Jeff Clark

Subject: IIIG Unified Engine Build Teleconference
Importance: High
Attachments: 2011 Unified engine build outline.doc

An Ad Hoc group consisting of Sequence III Test Labs, Test Sponsor, CPD and TMC was called into teleconference by Sequence III Surveillance Panel chairman Glaenzer on Thursday, March 3, 2011 at 11:00a.m. CST to discuss an offer to host a Unified Engine Build (UEB). As timing was critical, with a short window to complete the UEB, Chairman Glaenzer chose to discuss the subject with a small group prior to presenting the information to the full Surveillance Panel.

Attendees: Glaenzer, Matthews, Snider, Grundza, Clark, Leverett, Lang, Mosher, Seaman, Altman, Bowden J, Bowden A, Bowden M, Sapp, Kettman, Buscher, Smart, and Clark. Tim Caudill of Ashland was the sole lab engineer not on the call.

Charlie Leverett of Intertek Automotive Research has offered to host a Unified Engine Build at their facility in San Antonio on April 5-7, 2011. Charlie presented the attached outline with goals and planned actions. Basically, seven engines will be built; one for each of the labs with one spare utilizing common hardware. Race shop will supply green blocks, heads and rods. OHT will assembly batch code consistent CPD and SPO parts kits. Attendees at the build workshop will be limited to one technician from each lab, OHT and Test Sponsor.

Chairman Glaenzer indicated he would convene a teleconference of the full Surveillance Panel, possibly at 11:00a.m. on Thursday March 17, 2011 to ferret the details of how the UEB engines can be best utilized along with subsequent testing by the labs using the same block and an "in-house" build.

David L. Glaenzer
Sequence III Surveillance Panel Chairman
Afton Chemical Corporation
Phone: (804) 788-5214
Email: dave.glaenzer@aftonchemical.com

SEQUENCE III UNIFIED ENGINE BUILD

April 4th, 2011

Goals:

Conduct a Unified Engine Build to help reduce lab variability and give the engine build experts a forum to discuss issues they see as problems or enhancements to the engine assembly manual.

Overall Outline:

1) The group will build seven engines (the 7th engine is a spare) if this engine is not used it will become the property of the hosting Lab.
2) The goal is to have all six engines running within a seven-day time frame.
3) All SPO parts will be purchased by one entity (OHT). Laboratories will be expected to purchase this kit for their build.
4) All of the batch codes in the OHT supplied kits will be batch code consistent.
5) The matrix will run only with oil **TBD**.
6) Components will be prepared by the hosting Lab prior to the workshop. As an example, six of the seven blocks will be honed, front covers and heads assembled. Six of the seven engines will be assembled by the group with the prepared parts. On the seventh engine, the group will go through each of the individual assembly and preparation procedures to scrutinize the process and look for differences between labs.
7) Labs will be expected to provide an oil pan and a lower intake manifold to facilitate keeping the engine sealed during shipping.
8) Since there are liability issues associated with things such as parts cleaning, we will not have the group actually participate in the cleaning process. Instead, we will review the procedure that is being used and discuss it amongst the group.
9) The TMC is NOT expected to be on site for the start-up of the engines.
10) Engineers will not be present but the test sponsor will be present and OHT has agreed to have someone available to take notes during the workshop. Notes from finding/concerns will be reviewed each day.
11) The target date for this effort is the week of April 4, 2011. It is likely that we will ask technicians to fly in on Monday and fly out on Friday. We believe it will take a minimum of three full days to complete the task at hand.

12) Participating Labs will send **only one build tech** and they will be required to furnish approved safety shoes, other safety equipment will be supplied by the hosting Lab as needed. ***Please note: Failure to follow safety rules and have required safety equipment may result in a build tech not participating***