

Address 100 Barr Harbor Drive PO Box C700 W. Conshohocken, PA 19428-2959 | USA **Phone** 610.832.9500 **Fax** 610.832.9666 **Web** www.astm.org



Chairman: KENNETH O. HENDERSON, Cannon Instrument Co., 2139 High Tech Road, State College, PA 16803, (814) 353-8000, Fax: (814) 353-8007, e-mail: kenohenderson@worldnet.att.net First Vice-Chairman: BEN R. BONAZZA, TI Group Automotive Systems, Caro Research Center, 326 Green Street, Caro, MI, 48723 (989) 673-8181 ext. 227, Fax: (989) 673-3241, e-mail: bbonazza@us.tiauto.com Second Vice-Chairman: JANET L. LANE, ExxonMobil Research & Engrg., 600 Billingsport Rd, Paulsboro, NJ 08066-0480 (856) 224-3302, Fax: (856) 224-3616, e-mail: janet.l.lane@exxonmobil.com First Secretary: RALPH A. CHERRILLO, Shell Global Solutions (US) Inc., Westhollow Tech Ctr., 3333 Highway 6 South, Houston, TX 77082 (281) 544-8789, Fax: (281) 544-8150, e-mail: ralph.cherrillo@shell.com Second Secretary : MICHAEL A. COLLIER, Petroleum Analyzer Co. LP, PO Box 206, Wilmington, IL 60481, (815) 458-0216, Fax: (815) 458-0217, e-mail: macvarlen@aol.com Staff Manager: DAVID R. BRADLEY, (610) 832-9661, Fax: (610) 832-9668, e-mail: dbradley@astm.org

Reply to:

Richard Grundza ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 Phone: 412-365-1031 Fax: 412-365-1047

Unapproved Minutes of the August 10, 2011 Sequence III Surveillance Panel Conference Call

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The call was initiated at 2:00 PM on August 10, 2011. The attendees are listed on attachment 1. A copy of the agenda is included as attachment 2.

Minutes from the 6/2/11 meeting and corrected minutes from the 6/2/11 meeting, as well as minutes from the 6/30/11 conference call were approved. Motion: Mark Sutherland, second by Ed Altman.

Action Item Review

<u>Replacement oil for 1006-2 in the IIIF</u>; This item remains open as no candidates have been brought forward.

<u>Camshaft measurement accuracy</u>; The chair has only received responses from two labs. This item will remain open

Oil temperature control; To be addressed as part of this meeting.

Hour meter for parts washer; Charlie indicated one lab purchasing new equipment, still open.

Standardize on Soap for parts washer; To be addressed during this conference call.

<u>Combustion Chamber photos and compression data</u>; Pat Lang indicated he has not received any data. The chair requested that labs provide this information as soon as possible.

<u>Input on TGC document</u>; No responses have been received to date. Dave expressed concerns that no one has responded. Charlie Leverett suggested that no response indicates that there are no additional contributions. Bruce Matthews indicated that he thought he provided input. Dave will check to see and obtain Bruce's input. Bill Buscher requested the responses be sent to Jim Moritz.

Form an O & H subpanel or continue with task Force; Dave Glaenzer, Rich Grundza and Bruce Matthews discussed the pro's and con's and agreed that no additional value would be gained by having a formal O & H panel. They agreed that using the task force approach would probably bring a more centralized focus and would continue to address future problems in this manner. Complete.

New Business.

Recommendations from the Oil Cooler Task Force.

Greg Seman discussed the task force recommendations, included as attachment 3. A group, including the test labs discussed the use of an additional heat exchanger and developed the wording to be included in the procedure. The panel agreed to use a tube and shell and process water only. Greg moved to accept the wording in attachment 3 and to modify the IIIF and IIIG as per the attachment, which was seconded by Ed Altman. The motion was approved with no dissenting votes. A diagram will be provided for inclusion in the appropriate procedure(s) annex. A tube and shell heat exchanger part number will be needed for inclusion in the procedure(s).

Discrepancy between IIIF and IIIG procedures regarding soap concentration. Charlie Leverett indicated the IIIF procedure specifies the soap concentration for the jet washer as 0.46 kg for 380 L, while the spec sheet for both NAT and PDN 50 indicate 1.5 lb per 10 gallons for heavy oils. Sequence IIIG procedure states 7.3 kg for 380L, and Charlie believes it should be 16 lb for 100 gallon which is 7.3 kg of soap for 380 L. After some more discussion, Greg Seman moved and Pat Lang seconded to revised the IIIF procedure to reflect the concentration as 7.3 kg per 380 L. Bruce Matthews asked if the panel was changing the procedure, but the panel is changing the IIIF only as the IIIG appears to be correct. The motion was approved with no dissenting opinions.

Update on the UEB data.

Rich Grundza indicated one lab reported post UEB results that did not make end of test, 2 labs still need to run the post UEB test. When pressed for a time frame, Rich indicated that he expected these test to be run in the next 2 months. Jason Bowden indicated two kits still remain at OHT for the post UEB tests.

Standardization of Jet Washer Soap

Charlie Leverett indicated the panel needed to return to one item of old business. One action item, 3.5 addressing one soap for parts washer, still needed to be addressed. One of the UEB recommendations was to agree on one soap. Charlie indicated that the original soap was NAT 50. In 2001, the supplier of NAT 50 indicated that it was to be superseded by PDN 50. Both soaps are available and will continue to be for the next 5 - 6 years. Charlie suggested that the panel not standardize, and close out the item. Bruce indicated that he would like to understand the differences between the soaps and requested labs send samples for analysis. Jason Bowden asked if there were any differences spec sheets by supplier. Charlie, stated previous meeting minutes don't reflect any detail. Charlie agreed to provide NAT 50 and Pat to supply PDN 50 samples to Bruce for analysis. Dwight Bowden asked if the supplier showed any claimed difference, Charlie indicated he could see no difference in the brochures and would forward copies to Dwight. Jason asked what would be the problem to standardize, Charlie indicated it would need to be,

introduced with a reference, and it may apply to IIIF or IIIG or both. Dave indicated it may be used in other tests. Bruce asked what other tests might be impacted. Bob Campbell indicated the soap is not specified in diesel tests. Rich Grundza indicated the VG allows both. After considerable discussion, the panel agreed to modify the action item to consider one type of soap.

During teleconference a considerable discussion took place regarding inclusion of a requirement for "First in First out" inventory control (FIFO). Dave included Information Letter 60 for how to handle parts. Bruce felt the panel needs to include a statement in procedure. Bruce suggested including a statement, similar to info letter or assembly manual, added to section 9, possibly 9.7.1 of the test method. Dwight felt the panel is paying for hardware control. Dwight provided some history on Information Letter 60. When we think the test is drifting, then eliminating hardware as variable is necessary. The hardware guidelines were put in place because of industry problem that cost over a million dollars and took about a year to solve. Jason and Bruce are to form a task force to provide a statement to be included in the appropriate test method(s). Pat Lang suggested that the group develop list of critical parts, otherwise what is to be covered will be subject to interpretation. Procedures also need to reflect correct part numbers. Old IL defines critical parts. Task Force will define the list and work on updating the listing of parts in the method.

435-2 Update

Rich Grundza presented results. Four tests have been reported to date. Severity adjusted means compared to 435 targets were presented in attachment 4. A summary of the 435-2 results were also tabulated in attachment 4. Rich stated the severity adjusted means were reasonably close to the target means. Targets for reference oil 435-2 will be updated at 10 tests.

The meeting adjourned at 2:40 pm.

The next meeting will be at call of the chair.

Attachment 1

AUGUST 10, 2011 TELECONFERENCE ASTM Sequence III Surveillance Panel (17 Voting members), date:						
Name/Address	Phone/Fax/Email パン/	17 Voting Men	Signature			
Ed Altman Afton Chemical Corporation 500 Spring Street Richmond, VA 23219 USA	804-788-5279 804-788-6358 ed.altman@aftonchemical.com	Voting Member (Present			
Art Andrews ExxonMobil Products Research 600 Billingsport Rd. Paulsboro, NJ 08066 USA	856-224-3013 arthur.t.andrews@exxonmobil.c	Non-Voting Member	Present			
Zack Bishop Test Engineering, Inc. 12718 Cimarron Path San Antonio, TX 78249-3423 USA	210-877-0223 210-690-1959 zbishop@tei-net.com	Non-Voting Member	Present			
Doyle Boese Infineum 1900 E. Linden Avenue Linden, NJ 07036 USA	908-474-3176 908-474-3637 doyle.boese@infineum.com	Non-Voting Member	Present			
Adam Bowden OH Technologies, Inc. 9300 Progress Parkway P.O. Box 5039 Mentor, OH 44061-5039 USA	440-354-7007 440-354-7080 adbowden@ohtech.com	Non-Voting Member	Present			
Jason Bowden OH Technologies, Inc. 9300 Progress Parkway P.O. Box 5039 Mentor, OH 44061-5039 USA	440-354-7007 440-354-7080 jhbowden@ohtech.com	Voting Member イン	Present			
Dwight H. Bowden OH Technologies, Inc. 9300 Progress Parkway P.O. Box 5039 Mentor, OH 44061-5039 USA	440-354-7007 440-354-7080 dhbowden@ohtech.com	Non-Voting Member	Present			

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Name/Address	Phone/Fax/Email	Signature
Matt Bowden OH Technologies, Inc. 9300 Progress Parkway P.O. Box 5039 Mentor, OH 44061-5039 USA	440-354-7007 440-354-7080 mjbowden@ohtech.com	Non-Voting Member Present
Jerome A. Brys Lubrizol Corp. 29400 Lakeland Blvd. Wickliffe, Ohio 44092 USA	440 347-2631 jerome.brys@lubrizol.com	Non-Voting Member Present
Bill Buscher III Southwest Research Institute 6220 Culebra Road P.O. Box 28510 San Antonio, TX 78228 USA	210-522-6802 210-684-7523 william.buscher@swri.org	Non-Voting Member Present
Bob Campbell Afton Chemical Corporation 500 Spring Street Richmond, VA 23219 USA	804-788-5340 804-788-6358 bob.campbell@aftonchemica	Non-Voting Member Present
James Carter Haltermann Solutions 2296 Hulett Rd. Okemos, MI 48864 USA	517-347-3021 517-347-1024 j <u>ecarter@jhaltermann.com</u> Cell: 517-896-0897	Voting Member Present
Chris Castanien The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092 USA	440-347-2973 440-944-8112 <u>cca@lubrizol.com</u>	Non-Voting Member Present
Timothy L. Caudill Ashland Oil Inc. 22 nd & Front Streets Ashland, KY 41101 USA	606-329-1960 x5708 606-329-2044 <u>tlcaudill@ashland.com</u>	Voting Member ? Present Jowathan Cales Dave Caprone
Martin Chadwick Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 USA	210-706-1543 210-684-6074 martin.chadwick@intertek.co	Non-Voting Member Present

ASTM Sequence III Surveill	date			
Name/Address	Signature			
Jeff Clark Sequence III Secretary ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 USA	412-365-1032 412-365-1047 jac@atc-erc.org	Non-Voting Member	Present	
Sid Clark Southwest Research 50481 Peggy Lane Chesterfiled, MI 48047 USA	586-873-1255 Sidney.L.Clark@sbcglobal.net	Non-Voting Member	Present	
Todd Dvorak Afton Chemical Corporation P.O. Box 2158 Richmond, VA 23218-2158 USA	804-788- 6367 804-788- 6388 todd.dvorak@aftonchemical.co	Non-Voting Member <u>m</u>	Present	
Frank Farber ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 USA	412-365-1030 412-365-1047 fmf@astmtmc.cmu.edu	Non-Voting Member	Present	
Gordon R. Farnsworth Infineum RR # 5 Box 211 Montrose, PA 18801 USA	570-934-2776 570-934-0141 gordon.farnsworth@infineum.c	Non-Voting Member om	Present	
Joe Franklin Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 USA	210-523-4671 210-523-4607 joe.franklin@intertek.com	Non-Voting Member	Present	
David L. Glaenzer Afton Chemical Corporation 500 Spring Street P.O. Box 2158 Richmond, VA 23218-2158 USA	804-788-5214 804-788-6358 <u>dave.glaenzer@aftonchemical.</u> Surveillance Panel Chairman	Non-Voting Member	Present	

Name/Address	Phone/Fax/Email		Signature
Richard Grundza ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 USA	412-365-1031 412-365-1047 reg@astmtmc.cmu.edu	Voting Member 4 Secretar	Present
Jeff Kettman GM Racing 5388 Hill 23 Drive Flint, MI 48507 USA	313-667-0493 313-319-0139 – cell jeff.kettman@gm.com	Non-Voting Member	Present
Tracey King Chrysler LLC 800 Chrysler Drive CIMS 482-00-13 Auburn Hills, MI 48326-2757 USA	248-576-7500 248-576-7490 <u>tek1@chrysler.com</u>	Voting Member	Present
Clayton Knight Test Engineering, Inc. 12718 Cimarron Path San Antonio, TX 78249-3423 USA	210-690-1958 210-690-1959 <u>cknight@tei-net.com</u>	Voting Member 5	Present
Teri Kowalski Toyota Motor North America, Inc. 1555 Woodridge Ann Arbor, MI 48105	734-995-4032 734-995-9049 teri.kowalski@tema.toyota.com	Non-Voting Member	Present
Patrick Lang Southwest Research Institute 6220 Culebra Road P.O. Box 28510 San Antonio, TX 78228 USA	210-522-2820 210-684-7523 plang@swri.edu	Voting Member 🌘	Present
Charlie Leverett Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 USA	210-647-9422 210-523-4607 <u>charlie.leverett@intertek.com</u>	Voting Member	Present
Josephine G. Martinez Chevron Oronite Company LLC 100 Chevron Way Richmond, CA 94802 USA	510-242-5563 510-242-3173 jogm@chevrontexaco.com	Non-Voting Member	Present

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Name/Address	Phone/Fax/Email		Signature	
Bruce Matthews GM Powertrain Mail Code 483-730-472 823 Jocyln Avenue Pontiac, MI 48340 USA	248-830-9197 248-857-4441 <u>bruce.matthews@gm.com</u> Test Sponsor Representative	Voting Member 🦿	Present	
Mike McMillan	mmcmillan123@comcast.net	Non-Voting Member	Present	
Timothy Miranda BP Castrol Lubricants USA 1500 Valley Road Wayne, NJ 07470 USA	973-305-3334 973-686-4039 <u>Timothy.Miranda@bp.com</u>	Voting Member	Present	
Mark Mosher ExxonMobil Technology Co. Billingsport Road Paulsboro, NJ 08066 USA	856-224-2132 856-224-3628 mark.r.mosher@exxonmobil.com	Voting Member ရှိ <u>m</u>	Present	
Siamak Moshiri Cad Railway Industries Ltd. 155 Montreal – Toronto Highway H8S 1B4 Montreal, QC, CANADA	1-634-3131, ext. 412 smoshiri@cadrail.ca	Non-Voting Member	Present	
Bob Olree GM Racing 5388 Hill 23 Drive Flint, MI 48507 USA	248-689-3078 olree@netzero.net	Non-Voting Member	Present	
Christian Porter Afton Chemical Corp. 500 Spring Street Richmond, VA 23219 USA	804-788-5837 804-788-6358 christian.porter@aftonchemical.	Non-Voting Member	۷ Present	/
Phil Rabbat BASF Corporation 500 White Plains Road Tarrytown, NY 10591-9005 USA	914-785-2217 914-785-3681 phil.rabbat@basf.com	Non-Voting Member	Present	

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ASTM Sequence III Surveillance Panel	(17 Voting members)

Name/Address	Phone/Fax/Email		Signature
Allison Rajakumar The Lubrizol Corporation Drop 152A 29400 Lakeland Blvd. Wickliffe, OH 44092 USA	440-347-4679 440-347-2014 <u>Allison.Rajakumar@Lubrizol.co</u>	Non-Voting Member <u>n</u>	Present
Scott Rajala Idemitsu Lubricants America Corp	<u>srajala@ilacorp.com</u>	Non-Voting Member	Present
Andrew Ritchie Infineum 1900 East Linden Avenue P.O. Box 735 Linden, NJ 07036 USA	908-474-2097 908-474-3637 Andrew.Ritchie@Infineum.com	Voting Member 人り	Present
Ron Romano Ford Motor Company Diagnostic Service Center II Room 410. 1800 Fairlane Drive Allen Park, MI 48101 USA	313-845-4068 313-32-38042 rromano@ford.com	Voting Member	Present
Jim Rutherford Chevron Oronite Company LLC 100 Chevron Way Richmond, CA 94802 USA	510-242-3410 510-242-3173 jaru@chevrontexaco.com	Non-Voting Member	Present
Philip R. Scinto The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092 USA	440-347-2161 440-347-9031 prs@lubrizol.com	Non-Voting Member	Present
Greg Seman The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092 USA	440-347-2153 440-347-4096 greg.seman@lubrizol.com	Voting Member ر/	Present

Name/Address	Phone/Fax/Email		Signature
Matt J. Snider GM Powertrain General Motors Corporation MC - 483-730-322 823 Joclyn Rd. Pontiac, MI 48090-9055 USA	248-672-3563 248-857-4441 mathew.j.snider@gm.com	Non-Voting Member	Present
Thomas Smith Valvoline P.O. Box 14000 Lexington, KY 40512-1400 USA	859-357-2766 859-357-7084 <u>trsmith@ashland.com</u> PCEOCP Chair	Voting Member	Present
Don Smolenski GM	248-255-7892 donald.j.smolenski@gm.com	Non-Voting Member	Present
Mark Sutherland Chevron Oronite Company LLC 4502 Centerview Drive Suite 210 San Antonio, TX 78228 USA	210-731-5621 210-731-5699 msut@chevrontexaco.com	Voting Member _\ ໃ	Present
Joe Vujica The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092 USA	440-347-2057 440-347-4096 jsvu@lubrizol.com	Non-Voting Member	Present
Ben O. Weber Southwest Research Institute 6220 Culebra Road P.O. Box 28510 San Antonio, TX 78228 USA	210-522-5911 210-684-7530 <u>bweber@swri.edu</u> Sub-Committee D02.B01 Chai	Non-Voting Member r	Present
Tom Wingfield Chevron Phillips Chemical Co.	wingftm@cpchem.com	Non-Voting Member	Present

Attachment 2 Sequence III Surveillance Panel 08/10/2011 14:00 EDT Call-in Number is: (866) 817-9787 Participant Passcode: 2158089

Agenda

1.0) Roll Call

2.0) Approval of minutes

2.1) Approve the minutes from:

06/02/2011 Meeting in Warren, MI 06/30/2011 Teleconference

3.0) Action Item Review

3.1) 06/02/11 - Panel member solicit oil suppliers for potential replacement reference oil for IIIF (PVIS~275%). OPEN

3.2) 06/02/11 – Labs report accuracy of their camshaft measurement equipment to SP chair. OPEN, have received 2 of 6.

3.3) 06/02/11 - Greg Seman chair TF to address coolant for oil temperature control. COMPLETE with recommendation to be reviewed at this meeting.

3.4) 06/02/11 - Labs to install hour meters on parts washers to determine recommendation for hours to replace soap and water. OPEN?

3.5) 06/02/11 - Labs to standardize on one soap for parts washer. OPEN to be settled at meeting.

3.6) 06/02/11 - Labs to provide photos of combustion chamber and compression data to Patrick Lang. OPEN

3.7) 06/02/11 - SP members provide input for the TGC Best Practices in Lubricant Test Development document by 08/01/11. OPEN

3.8) 06/02/11 – Glaenzer, Matthews & Grundza evaluate need for O&H subpanel. DONE

4.) Old Business

4.1) Receive report and recommendations from Oil Cooler Task Force. Greg Seman

4.2) Detergent and detergent concentration for parts washer; IIIF & IIIG procedure inconsistencies.

4.3) Review UEB data generated to date. Final data available?? Rich Grundza

5.) New Business

5.1) Update standards to include statement for FIFO usage of parts. Revisit Sequence IIID/IIIE IL #60 and perhaps include portions. Bruce Matthews

6.) Review Scope and Objectives

6.1) To be done at next face-to-face meeting

7.) Next Meeting 6.1) At call of Chairman

8.) Meeting Adjourned

Attachment 3

The engine oil cooler consists of an oil filter adapter, oil cooler, and gaskets as specified in the Engine Assembly Manual, Section 8 Sheet 3 & 3a. The engine oil-cooling system uses engine coolant pumped from the Fluid Conditioning Module through a three-way control valve to the oil cooler circuit which contains a heat exchanger prior to the engine oil cooler. To maintain the specified oil temperature of 150C at the oil filter block (TOLFLT) the three-way control valve varies the coolant flow as necessary through the oil cooler circuit. The heat exchanger in the oil cooler circuit is tube and shell style and will use process water as the cooling media. When testing high oxidation sensitive oils, the oil cooling system may go into a bypass mode, causing the oil cooler to be by-passed. In this condition, the TMC may allow engineering judgment for the oil temperature Quality Index on reference oil tests. Attachment 4

Comparison of Mean Performance of 435-2 (n= 4) with 435 targets



All 435-2 results severity adjusted using candidate model, where appropriate.

TESTKEY	Lab	APP	IND	PVISti	SA applied	ACLWti	SA applied	WPD	SA applied
80559-IIIG	D	2	435-2	5.339459	5.339459	3.2958	3.6605	3.33	3.33
80562-IIIG	А	7	435-2	5.88165	5.5945	3.5205	3.8575	3.23	3.6174
80561-IIIG	F	1	435-2	5.240688	5.240688	2.9497	3.0768	2.94	2.94
81512-IIIG	G	1	435-2	5.682559	5.457072	3.1001	3.5252	3.2	3.6196
					5.4079298		3.53		3.37675