Caterpillar Surveillance Panel Conference Call 10/30/2014 9:00AM CST

Attendance:

Jim Gutzwiller Martin Thompson Elisa Santos Jason Bowden **Bill Larch** Andrew Stevens Kevin OMalley Michael Conrad **Bob Campbell** Hind Abi-Akar Mark Jarrett Jim Moritz Adam Roig Mey Dewey Mark Cooper Sean Moyer Pat Fetterman Jim McCord

Agenda Items:

Continue discussion on the 1N correction factor analysis. CAT C13 Second Ring Deposits C13 Valve Guide Results

Old Business

1P Liner update

Discussion Items:

1N Connection Factor

Elisa Santos Presentation on Data Analysis and potential outcomes

Document ** Oct 21st 1N Evaluating the impact** with added slides



Top Groove Fill

Elisa Clarified the concern from the last conference call on the transformed ICF's potential to move the target. The mean shown in 5B and 5C was lower than the target and this caused confusion. Once the mean is moved back into normal space it is smaller because it is a geometric mean and will be smaller than the arithmetic mean.

There was a review of an additional approach 5D using a standard multiplication factor of ~1.549899. However this can change the lab severity adjustments strongly and shift the balance.

The conversation began to target 5C again as the best option.

It was commented that the run at lab A with a very high value of 71 could be removed from the study and may simplified the calculations and make them more appropriate. This was not taken further.

A motion began being drafted to accept 5C.

The effective date was discussed and it was decided to allow time to re-submit a large volume of reference data and update forms.

Motion: Andrew Stevens Second: Hind Abi Akar

To accept Scenario 5C from document "OCT 21st 1N EVAULATING THE IMPACT" for a 1N top groove fill correction factor. The effective date of this correction factor is to be determined at a later date not to exceed 2 months.

0 opposed 1 Wave (TMC)

Summary of Scenario 5C:

811 data ONLY

- LN (TGF rated)
- CF = 0.438191
- Mean for yi = Mean of LN TGF rated for target tests

- STD for yi = new liner std by oil
- STD for SA= pooled std for new liner

Scenario 5C		n=54 LN TGF rated						
Model with liner only: equivalent to taking the mean by liner								
Level	LSMean	Std Error	n					
1Y355	3.01828	0.112267	29					
1Y3998	2.580089	0.120915	25					ĺ
CF	0.438191							
new liner								
std pooled	0.524359							
	TGF		TGF target mean		pooled std of tranf			
	Target	s (new	transf data		data new		std new	
	iviean	liner)	(old liner)				liner	
809-1	35.3	12.8116	3.3688081		0.524359		0.604926	
811-1	26.2	4.041452	3.0182802		0.5243	59	0.400189	
811-2	24.7	6.045284	2.8940084		0.5243	59 0.38932 7		327
1004-3	23.9	9.9	3.002809	8	0.5243	59	0.4687	'65

The surveillance panel wants to thank Elisa Santos for a great amount of effort on the correction factor studies!

C13 Valve Guides

2 references were performed at SwRI. One reference used the new valve guides and one used the old style guides. Both tests showed very similar oil consumption and it appears that there is no significant change but the guides were found to be sealing well post test and did not appear to contribute to the OC delta. Further testing will be needed for a confident outcome.

IAR began a reference on the new valve guides 10/30/14. After this test completes the data will be reviewed and motion will be made for acceptance

C13 Second Ring Deposits

This item will be discussed at the next SP conference call 11/06/2014.



1P Liners

These liners will be unavailable for approximately 12 weeks. CAT is working with the supplier to make new liners available as quickly as possible.

1Y-3997 with date codes in year 2013 have difficulty completing the test due to oil consumption. The 1R is not having an issue completing the test.

Once the new liners are available they will need to be brought in with testing and accepted.

It was requested that this test be declared unavailable so that provisional licenses may be provided. There is one remaining liner available to a calibrated stand. Once this test completes the SP will meet to attempt and declare this test unavailable.

Any parts shortage can allow the test labs to request reference extensions. If this extension is the majority of a reference period it is typically split over the next two reference periods.

SDTF2 Fuel high TAN Value



Haltermann SDTF2 HF0001 SDTF2 -20141022 TAN off sp Batch C12921HW10.p

Motion: Bob Campbell Second: Jim Moritz

To accept SDTF2 CI2921HW10 fuel batch that exceeded the TAN limit.

0 Opposed Waves 3 OHT CAT TMC