

ASTM Update
to the
LRI Gear Oil Review Committee

May 8, 2008

Status of the ASTM D 7038 (L-33-1) Test

- Test availability and operation
 - Test stands available at multiple labs
- Test continues to be in an alarm status for severity (severe) and precision
 - Appears to be primarily related to one laboratory
 - ASTM Test Monitoring Center working with the Surveillance Panel and the testing laboratory to address
 - Not of sufficient magnitude to inhibit use of test
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 6121 (L-37) Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
 - Test severity at historic levels
- Hardware
 - Lubricated hardware continues to be in short supply
 - Manufacture of a new batch is underway
 - Expect delivery to occur in mid-to-late June
 - A new batch of non-lubricated hardware is being manufactured at the same time
 - Hardware supplier suggests that industry begin process of moving to “current” hardware
 - May include moving to a different axle ratio, different steel alloy, different manufacturing process, etc.

Status of the L-42 Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
 - Test severity at historic levels
- Hardware
 - Adequate supplies of hardware available
- General
 - Ballot to approve the test procedure as an ASTM Standard passed
 - Has been assigned ASTM D 7452
 - Should be available for purchase in 4 to 6 weeks
 - Implementation of a Rater Calibration process is in progress

Status of the ASTM D 5704 (L-60-1) Test

- Test availability and operation
 - Test stands available at multiple labs
 - No known test stand-related problems
- Test continues to be in a slight severity trend (severe) for Carbon/Varnish. May also be seeing the beginning of a slight severity trend (severe) for Sludge
 - Neither of sufficient magnitude to inhibit use of test
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 5579 (Cyclic Durability) Test

- Test availability and operation
 - One calibrated test stand available at each of two independent labs
 - Additional, non-calibrated test stands also available
 - No known test stand-related problems
- Test continues to be in a slight severity trend (severe)
 - May be related to move to newer hardware
 - Reference oil test targets were recently updated to reflect use of newer hardware – Appears to be addressing the issue
 - Not of sufficient magnitude to inhibit use of test
- Hardware
 - Adequate supplies of hardware available

Status of the ASTM D 5662 (Oil Seal Compatibility) Test

- Test availability and operation
 - Baths available at two labs
 - No known “stand” (bath) related problems
 - Test severity at historic levels
- Hardware
 - Adequate supplies of all elastomers available
- General
 - Panel identified need to clarify pass/fail criteria for elongation
 - Included in SAE J2360 and ASTM D 5760 (API Category MT-1)

Status of the Storage Solubility and Compatibility (SS&C) Test

- Surveillance Panel has been formed to oversee test
- ASTM Test Monitoring Center (TMC) has assumed responsibility for maintaining and distributing reference oils
- Future activities include
 - Determine if there is a need to update the selection of reference oils
 - Write the test procedure in the form of an ASTM Standard

Status of the API Category GL-5 Update/Rewrite

- Ballot to approve the update/rewrite of API Category GL-5 as an ASTM Standard passed
 - Has been assigned ASTM D 7450
 - Should be available for purchase in 4 to 6 weeks

Status of the Gear Rating Workshop

- A Gear Rating Workshop will be held in Troy, Michigan on May 28 through May 30
 - Intent is to familiarize attendees with automotive gear oil test procedures, provide a basic level of training in rating techniques, etc.
 - Register through the SAE website at www.sae.org
 - Found under Education & Training, Seminars

Future Activities

- A Work Group will be formed within SAE to better define the need for a standardized test to evaluate the efficiency of axle lubricants
 - Prompted by a U.S. Army presentation at the April, 2008 SAE Technical Committee 3 Meeting
 - Expected to result in a request that ASTM develop a standardized test
 - Timing for this request is unknown at this time