

**Shear Stability Task Group**  
**February 26, 2013 Teleconference**  
**Meeting Minutes**

Attendees:

Andrew Wong X

Mike Covitch X

John Loop X

Heather DeBaun X

Pat Fetterman X

Jim Linden X

Shawn Whitacre X

Mary Dery X

Jaimie Daash (Valvoline) X

Sean Moyer X

Mike Birke X

Jason Anderson X

Roger Gault X

Eric Johnson X

Carrie Sims X

Mesfin Belay X

Field test update: all 10 trucks are on test and samples are expected soon. Still on track to complete one drain before the June D02 meeting. The HTHS of used oils will be tested during the test.

HTHS cannot be tested in samples after KRL but could be done after the KO.

OEM after shear test requirements? Roger can ask the lube committee next week as to the availability of the information.

The group reviewed data that supported the field performance claims of each of the 5 test oils. The group requested test cycle and soot content from the first Navistar data set. Per Shawn Whitacre, the Cummins test data is from one drain interval at 700 hours which is the drain interval for this

application. The viscosity trend is repeatable in this application. Fuel dilution was measured by gas chromatography and soot by FTIR.

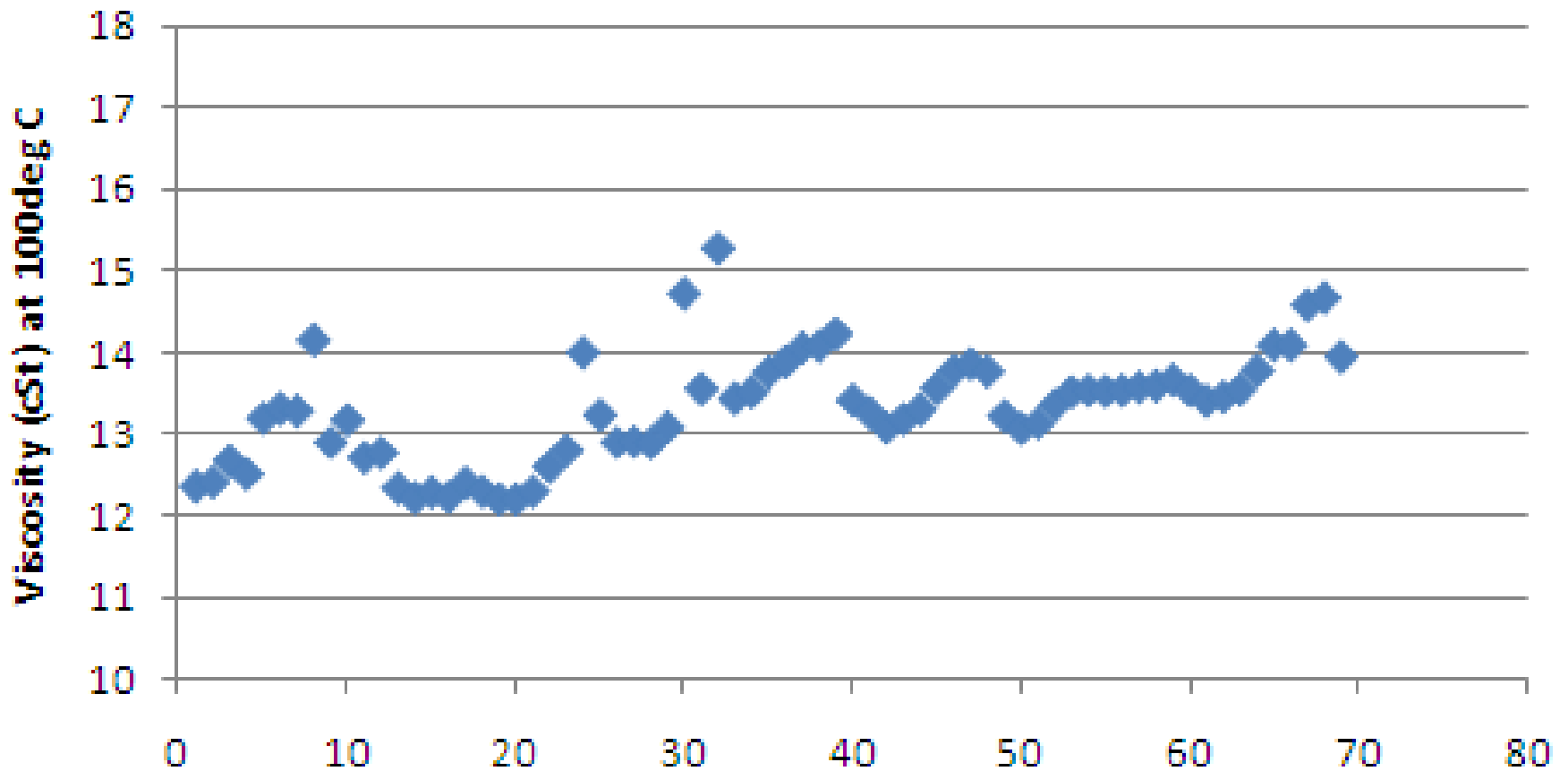
Next meeting: April 15th at 1:00pm Central

# Shear test candidates

Navistar

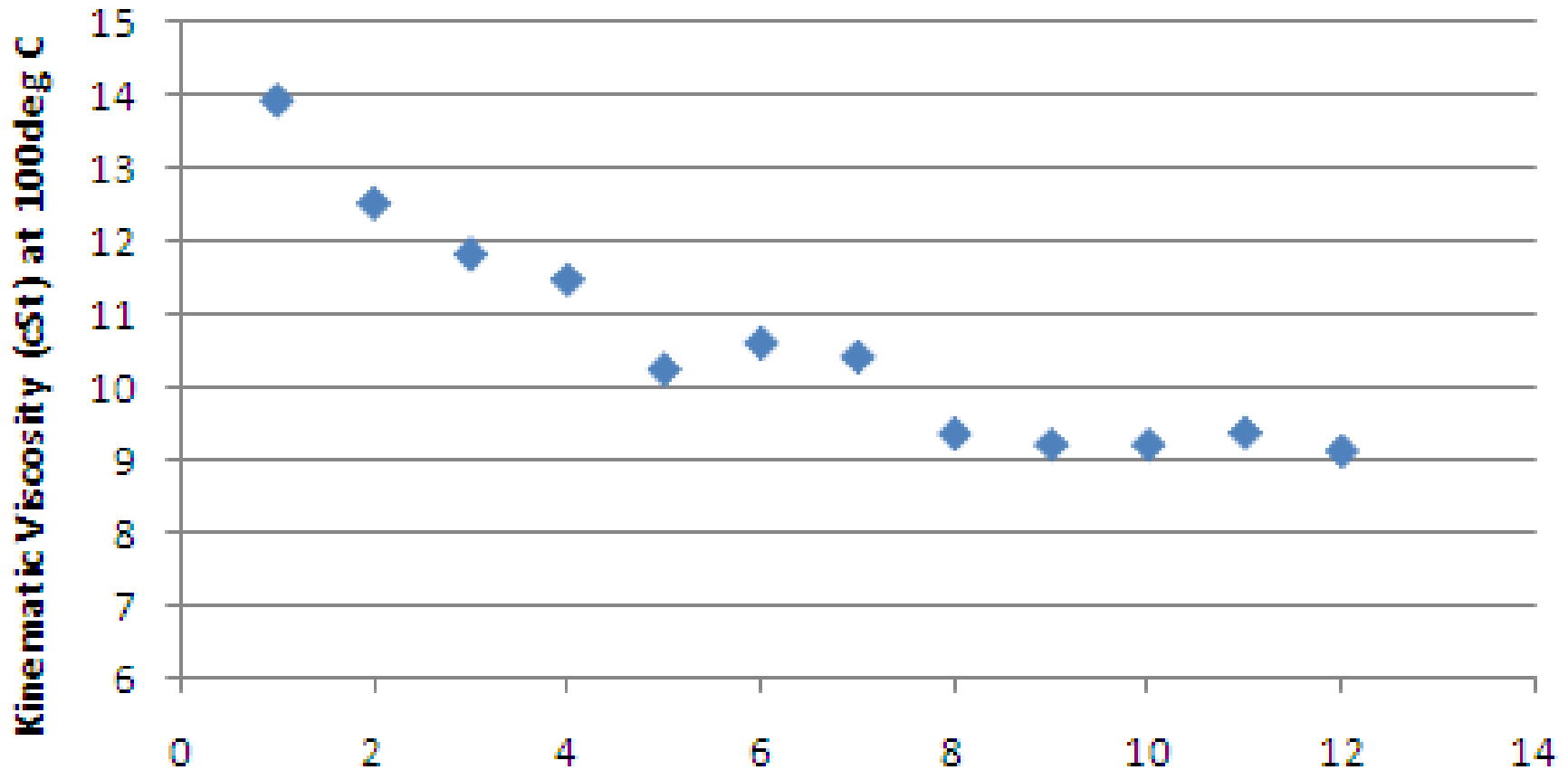
April 2012

# 15W-40 CJ-4 Oil



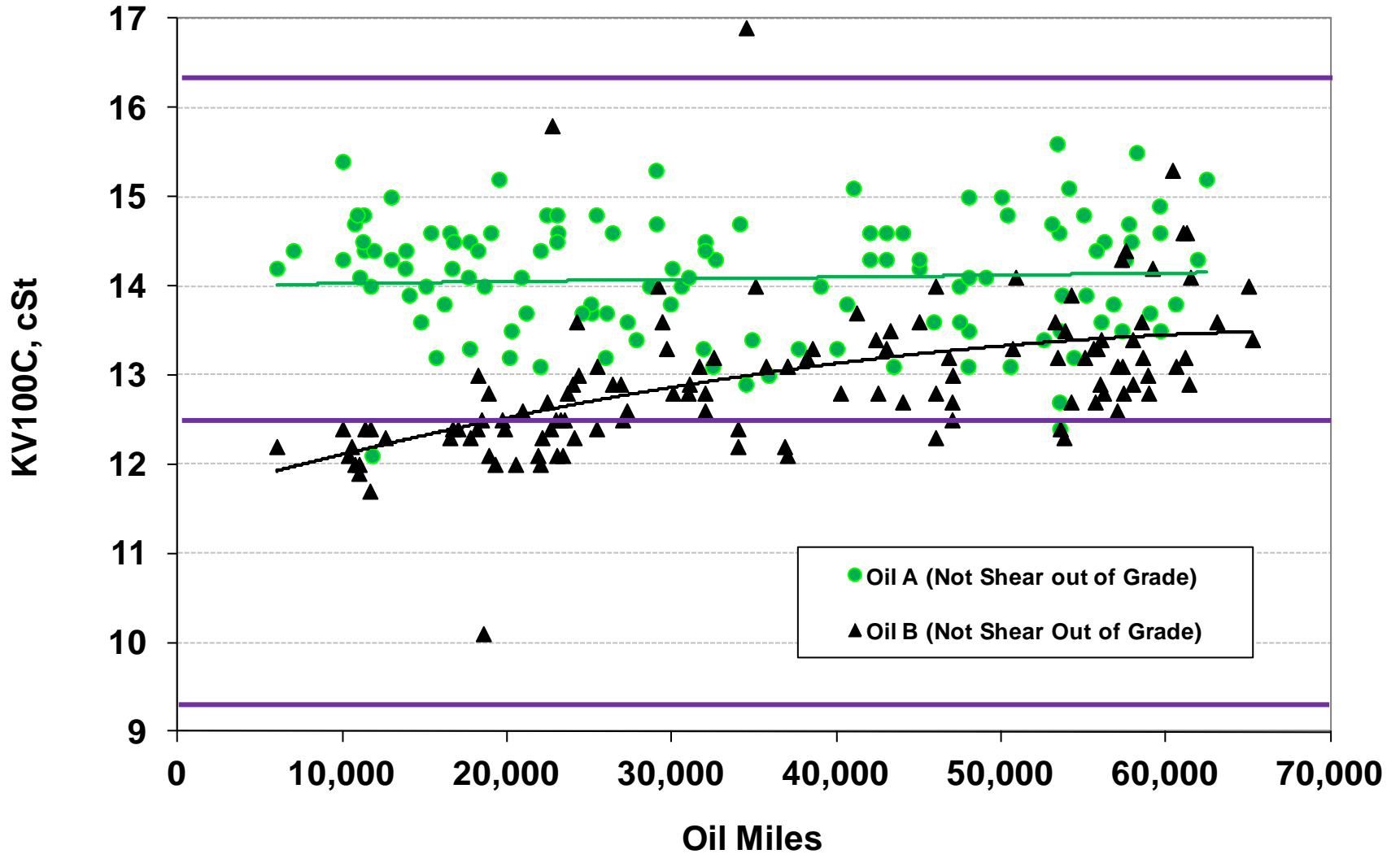
Navistar Test Vehicle running engine oil A with a fresh oil viscosity of ~15.5cSt. Fuel dilution is minimal for these samples. Data contains several oil changes.

## 15W-40 CJ-4 Engine Oil - Dyno test

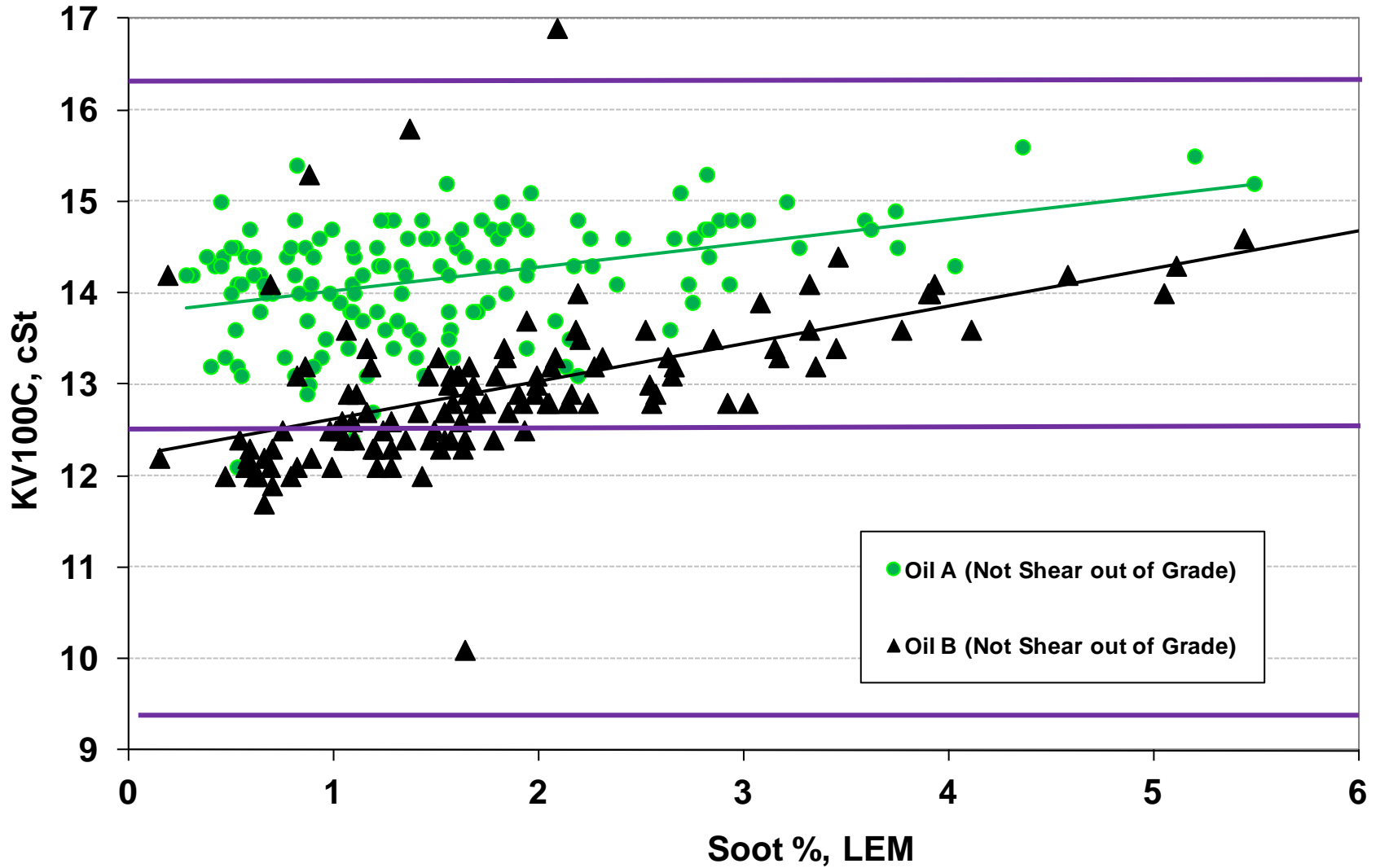


Navistar Test Engine running engine oil B with a fresh oil viscosity of ~15.5cSt. Fuel dilution is minimal for these samples. Data contains one drain interval.

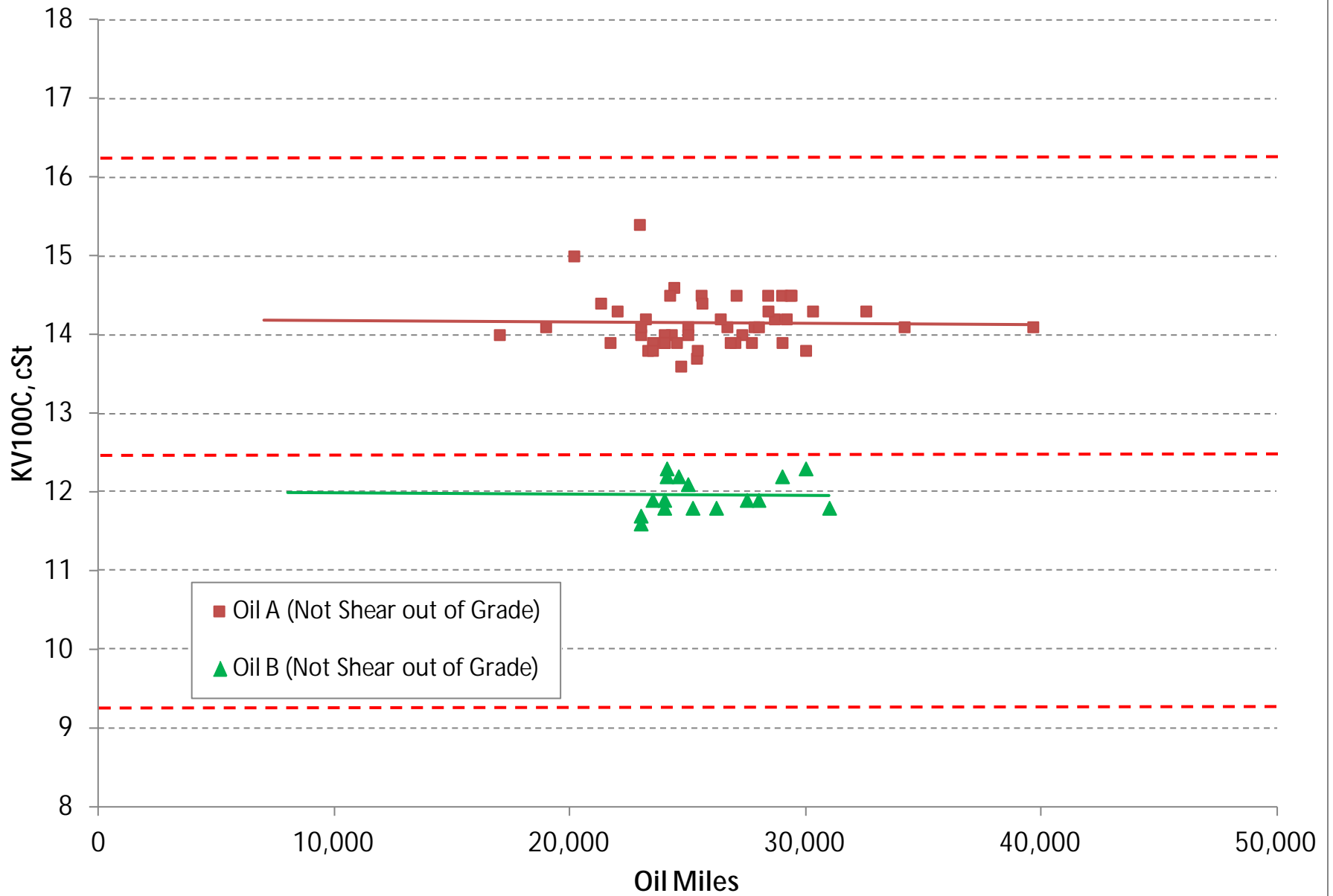
# Viscosity in DD15 (2008/2009 MY)



# Soot/Viscosity in DD15 (2008/2009 MY)



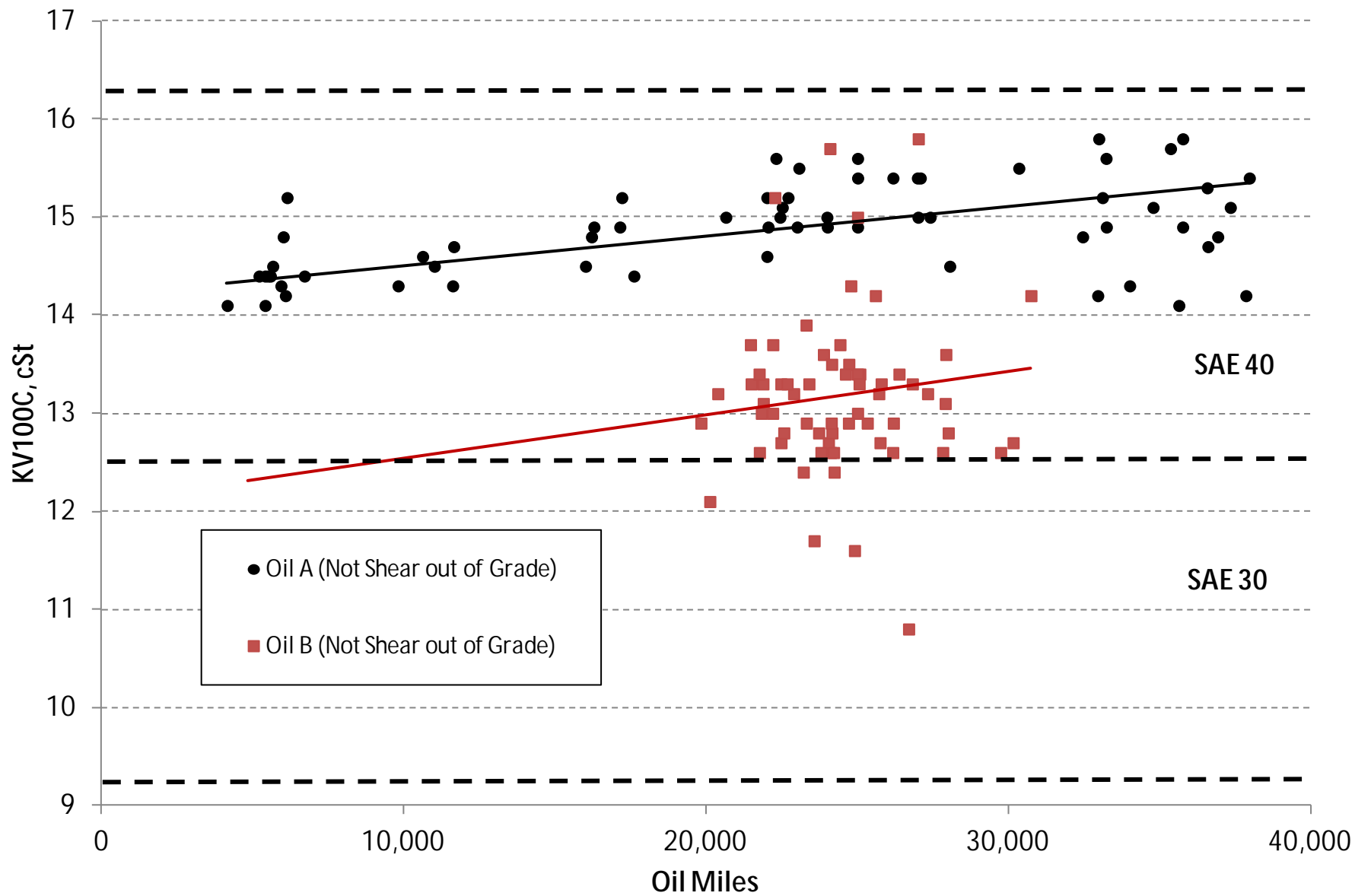
# PACCAR MX (2010, 2012 MY)







# International Maxxforce 13L - 2011 MY





# Cummins Example

- Field test engine
- Midrange product (6.7L displacement)
- Off-highway application
- API CJ-4 15W-40 CES 20081
- No fuel dilution
- No soot

