Caterpillar Surveillance Panel Conference Call 08/25/2015 1:00PM CST

Attendance:

Jim Gutzwiller

Martin Thompson

Mark Cooper

Jim Rutherford

Gary Hammer

Mark Jarrett

Bob Salguero

Jim Moritz

Mey Dewey

Elisa Santos

Sean Moyer

Andrew Stevens

Kevin O'Malley

Bill Larch

Pat Fetterman

Adam Roig

Agenda Items:

- Caterpillar 1P time limit to report reference test results to TMC (see below proposed changes to section 10.10 and 12.6)
- C13 Supplemental Parts Measurements
- Parts Update from Caterpillar
- 1K Reference test data analysis

Not discussed agenda items.

- Should COAT TF be moved into the CAT SP? Recommendation to B or B2?
- Should recommendation be made to B or B2 that the EOAT SP should be moved into the CAT SP?
- Does the EOAT SP agree with this recommendation?
- Who's responsibility is it to show the COAT is an acceptable replacement test for the EOAT and at what performance level?

Old Business:

Discussion Items:

• Caterpillar 1P time limit to report reference test results to TMC (see below - proposed changes to section 10.10 and 12.6)

1P references were run at IAR and Lubrizol to validate new liner hardware for parts acceptance. The parts were not immediately available for candidate testing. The reference result from Lubrizol was not immediately submitted to TMC due to the parts being unavailable.

It was not well known that the results needed to be submitted within 7 days of EOT.

Lubrizol believe the validity should not be tied to the delay in test results being submitted.

TMC commented that despite parts availability the results could have been reported promptly.

The removal of this wording should be on the basis that test validity is not tied to reference submission and not the availability of parts or this special case.

Motion: Andrew Stevens Second: Martin Thompson

Waves: 0 Opposed: 0 Motion Carries

Strike the highlighted line from D6681 with the motion to be retroactively applied to all references that EOT'd on or after 7/8/2015

10.10 Calibration of Test Stands-Use a blind calibration oil from the TMC to calibrate the engine stand. A stand calibration test is required every nine months. The calibration period begins on the start date of the acceptable calibration test. A test stand is considered calibrated when the test results are within the acceptability limits as published by TMC and the test is operationally valid. The TMC may request stand checks on calibration tests that fail to meet acceptability limits. If the calibration test is operationally valid, send the piston to another calibrated laboratory for a referee rating. In order for the test to be considered valid, report the test data to the TMC within seven days of end of test (EOT). The TMC issues a control chart analysis for each calibration test to the testing laboratory (seeFig. A14.2). The test stand is not considered calibrated if the calibration test was invalid or uninterpretable. Start any non-reference test prior to the expiration of the calibration period.

Also, strike the highlighted line from D6618 to be applied to all references that EOT on or after the date of the next call.

12.16 Reporting Reference Results-Transmit the calibra-tion test results by fax or electronic data transmission to the

ASTM TMC immediately after completion of test analysis.

Send these data within seven days of EOT or the test will be considered invalid.

C13 Supplemental Parts Measurements

IAR, Lubrizol and SwRI have worked together on a common, value added supplemental C13 measurement procedure. They recommend having this document added to the TMC webpage so every lab measures these values in a similar way.

In the future it is speculated that one of these items may show a correlation to high oil consumption that is driven by something other than currently measured test items.

TMC is concerned that the data may not be maintained in the same manor and that compiling it in the future may be difficult.

It was recommended that this method be performed on all references so there is a common oil and known performance for direct comparison.

SwRI can perform ring weights since they are already measured pre test.

This document will be submitted to TMC to be posted on the TMC webpage.

Parts Update from Caterpillar

1P 1Y3397 Liners:

50 pieces were screened down to 45 parts that were shipped from the central facility out to local distributors. More are on order. This should take no longer than 3 months. The additional screening and non standard practice adds to the lead time.

CAT believes the current liner supply should be enough for the end of the year. SwRI believes three months is pushing the current stock. Earlier availability on the next batch is preferable.

Labs should notify CAT about their supply estimates and an estimated date for their last available liner.

C13 Piston, Rings and Liners:

The C13 capacity has increased along with demand. The current supply is not keeping up with PRL kits. SwRI estimate that there may be 72 pieces of each PRL item used every month during peak demand.

Demand levels and parts orders should be made to the local distributors. Back order should increase Supply.

C13 Liners 1Y4107:

144 liners are due to Morton on 8/24. On 9/1 there are another 144 due. 10/1 another 144. This should be close to the necessary demand but is lagging behind demand.

All test labs are currently at the end of supply.

C13 Pistons:

Current stock appears to be running short as well. The current order will be pushed forward to try and anticipate the shortage.

1N parts should also be reviewed since they are tied to PC-11 and may also see an increased demand. Current testing is around 10 registered tests and this does not include referencing. ~15 tests a month is a starting point for current demand. This could increase.

• 1K Reference test data analysis

Elisa Santos presented "Caterpillar 1K potential Shift?" presentation.

The oil consumption was a special case as a Non-Critical parameter that does not have a severity adjustment. The method for monitoring or correcting this parameters over time was not clear.

• COAT and EOAT Task Force and Surveillance Panel Items.

Should COAT TF be moved into the CAT SP? Recommendation to B or B2? Should recommendation be made to B or B2 that the EOAT SP should be moved into the CAT SP? Does the EOAT SP agree with this recommendation? Who's responsibility is it to show the COAT is an acceptable replacement test for the EOAT and at what performance level?

These items were not discussed and will be moved to a future call.