

Shear Stability Task Group
April 16, 2012 Teleconference
Meeting Minutes

Attendees:

Bob Duggal

Roger Gault

Doyle Base

Kwame Duho

Bob Salgueiro

Heather DeBaun

Chris Castanien

Mike Birke

Shawn Whitacre

Jim Linden

Mesfin Belay

Carrie Sims

Allison Atthey

Frank Farber

Sean Moyer

Jason Anderson

Andrew Long

The group discussed the collection of test oils and the need to look at data for each oil. Though not necessary, the group would like to review the supporting data that the oils do shear out of grade (or not). Navistar has 2 candidate oils, Cummins has one candidate and there are two other possible candidates.

Navistar reviewed the data from one engine test and one vehicle test to demonstrate the two different oils shearing out of grade.



2012-04 Navistar
Shear Data.pdf

The group also reviewed the data previously shared by Cummins.



Cummins Example -
Shear Instable CJ-4 C

TMC has agreed to collect and distribute the oil samples. An IR scan will also be done on the test oils. The oils should be shipped to TMC in the next two weeks and TMC will ship the oils as they are received. The group discussed if the plan for 1.5 gallons of each test oil to go to each test lab would be sufficient quantity. Chris Castanian will get back to Heather on quantity needed.

The group reviewed why the KO and the KRL were selected. As the sonic shear is not severe enough which leaves the KO and KRL (with varying durations).

A review of test plan:

Each test oil should have the following tests:

1. KO (20°C) 90 pass
2. KO (20°C) 160 pass
3. KO (20°C) 250 pass
4. KRL (60°C) 4 hours
5. KRL (60°C) 8 hours

Each test should be a new set up and not as intermediate samples of one test. The KO 90 pass should be run a total of 3 times and all others run one time each. KRL testing should be run on the same rig and KO could be the same rig or different.

Test oils will be sent to TMC (20 gallons) with coding of oil brand and if the oil shears out of grade or not. Oils should be sent to:

ASTM Test Monitoring Center

6555 Penn Avenue

Pittsburgh, PA 15206

Dock 11

Attention: David Hooper

TMC will code the oils and send 1.5 gallons of each test oil to the following labs:

1. Afton

Afton Chemical

101 W. Byrd Street

Richmond, VA 23218

Attn: Bob Duggal

2. Infineum

Attention: Mike Rimmer

LBTC-26 Lab 130

INFINEUM USA L.P.

1900 East Linden Avenue

Linden NJ 07036

3. Lubrizol

The Lubrizol Corporation

1275 Lloyd Road

Building 8

Wickliffe, OH 44092

Attn: Mike Covitch

4. SWRI

9503 West Commerce

San Antonio, TX 78227

Attn: Mike Birke

Next group meeting: 6/21/12 at 1:00pm CST