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### Unapproved Minutes of the June 15, 2005 Sequence III Surveillance Panel Teleconference

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Attendees on 6-15-05: Sid Clark, Rich Grundza, Bill Buscher, Jr., Pat Lang, Bill Nahumck, Larry Hamilton, Monica Beyer, Andrew Ritchie, Jason Bowden, Adam Bowden, Dwight Bowden, Charlie Leverett, Johnney De La Zerda, Mark Sutherland, Jo Martinez, Dave Glaenzer

**Meeting was called to order at 11:05 AM ET on 6-15-05.**

### **TGC Test Precision Review**

The purpose of this teleconference was to specifically address an ASTM Technical Guidance committee (TGC) ballot related to test precision and test precision statements in test methods. At the May meeting, the Surveillance Panel reviewed proposal and agreed that the concept behind the proposal was acceptable. However, the panel felt that we needed actual numbers so we could see the impact of the proposal as well as the impact on the individual laboratories before we could endorse the proposal for the Sequence IIIG Method. The issue was tabled and the TMC was directed

to develop the specific numbers related to IIIF and IIIG using the TGC proposal so that we could make a better decision.

As requested, Frank Farber worked up a TMC recommendation for these values based on oils that were selected by the TMC staff as being the best representation for the PVIS and WPD parameters. Attachment 1 is the TGC precision presentation that Frank presented at the Surveillance Panel (SP) meeting on May 17, 2005. The presentation has been modified to address revised oil selections and severity adjusted precision values. Frank explained the TMC methodology for deciding what oils were used for calculating severity adjustments and then the new severity adjustment standard deviations and test method precision values. The membership had the opportunity to review the proposal with the recommended oils prior to the meeting. A motion was made to accept the proposal as presented.

**Motion** : By Dwight Bowden, seconded by Rich Grundza. *The Sequence III Surveillance Panel accepts the TGC proposal as presented by Frank Farber on 6-15-2005.*

During the discussion that followed, there was much resistance to accept the motion at this time as we are in the midst of a severity concerns related to PVIS and WPD. We historically have not adjusted the reference oil targets during a severity shift. Similarly we are not willing to accept a change to the severity adjustment system during the severity shift.

*The motion failed with a vote of 1 for, 5 against and 3 waives.*

## **Test Severity Investigation**

As a related matter, a Task Force had been formed under the O&H control to investigate potential root cause(s) during the May 2005 Surveillance Panel meeting. This smaller group was established to evaluate any potential cause(s) with the intent of determining what can be corrected and controlled versus leaving it up to a numerical adjustment that can be unpredictable. This task force had previously established a teleconference for June 16, 2005 at 10 AM Eastern Time to develop a strategy and begin data collection to investigate the severity concerns. Many of the issues that were discussed today will be brought up again tomorrow at the O&H teleconference.

## **Adjournment**

The meeting was adjourned at approximately 11:37 AM. The next meeting will be at the call of the chairman.

Respectfully submitted,

William Nahumck  
Chairman, Sequence III Surveillance Panel

## **Attachment 1**

# **TGC Test Precision Ballot Review**

**May 2005**

# Ballot Issuance

- Technical Guidance Committee Chairman Gordon Farnsworth emailed TGC membership a unanimous consent ballot on 2/3/2005
  - TGC membership : Surveillance Panel Chairs
  - Close date of ballot was March 1, 2005
  - Negatives were received
  - Motion was not implemented

# Ballot Subject

- Attached is a proposal from the TMC for "Test Precision Reporting Guidelines". As chairman of the ASTM TGC I will instruct the TMC to adopt this practice on March 1, 2005 unless I receive other input from any TGC member.
- The ASTM TMC has proposed a standard methodology for calculating and updating the test precision listed in the various Sequence test procedures (see attached). This proposal is complementary to the recently issued LTMS appendix G "Guidelines for developing Reference Oil Targets and Severity Adjustment Deviations - B.01 & B.02 Tests" that the TGC approved via e-mail.

## Test Precision Reporting Guidelines

As test targets are updated or a need arises to update test method precision statements the TMC will be working with each surveillance panel to identify which reference oils should be used in the Severity Adjustment standard deviation calculation. The recommendation from the TMC is to use reference oil(s) that are as close to the pass limit as possible. In some test areas, only one oil may be used. Other test areas may use multiple oils depending on the available oils and number of pass fail parameters. As always it will be the surveillance panel who will ultimately decide the oil(s) selection.

To be consistent on the precision value that is provided to the industry, the TMC will be updating test method **Intermediate Precision standard deviation** with the same value that is used for the SA standard deviation. Data to be used for this calculation will be severity adjusted and pooled by oil **and lab**. The **test method Reproducibility standard deviation** will then be based on the same data set and pooled by oil.

The only time the test method precision values will be changed is when the SA std. dev. is updated. And this of course will occur according to the recently accepted LTMS guidelines. As mentioned above, the surveillance panels can always intervene and make changes as they see fit.

# Background

- At the December 2004 ASTM meeting D02.B advised that test method precision statements are to be reviewed/updated on an annual basis
- The TMC was aware that inconsistencies existed in how test precision was being reported

# Background (continued)

- TMC developed guidelines for updating test method precision values
- TMC forwarded the guidelines to the TGC Chairman for his review
- TGC ballot was subsequently released



# Sequence IIIG Status

|                               | Test Method        | LTMS SA<br>Std. Dev.        |
|-------------------------------|--------------------|-----------------------------|
| <b>Oils</b>                   | 434, 435 and 438   | See Below                   |
| <b>Viscosity<br/>Increase</b> | 0.392 <sup>1</sup> | 0.2919<br>(RMSE Matrix)     |
| <b>WPD</b>                    | 0.655 <sup>1</sup> | 0.60<br>(RMSE Matrix)       |
| <b>ACLW</b>                   | 0.224 <sup>1</sup> | 0.1903<br>(434 & 435 -1/04) |

<sup>1</sup> Precision as of December 22, 2004

# Sequence IIIG Performance

| Oils | Viscosity Increase |             | WPD    |            | ACLW   |            |
|------|--------------------|-------------|--------|------------|--------|------------|
|      | Target             | Pass Limit  | Target | Pass Limit | Target | Pass Limit |
| 434  | 113                | <b>150%</b> | 4.80   | 3.5        | 32     | 60         |
| 435  | 178                |             | 3.59   |            | 33     |            |
| 438  | 97                 |             | 3.20   |            | 18     |            |

# Sequence IIIG Recommendation

|                               | Test Method         | LTMS SA<br>Std. Dev.        | Recommendation          |
|-------------------------------|---------------------|-----------------------------|-------------------------|
| <b>Oils</b>                   | 434, 435<br>and 438 | See Below                   | See Below               |
| <b>Viscosity<br/>Increase</b> | 0.392 <sup>1</sup>  | 0.2919<br>(RMSE Matrix)     | 0.4867<br>(434 & 438)   |
| <b>WPD</b>                    | 0.655 <sup>1</sup>  | 0.60<br>(RMSE Matrix)       | 0.67<br>(434,435 & 438) |
| <b>ACLW</b>                   | 0.224 <sup>1</sup>  | 0.1903<br>(434 & 435 -1/04) | 0.212<br>(434 & 435)    |

<sup>1</sup> Precision as of December 22, 2004

# Sequence IIF Status

|  | Test Method                 | LTMS SA Std. Dev. |
|--|-----------------------------|-------------------|
| <b>Oils</b>                              | 1006-2, 1008-1 and<br>433-1 | See Below         |
| <b>Viscosity Increase<br/>@ 80 Hours</b> | 0.016755 <sup>1</sup>       | 0.0129546         |
| <b>APV</b>                               | 0.220 <sup>1</sup>          | 0.220             |
| <b>WPD</b>                               | 0.532 <sup>1</sup>          | 0.658             |
| <b>VIS60</b>                             | 0.146264 <sup>1</sup>       | 0.17334           |

<sup>1</sup> Precision as of December 6, 2004

# Sequence IIF Performance

|              | 1006-2 | 1008-1 | 433-1 | Pass Limit |
|--------------|--------|--------|-------|------------|
| <b>VIS80</b> | 515    | 115    | 37    | 275        |
| <b>APV</b>   | 9.35   | 9.77   | 9.30  | 9.0        |
| <b>WPD</b>   | 3.94   | 4.57   | 4.59  | 4.0        |
| <b>VIS60</b> | 235    | 76     | 35    | 295        |

# Sequence IIF Recommendation

|  | Test Method                 | LTMS SA<br>Std. Dev. | Recommendation                 |
|--|-----------------------------|----------------------|--------------------------------|
| <b>Oils</b>                                  | 1006-2, 1008-1<br>and 433-1 | ?                    | See Below                      |
| <b>Viscosity<br/>Increase<br/>@ 80 Hours</b> | 0.016755 <sup>1</sup>       | 0.0129546            | 0.006138<br>(1008-1)           |
| <b>APV</b>                                   | 0.220 <sup>1</sup>          | 0.220                | 0.200<br>(1006-2,1008-1,433-1) |
| <b>WPD</b>                                   | 0.532 <sup>1</sup>          | 0.658                | 0.524<br>(1006-2,1008-1,433-1) |
| <b>VIS60</b>                                 | 0.146264 <sup>1</sup>       | 0.17334              | 0.1220<br>(1006-2)             |

<sup>1</sup> Precision as of December 6, 2004

# Reproducibility

- Reproducibility will be calculated from same data set as Intermediate Precision.