

**Sequence VIII Surveillance Panel
 December 17th, 2013 10:30 AM CST
 Dial-In Number: (800) 391-9177
 Conference code: 4875645502**

AGENDA

1.0 Attendance:

Bruce Matthews, Robert Stockwell, Andy Ritchie, Doyle Boese, Fred Gerhart, Sid Clark, Zack Bishop, Clayton Knight, Rich Grundza, Charlie Leverett, and Addison Schweitzer. (17 voting members, only 6 members present. Quorum not achieved)

2.0 Old Business

2.1 VIII External Oil Pump Discussion Fred

We now have two donated results using the external oil pump design. Both results were conducted on referenced test stands.

LAB	ASTM REO Oil	Strip Vis Target, cSt	Strip Vis Result, cSt	Strip Vis Result, Yi	TBWL Target, mg	TBWL Result, mg	TBWL Result, Yi
B	704-1	10.27	10.26	-0.09	8	9.5	0.5172
A	1006-2	9.37	9.35	-0.286	17.5	49.8	7.636

From a shear point of view I see no issues with the stay in grade when using the external oil pump. But I have great trouble explaining the result from laboratory A for TBWL which ran in my laboratory. I can only speculate that the current design of the external oil system may have caused cavitation to occur as we did seem some main bearing distress as well.

Discussion: Group

Fred Gerhart opened the floor for discussion although a quorum was not achieved for this teleconference. The call began with the establishment that SwRI's oil heater is positioned vertically, while IAR's oil heater is positioned horizontally on the Sequence VIII. This was a potential concern for oil cavitation and a possible cause of the severe result from SwRI with regards to TBWL according to Fred. Although the oil heater layouts differed, the bypass lines on the external oil pump at both independent test labs were agreed to be very similar according to Fred. SwRI's first test on 1006-2 reference oil had to be invalidated due to off gas temperature being out of specification for a large part of the test, but the result for TBWL was similar supporting the second valid reference results for TBWL on reference oil 1006-2. The panel expressed concern that SwRI and IAR ran

a different reference oils with different viscosities and were in agreement that the test labs should run with the external pump on the same reference oil in order to have comparable results for discussion. Charlie made an offer to run reference oil 1006-2 after the first of the year with the understanding that if the reference was an acceptable result that IAR could run candidates with the stand referenced using the external oil pump. Fred stressed that SwRI was in support of Charlie's suggestion that if IAR runs an acceptable reference on 1006-2 that IAR could utilize the external pump for referenced candidate tests. This meeting would need to reconvene with a quorum of participation from the voting members and OEM's to generate a motion to move things forward with regards to the external oil pump use on the Sequence VIII.

Motions and Action Items

As Recorded at the Meeting by Addison Schweitzer

1. Action Item - Andy Ritchie agreed to take as an action item to send out an e-mail message to the Sequence VIII Panel membership to meet after the Sequence V conference call on Thursday December 19th. The panel was in agreement and will await confirmation.

3.0) Next Meeting

- 3.1) Next meeting is intended to follow the Sequence V meeting on December 17th 2013. Confirmation is to be sent by Andy Ritchie.

4.0) Meeting Adjournment

- 4.1) 11:10 AM CST