
DATE December 19, 2006

TO CAPP Crude Oil Committee

COPY Equalization Steering Committee

FROM Krista Nelson

SUBJECT **The Value of Sulphur in Condensate**

Attached is the Executive Summary from the recently released Value of Sulphur in Condensate report.

If you would like a copy of the report, available on CD, please contact me at nelson@capp.ca or (403) 267-1141.

The Value of Sulphur in Condensate

For

**Canadian Association of Petroleum
Producers**

By

Advantage Insight Group Inc

October 2006

www.cti-advantage.com

Executive Summary

Industry has approached the Equalization Steering Committee with a proposal for revising the condensate sulphur equalization. The proposal presented by Industry was that the sulphur penalty for condensate sulphur content should reflect a simplified calculation of incremental processing cost to remove that sulphur in a sour crude refinery.

The intention of this revision is to reduce the sulphur penalty. This is felt to be a reasonable request since the condensate is normally blended into sour bitumen where condensate sulphur content would have little influence on the bitumen blend.

The Equalization Steering Committee, with funding provided by CAPP, commissioned Advantage Insight Group Inc. to review several alternatives for calculating the condensate sulphur penalty. These included:

- Coking refinery value comparison of heavy crude oil blends created using higher sulphur condensates versus the current quality condensate
- Regression of Western Canadian medium sour and heavy crude market prices versus sulphur and density to determine the price difference with differences in blend sulphur content
- Simplified approach to calculating the cost of incremental sulphur removal (Industry proposal)
- Light crude equalization scale (current methodology), with a description of the rationale for maintaining status quo
- Other methods as suggested/recommended by the consultant

The study examined each of the methodologies and offered conclusions on the benefits and deficiencies of each of the proposed alternatives.

After careful analysis, it was concluded that:

- Using the coking refinery as a reference was really a more complex version of the methodology proposed by industry. While the methodology would be more rigorous, it did not provide a result that reflected the market value of heavy sour crude
- The regression of medium and heavy sour Canadian crudes suggested that currently higher sulphur crudes are penalized more than lower sulphur crudes, the opposite result to the premise used by industry. This result is at odds with an analysis done several years ago and may reflect current difficulties with manufacturing ultra low sulphur diesel, but it is the real market situation today.
- The industry proposal is not rigorous and does not accurately reflect the cost to the refiner of having higher sulphur in his diluent part of his crude feedstock.
- The current methodology, while not rigorous, is a transparent process that does not influence the producer's decisions on whether to deliver his product to the crude or the condensate pool.
- If the industry wants to minimize the influence that sulphur has on the delivery of condensate into the condensate pool, eliminating the sulphur equalization could be considered an option. This could be an attractive option for certain condensate users, but it does not appear to reflect the markets perception of condensate value.