



LIGHT SWEET CRUDE SUBCOMMITTEE – MEETING MINUTES FOR 6/9/2021

- 1) Meeting started on June 9, 2021 at 1:00 PM (CST). Welcome provided by Aaron Dillard
- 2) The Light Sweet Crude Subcommittee Meeting (Presenters: Aaron, Arden & Bill)
 - A. Agenda
 - B. Review of Current Activities
 - C. Draft Methods Advisory Panel Summary - Arden Strycker
 - i. Review of recommendations of ASTM Test

Methods

1. Briefly outlined summary of the Advisory Panel activities
2. Reviewed the recommended test methods listed
3. Primary criteria for selection of methods was based on applicability to crude oil testing, common test methods currently in use across multiple organizations for light sweet crude oil
4. Some discussion from the LSC focused on suggestions for next steps
 - ii. H₂S (V) – ASTM 5705 (M3) - Listed as an issue by

Tyler Caughman

1. Tyler highlighted the importance of this test; indicated the lack of standardization between laboratories made comparison of data more difficult when measuring H₂S(v) for crude oil
2. Method as written is applicable to residual fuel oil; procedure is not suitable for more volatile light sweet crude oils
3. Currently, commercial laboratories replace the “sample is heated in an oven to 60°C” procedure to a lower temperature near ambient; however, the temperature is not often stated and the modified procedure is not standardized across the industry
4. Current procedure requires that the test must be performed within 4 hours of sampling; even though critically important, this may not be adhered to, also leading to inconsistencies in reporting ~~Must run samples within 4 hours of being pulled also is a problems~~
5. Someone mentioned that CCQTA has done some work on other methods for measuring H₂S(v) on crude oil
 - a. CCQTA has a publication on their website on H₂S measurement of crude oil; although the report contains useful information, no alternate method for measuring H₂S in vapor is presented
6. Consensus (without objections) was to see how the Advisory Panel or Subcommittee might move forward, working with ASTM for example, to develop a standardized method or method modification to measure H₂S(v) of crude oil

iii. Metals - Vanadium – New test ASTM 8252

1. This method was introduced as new to the industry, and historical data are being accumulated within companies using it; the MAP is not currently recommending replacing ASTM D5708B for V & Ni with this method
2. This method is also assigned a ASTM Task Group/Work Item focused on updating this method to improve precision and expand its scope (considering the addition of iron to existing vanadium and nickel)
 - a. Although not at this meeting, Terry Thompson is actively a part of MAP and also the ASTM Collaboration group that is specifically focused on this topic
3. It was mentioned this method is “currently only” being used by Company internal labs for their cross-check programs.
4. Bill, Tyler, Neanette, (others?) acknowledged that there is quite a bit of historical data available; recommended that a separate working group with this data be assembled to compare this data, best practices, etc. and perhaps make recommendations in an upcoming meeting
5. How can MAP get actual test data (test results) on the method from terminal operators and pipeline carriers?
6. Possible companies to contact for data include Plains, Enbridge, Enterprise and Magellan.

iv. Methods Advisory Panel Suggested Next Steps

1. Expand summary methods to include Argus. Hou Futures, Platts and Others
2. Consider possible next steps to move forward with method modifications and standardization for measurement of H₂S in vapor
3. Assemble a working group to review the new ASTM D8252 test method for V & Ni, compare historical data and best practices, move forward with recommendations as appropriate to the MAP or LSC
4. Consolidate best practices and formulate recommendations
5. The meeting attendees agreed with the recommendation to develop a “White Paper” with the final MAP recommendations and present it to the appropriate companies involved in crude oil Supply, Trading and Transportation.

D. CrudeMonitor.US Updating Proposal - Bill Lywood

1. Issue: How to effectively obtain crude quality from terminal operators and pipeline carriers
2. Plan: Develop a draft letter (email) for review by the LSC Subcommittee, that could be sent to terminal operators and pipeline carriers requesting their crude quality monitoring data.
3. The meeting attendees approved the motion to develop the draft standards permission letters.
4. Timeframe for developing the draft letter (email) is 30 to 60 days.

E. LSC – Next Meetings (prior to Fall COQA Meeting)

1. Continue to utilize COQA Zoom platform to conduct meetings
2. Methods Advisory Panel meeting should be scheduled during August/September time period. Frank Hagardorn should be available to coordinate and schedule the meeting.

3. Crudemonitor.us meeting should be scheduled within the next 30 to 60 days to collect contact names and companies for draft standards permission letters.
4. LSC Advisory Panel membership listing is attached.

Meeting attendees:

- Mike Mayers, XOM
- Tyler Caughman, Magellan
- Neanette Yearley, Enbridge
- Arden Strycker, SGS
- Raj Wahwa, P66
- George Lywood, COQA
- Dennis Sutton, COQA
- Bill Lywood, Crudemonitor
- Aaron Dillard, P66