100 YEARS



A PROVEN PARTNERSHIP

100 Barr Harbor Drive West Conshohocken, PA 19428-2959

Telephone: 610-832-9500 ■ Fax: 610-832-9555 ■ e-mail: service@astm.org ■ Website: www.astm.org

# Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

Chairman: N David Smith, North Caroline Dept Of Agric, 2 West Edenton St, PO Box 27647, Raleigh, NC

27611, (919) 733-3313, FAX:919-715-0524, Email: david\_smith@ncdamail.agr.state.nc.us

First Vice Chairman: Susan E. Litka, UOP Research Center, 50 East Algonquin Road, PO Box 5016, Des Plaines, IL

60017-5016, (847) 391-3390, FAX: 847-391-3330

Second Vice Chairman:

Secretary:

Kurt H. Strauss, 69 Brookside Rd, Portland, ME 04103, (207) 773-4380, FAX: 207-775-6214 Kenneth O. Henderson, Cannon Instrument Co, PO Box 16, State College, PA 16804-0016,

(814) 353-8000, FAX: 814-353-8007, Email: kenohenderson@worldnet.att.net

Assistant Secretary: W James Bover, Exxon Biomedical Sciences, Mettlers Rd Cn2350, East Millstone, NJ 08875-2350,

(732) 873-6318, FAX: 732-873-6009, Email: mailto:james.bover@ere.exxon.sprint.com

Staff Manager: EARL R. SULLIVAN, (610) 832-9709, Email: esulliva@astm.org

October 1, 2004

TO: Mack HTCT S. P. Membership and Mailing List

SUBJECT: Mack HTCT SP Meeting Minutes, August 27, 2003, Warrendale, PA

THIS DOCUMENT IS IN THE PROCESS OF DEVELOPMENT AND IS FOR ASTM COMMITTEE USE ONLY. IT SHALL NOT BE REPRODUCED OR CIRCULATED OR QUOTED, IN WHOLE OR IN PART, OUTSIDE OF ASTM COMMITTEE ACTIVITIES EXCEPT WITH THE APPROVAL OF THE CHAIRMAN OF THE COMMITTEE HAVING JURISDICTION AND THE PRESIDENT OF THE SOCIETY. COPYRIGHT ASTM, 100 BARR HARBOR DRIVE, WEST CONSHOHOCKEN, PA 19428-2959. ALL RIGHTS RESERVED.

# Call to order:

Brian Koehler, the chairman of the Mack High Temperature Cyclic Test ASTM Surveillance Panel called the meeting to order at 10:16 am, August 27, 2003 at the PRI headquarters in Warrendale, PA.

# Chairman's Comments:

The chairman handed out copies of a proposed agenda. See attachment 1.

# Review/ Revise Membership:

The chairman passed around a Membership/Visitor sign up list, see attachment 2.

# Approval of minutes from the last meeting:

There were no comments concerning the meeting minutes from September 18, 2002. The minutes were accepted as presented.

### PARC shift Time Observation:

PARC noticed that their high to low shift time had trended upward in their lab over the previous 2 year period. (See attachment 3). At the same time their test severity appeared to increase. Investigations indicated that a change out of the procedural air supply orifice was able to return the shift time and severity back to historical levels. This orifice had not been inspected for a long period of time and may have become dirty. It was suggested that all labs inspect their orifice and clean or replace as needed. SwRI showed typical high to low shift plots for its recent tests which appeared to show normal, low shift times. No further action was seen as being needed. PARC will run another gimmie test with 151 oil and the new orifice to study the severity effect. PARC is continuing its investigations and may give a follow up report at a future date if more findings are made.

# Referencing Procedure for Conf. 1 to Conf. 2 Change

Brian Koehler from SwRI requested clarification on the re-referencing procedure when a stand is converted from configuration 1 hardware to configuration 2 hardware. See attachment 4 for Mr. Koehler's proposed clarification to the referencing procedure. This suggestion was accepted by the panel with the following modifications.

- 1) The TMC will statistically review the reference results to determine if more referencing is needed.
- 2) TMC will give precision limits prior to referencing that will be used to trigger 3 run average acceptance vs. need for 5 run average.
- 3) The above will come through a TMC memo that will be balloted prior to the lab using the new conversion system.

Note: The above was completed as proposed but the only lab having a configuration 1 stand decided not to convert it to configuration 2 within the time period stated due to low levels of industry testing activity.

# **Solvent Specification:**

During the summer of 2003 ASTM D02.B0.01 and the Technical Guidance committee recommended that all ASTM crankcase lubricant and gear lubricant testing procedures be modified to show a common cleaning solvent specification. See attachment 5. A motion was made to change section 7.2 by adding ... "type II, class C", after D235. This is effective December 31, 2003. The motion was made by Dale Smith and seconded by Paula Vettel. The motion passed.

### **Old Business:**

There was no other old business to be discussed.

### **New Business:**

There was no other new business presented.

### **Action Items / Motions:**

See attachment 6 for an action item and motions list.

### **Next Meeting:**

Submitted by:

The next meeting will be at the call of the chairman.

\_\_\_\_\_

Mack HTCT Surveillance Panel Chairman

Southwest Research Institute

6220 Culebra Road

San Antonio, TX 78238-5166

clm

Attachments

# Mack HTCT Surveillance Panel Meeting Sheraton Four Points Hotel - Mars, PA August 27, 2003 9:30am

# **AGENDA**

Call to Order

Chairman's Comments; Brian Koehler, SwRI

Review/Revise Membership

Approval of Minutes from Last Meeting; Sept. 18, 2002

**PARC Shift time Observations** 

Discuss Current Referencing Procedure for Conf.1 to Conf. 2

**Solvent Specification Action** 

**New Business** 

**Summary of Action Items** 

**Summary of Motions Passed** 

**Next Meeting** 

Adjournment

# **ATTACHMENT 2**

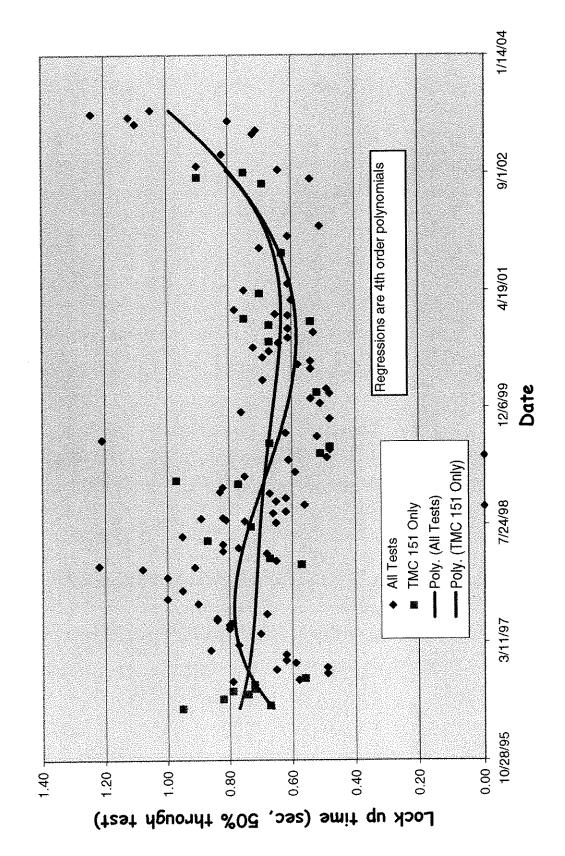
# CYCLIC DURABILITY SURVEILLANCE PANEL Meeting Date: September 16, 2002 Meeting Date: September 16, 2002

	,						т	<del> </del>	···	<del></del>				
Enail	dtb@lubrizol.com	tom:bryson@macktrucks.com	jabu@chevrontexaco.com	hdelaniente@swri.org	rhd@usaor.net	fmf@astmtmc.cmu.edu		1 <u>lg@lubrizol.com</u>	huro@chevrontexaco.com		bkoehler@swri.org	koglim corv@ethyl.com	kevin layton@ethyl.com	dm1@astrotmc.cmu.edu
Fax	440-347-2878	301-790-6744	510-242-3392	210-680-1777	412-526-5443	412-365-1047		440-347-1555	210-731-5699	908-747-3597	210-680-1777	804-788-6358	804-788-6358	412-365-1047
Telephone	440-347-2388	301-790-5454	510-242-1161	210-522-5996	412-826-5115	412-365-1030		440-347-1223	210-731-5609	908-474-3031	210-522-3588	804-788-5303	804-788-5363	412-365-1034
Company Name & Address	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Mack Trucks, Inc. 13302 Pennsylvania Avenue Hacerstown, MD 21740	Chevron Oronite Company 100 Chevron Way Richmond, CA 94802	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78238-5166	PARC Technicl Services, Inc. 100 William Pitt Way Pittsburgh, PA 15238	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206	ExxonMobil Research & Engineering 600 Billingsport Road Paulsboro, NJ 08066	The Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092	Chevron Oronite Company 4502 Centerview Drive, Suite 210 San Antonio, TX 78228	Infineum USA P.O. Box 536 Linden, NJ 07036	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78238-5166	Ethyl Corporation 500 Spring Street Richmond, VA 23218	Ethyl Corporation 500 Spring Street Richmond, VA 23218	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206
Voting Status	Non-Voting	Voting	Voting	Non-Voting	Voting	Non-Voting	Non-Voting	Voting	Non-Voting	Voting	Voting	Non-Voting	Voting	Voting
and A	Bartlett, Don	Bryson, Tom	Buitrago, Juan	De La Fuente, Hector	Duckstein, Ron	Farber, Frank	Goyal, Arjun	Gropp, Jerry	Huron, John	Jacobson, Tom	Koehler, Brian	Koglin, Cory	Layton, Kevin	Lind, Don
Initials	M				SME	3		MA.			M		7	B

# CYCLIC DURABILITY SURVEILLANCE PANEL August 27 200 > Meeting Date: September 10, 2002

Initials	Name	Voting Status	Company Name & Address	Telephone	Fax	Email
	Marougy, Thelma	Voting	Eaton Corporation	248-354-6985	2/18-354-2739	thelmaemarougy@eaton.com
		)	26201 Northwestern Highway Southfield, MI 48037			
	McGlone, Bruce	Voting	ArvinMeritor	248-435-9929	248-435-1411	mcglonbf(@meritorauto.com
		>	2135 West Maple			
			Troy, MI 48084			And the second s
	Messmann, Grant	Voting	Spicer Off-Highway			
			Dana Corporation			
		<del></del>	P.O. Box 2424			
			Fort Wayne, IN 46801	***************************************		and the second s
	Schenkenberger, Chris	Non-Voting	The Lubrizol Corporation	440-347-2927	440-347-2878	csc@lubrizol.com
ノノ			29400 Lakeland Blvd.			
			Wickliffe, OH 44092			
	Smith, Dale	Voting ·	PARC Technical Services, Inc.	412-826-5051	412-828-5443	dbs@usaor.net
ANJ.			100 William Pitt Way			
	A STATE OF THE STA		Pittsburgh, PA 15238			
No.	Sullivan, Bill	Voting	ExxonMobil Chemical Company	732-321-3354	732-321-6064	william t sullivan@email.mobil.com
			P.O. Box 3140	17		の 1990年 - 19
3			Edison, NJ 08818			
04	Vettel, Paula	Voting	D.A. Stuart Company	630-393-8859	630-393-8577	pvettel@dastuart.net
			4580 Weaver Parkway			
<u>&gt;</u> -			Warrenville, IL 60555			
	Waldron, Barb	Non-Voting	AutoResearch Laboratories, Inc.			
-			6735 South Old Harlem Avenue			
			Chicago, IL 60638			AND THE PARTY OF T
	Whitton, Claire	Non-Voting	Ethyl Corporation	804-788-5052	004-788-6243	claire whitton@ethyl.com
			500 Spring Street			
خ <u>گ</u>			P.O. Box 2158			
			Richmond, VA 23218-2159	William William Town		
Holy.	Oumar-Mahawat, H.	Non-Voling	Errou Mobil Chewical	732-321-614	732-321-6191 720-767-332	32 11 sto . Pores Mohamata Exxon mobil
•	•	0	1.0. Pox 3140		3	
			Edina, NJ 08618			

HTCT Lock Up vs. Test Start Date



# Configuration 1 to Configuration 2 Referencing Requirement

# Current Requirement:

Lab must run 5 runs on the "good" reference oil and 2 runs on the "bad" reference oil for a total of 7 runs. This is the same as required for bringing a new stand into the system. This seams excessive for conversion of a stand that has recently been in the referencing system. The September, 2002 TMC study on severity by stand/laboratory/hardware type, was not able to conclude that conf. 1 and conf. 2 hardware was different statistically.

# SwRI Proposal:

For a stand that is within 9 months of the end of its last successful reference period, allow the laboratory to convert the stand from configuration 1 to configuration 2 by running 3 statistically acceptable reference results on the "good" reference oil and conf. 2 hardware. Average these three results with the last two using the conf. 1 hardware to generate the candidate pass/ fail limit for the conf. 2 testing. Require that the lab run the "fail" reference oil alternately (every other reference period) starting at the end of the first conf. 2 reference period.



100 Barr Harbor Drive West Conshohocken, PA 19428-2959

Telephone: 610-832-9500 ■ Fax: 610-832-9555 ■ e-mail service@astm.org ■ Website www.astm.org

# Committee D02 on Petroleum Products and Lubricants

Chairman: W. JAMES BOVER, ExxonMobil Biomedical Sciences, Inc., 1545 Route 22 East, P.O. Box 971, Annandale, NJ

08801-0971, (908) 730-1048, FAX: 908-730-1197, EMail: wjbover@erenj.com

First Vice Chairman: KENNETH O. HENDERSON, Cannon Instrument Co., P.O. Box 16, State College, PA 16804, (814) 353-8000, Ext:

0265

FAX: 814-353-8007, EMail: kenohenderson@worldnet.att.net

Second Vice Chairman: SALVATORE J. RAND, 221 Flamingo Dr, Fort Myers, FL 33908, (941) 481-4729, FAX: 941-481-4729

EMail: sjrand@earthlink.net

Secretary: MICHAEL A. COLLIER, Petroleum Analyzer Co LP, P.O. Box 206, Wilmington, IL 60481, (815) 458-0216

FAX: 815-458-0217, EMail: macvarlen@aol.com

Assistant Secretary: JANET L. LANE, ExxonMobil Res. & Eng., 600 Billingsport Rd, P.O. Box 480, Paulsboro, NJ 08066-0480

(856) 224-3302, FAX: 856-224-3616, Email: janet\_l\_lane@email.mobil.com

Staff Manager: DAVID R. BRADLEY, (610) 832-9681, EMail: dbradley@astm.org

Date:

June 19, 2003

From:

Ben Weber

To:

TGC Chair, Gordon Farnsworth

Subject:

Solvents Used in ASTM Test Methods

Within Section 9 & 10 of Subcommittee B we have had several great debates over a solvent specification. Many realize the potential impact on precision and/or severity that this cleaning solution could have on our many ASTM Test Methods. As you know, just recently the Sequence IIIG had some precision issues regarding wear. One of the ideas incorporated was to standardize on the cleaning solvent used. A survey was conducted of the Sequence III test laboratories and it revealed all sorts of solvent types being used in relation to ASTM's solvent specification D235. A similar survey had been conducted with the Caterpillar Diesel test labs a few years ago, revealing the same variety of solvents and initiating the Section 9 & 10 solvent debates.

In order to facilitate a standard solvent, and eliminate any more questions about its possible influence on test severity or precision, the two independent laboratories along with the Sequence III and V Surveillance panels have agreed to adopt a uniform solvent specification meeting ASTM D235 – type II, class C. The specific type and class also fit well with regard to laboratory safety and environmental practice. The type II part of the specification calls for a high flash point, and the class C part of the specification calls for a low aromatic content which lessons our environmental impact.

Sections 9 & 10 of Subcommittee B would like to see this solvent specification stated in all the appropriate test methods in all applicable sections of Subcommittee B via the information letter system and request your assistance in achieving this task. Since most laboratories conducting the Sequence tests also conduct the other test types in Subcommittee B, we trust that this won't cause any undue financial burden or additional storage issues since we are recommending a single solvent specification for all the test types. In addition, the Sequence III and V Surveillance panels agreed on a final implementation date of December 31, 2003, giving laboratories plenty of time to use their existing inventories if they have to change. For informational purposes, PerkinElmer and Southwest Research Institute are using Exxol D 60 which recently replaced Shell Sol 142.

Sincerely,

Ben Weber

Ben Weber ASTM D02.B0.01 Chair Change section 7.2 by adding .... Type II, class C," after 0235. This is effective Dec. 31, 2003.

Mack HTCT SP August 27, 2003, Convene 10:16 a.m. Brian Koehler

# Action Items:

- > PARC will conduct another gimmie 151 with new orifice to evaluate the variability/effect of orifice.
- Prian, I will let you sort out the final action item. These were just some of the comments: see your motion proposal... For a stand within 9 months... and add note about TMC statistical evaluation/difference/need for more reference testing. Before lab initiates conversion to the new configuration, TMC will propose a statistical evaluation to be used to look at 5 run vs. 3-run average. Koehler to review TMC proposal and sign off before starting the reference sequence in his lab. This will come through a TMC memo. TMC to circulate the proposal to the voting members to confirm approval through an email ballot.

# Motions:

- > September 18, 2002 minutes, motion to approve by Smith/Sullivan, approved unanimously.
- > Smith/Vettel, change section 7.2, modify "type ii, class c" Effective 12-31-03
- Smith/Koehler/Adjourn at 11:06 am