscosity
- Heavy Oil Manual
- Additive Impact

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Heavy Oil BS&W
Participants

- Baker Petrolite
- Champion Technologies
- Conoco Phillips
- Encana Corporation
- GE
- Maxxam Analytics
- NCUT
- Suncor Energy

BP
CITGO
Enbridge
ExxonMobil
Husky Oil
Nalco Canada
Petro-Canada

Contact: president@ccqta.com or secretary@ccqta.com
February 23, 2006
Heavy Oil BS&W Project

Project Status

1. Collect additional samples of problem crude
2. Explore option of completing sampling of good/bad sample sets at an alternate refinery site
3. Prepare a detailed project summary report for project members, summarizing data from Phases I, II, and III
Phosphorus in Crude Project Status Report

February 7th, 2006

Project Manager: Bruce Kennedy
1 416 986 6722
kennedybw@rogers.com

Contact: president@ccqta.com or secretaty@ccqta.com

February 23, 2006
Phosphorus in Crude

Participants

• B.J. Services  
• CCS Energy Services  
• Clearwater Inc.  
• Halliburton  
• Imperial Oil Limited  
• Nalco  
• United Refining  

BP  
Chevron Canada  
Enerchem  
New Alta  
Maxxam Analytics  
Petro-Canada  

Contact: president@ccqta.com or secretary@ccqta.com
Phosphorus in Crude
Project Status

• Preliminary CAPP testing indicates phosphorus volatilities much greater than anticipated from frac fluids
• Test procedure being verified by commercial lab
• Ongoing activities include:
  – Confirm volatility of frac gellants
  – Determine if new high volatile additives are being used
  – Evaluate pilot plant fouling tendencies of “low volatile” alternatives

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
TAN Project- Phase 2 Status Report

February 8th, 2006

Project Manager: John Van Heyst
1403 920 8922
jvanheyst@suncor.com
TAN Project Participants

- Alberta Research Council
- BP
- Enbridge Pipelines
- GE
- Marathon Petroleum
- Nalco Canada
- Petro-Canada
- Suncor Energy
- Total
- Baker Petrolite
- Conoco Phillips
- Encana Corporation
- JACOS
- Maxxam Analytics
- NCUT
- Shell
- Terasen Pipelines
- NorthWest Upgrading

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Project summary

• Modifications to ASTM D664 published on website
• Corrosivity testing completed on MacKay River gas oil, and two SJV gas oil samples (low & high Tan) and Albian gas-oil
• Completed preliminary review of speciation results
• Results to date support hypothesis that Athabasca oilsands product is not as corrosive as the TAN would suggest
• Plan to test three more gas oil samples. Two from oilsands bitumen and one from a “known” corrosive non – oilsands source

Contact:  president@ccqta.com or secretary@ccqta.com

February 23, 2006
NGL Contamination Project Status Report

February 7th, 2006

Project Manager: Bob Falkiner
1416 968 8316
bob.j.falkiner@esso.ca

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
NGL Contamination Participants

- ARC
- BP
- Keyera
- Maxxam
- Pall Filters
- Provident Energy

Alberta Envirofuels
Dow Chemical
Imperial Oil
Nova Corporation
Petro-Canada
Halliburton Energy Services

Participation for 2006 - pending

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
NGL Contamination Activities

- Evidence to suggest that NGL contamination is carried through to fC₄ during distillation
- Preliminary results suggest that contamination during pipeline transport (batched with condensate) has minimal impact
- Next steps include:
  1. Track sources of sediment upstream of fractionators
  2. Evaluate effectiveness of existing filtration systems.
  3. Determine the best option for contaminant management

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Heavy Oil Emulsion Viscosity Project Status Report

February 8th, 2006

Project Manager: Steve Bater
1 403 537 7238
Steve.bater@Total.com

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Heavy Oil Viscosity

Participants

• EnCana Corporation
• Total E&P Canada
• Suncor Energy

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Heavy Oil Viscosity Project Status

• Project goal – Quantify the gap between predicted and actual pressure drop in SAGD emulsion gathering system pipelines
• Project will compare plant data collected over a one month period against predicted data based on the measured flow conditions
• Testing will be done in the summer to mitigate issues with freezing
Heavy Oil Manual Project

February 8th, 2006

Project Manager:
Bryan Fuhr
1780 450 5032
fuhr@arc.ab.ca

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Heavy Oil Manual Project

Objective

• Provide a document to assist users of heavy oil methods with an understanding of their capabilities and limitations and allow users to make informed decisions on method selection

  – Users include: analytical chemists, researchers, site engineers and marketing personnel
Heavy Oil Manual Project

Scope

- Density
- Viscosity
- Sulphur
- BS&W
- Asphaltenes
- TAN
- Distillations (TBP, Simdist)
- Chloride
- Water & solids cleanup techniques

Contact:  
- president@ccqta.com
- secretary@ccqta.com

February 23, 2006
Heavy Oil Manual
Project Status

• Initial scope to include water and solids cleanup procedures and 2 other methods
• Initial work to be completed in six months
• Scope will be expanded and manual modified as required
• Funding to be provided by CCQTA membership – $25K annually
• Availability & distribution of material to third parties - to be determined

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Additive Impact
Proposed Project
February 7th, 2006
Project Manager: Graham Derby
1403 219 0640
graham,derby@champ-tech.com

Contact: president@ccqta.com or secretary@ccqta.com
Additive Impact

Objective

- Improve awareness of commercially used chemistries used in all up-stream activities in the petroleum industry.
- Share information with refinery technical staff in order to improve their awareness of chemistries used in petroleum production.
- In return, obtain from refinery technical staff information regarding sensitive products, processes, and chemistries
- Assist in future product development activities and possible testing of pre-commercialized additives.

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006
Additive Impact
Project Status

Preliminary data being collected using two approaches

• Refinery incident reporting
  – COQG survey

• Additive suppliers to provide a summary of key products for investigation. Selection based on
  – Total volumes in use
  – Potentially sensitive chemistries

Contact: president@ccqta.com or secretary@ccqta.com

February 23, 2006