

Address 100 Barr Harbor Drive PO Box C700 W. Conshohocken, PA 19428-2959 | USA

Phone 610.832.9500 Fax 610.832.9555 e-mail service@astm.org Web www.astm.org

Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

Chairman: KENNETH O. HENDERSON, McEinri Associates LLC, 30 Doe Drive, Port Matilda, PA 16870, (814) 883-3824, Fax: (267) 885-2363, e-mail: kenohenderson@att.net First Vice-Chairman: JANET L. LANE, Janet L. Lane Consulting, 41 Evergreen Lane, Haddonfield, NJ 08033, (609) 417-2736, e-mail: janet.l.lane@comcast.net Second Vice-Chairman: RANDY F. JENNINGS, Tennessee Department of Agriculture, P. O. Box 40627, Nashville, TN 37204, (615) 837-5150, Fax: (615) 837-5335, e-mail: Randy.Jennings@tn.gov First Secretary: RALPH A. CHERRILLO, Shell Global Solutions (US) Inc, Westhollow Tech Ctr., 3333 Highway 6 South (L-172), 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, 21114 Hwy 113, Custer Park, IL 60481, (815) 458-0216, Fax: (815) 458-0217, e-mail: Michael.Collier@paclp.com Staff Manager: DAVID R. BRADLEY, (610) 832-9681, Fax: (610) 832-9668, e-mail: dbradley@astm.org

Sequence VIII Surveillance Panel Meeting March 28, 2012 Corpus Christi, TX

Please send any corrections to: Charlie Leverett Charlie.leverett@intertek.com (210) 647-9422

The meeting was called to order at 3:00 by the Chairman Fred Gerhart.

The agenda is shown in Attachment #1

The sign-in sheet was sent around, there were 8 voting members present and 1 on the conference phone. This sheet is shown in Attachment #2.

The last meeting minutes were accepted.

Old Business

The Action Items from the May 2010 meeting were reviewed.

The Chairman did have a discussion on the need for a current category Reference oil and again request.

New Business

CPD report – The full report can be found in Attachment #3

- a. Bearing inventory = 490 sets
- b. The availability of Pb Alloy has been confirmed by the supplier to be available for years to come.

<u>TMC report</u> – The full report can be found in Attachment #4, please note this is in a new format which we will see going forward.

Alternate Test Fuel for GF6 - A possible alternative to KA24E Green fuel was reviewed and * Charlie Leverett mentioned he may be able to locate the original data when this test was switched from the Leaded to Un-Leaded fuel. Fred and Charlie will get with the supplier to discuss the decrease in the need for the current KA24E fuel if not used in the Sequence IVB (IVA Replacement). Kurt Knapp of Chevron/Phillips mention they do blend special fuels and maybe able to produce a replacement if needed.

* Charlie could not locate the original work done on different fuels, this was done in the 1996-197 time period if anyone may have these files archived, I believe it was presented by Brian Kohler of SwRI.

Review Scope and Objectives – The Chairman noted he would email this to the panel for review.

Next Meeting

At the call of the Chairman, Fred did mention due to the fact this test is and has been under control he would like to limit any meetings needed to conference calls, the SP agreed.

Adjournment

The meeting was adjourned at 3:20.

Attachment #1

Sequence VIII Surveillance Panel Agenda

Southwest Research Institute Corpus Christi, Texas March 28, 2012 3:00 PM – 5:00 PM

- 1. Call to Order
 - a. Attendance Sign-in
 - i. Membership changes?
 - ii. Quorum?
 - b. Acceptance of Agenda
 - c. Motion and Action Items Recorder
- 2. Old Business
 - c. Review of Action Items from May 2010 Meeting
- 3. CPD report
 - d. Bearing inventory
 - e. Availability of Pb Alloy?
- 4. TMC report
- 5. New business
 - a. Alternative to KA24E Green fuel.
- 6. Review Scope and Objectives
- 7. Next Meeting
- 8. Adjournment

HHach ment Z

ASTM SEQUENCE VIII SURVEILLANCE PANEL VOTING MEMBERSHIP ATTENDANCE RECORD

Name	Address	Phone/Fax/Email	Attendance
Bowden, Dwight	OH Technologies, Inc.	Phone: 440-354-7007	
	P.O. Box 5039	Fax: 440-354-7080	
•	Mentor, OH 44061-5039	dhbowden@ohtech.com	
Buscher, Jr., Bill	Buscher Consulting Services	Phone: 845-897-8069	
	P.O. Box 112	Fax: 845-897-8069	
	Hopewell Jct., NY 12533	BuschWA@aol.com	
Caudill, Timothy	Valvoline	Phone: 606-329-1960 ext 5708	
	21st and Front Streets	Fax: 606-329-2044	
<u> </u>	Ashland, KY 41101	Tlcaudill@ashland.com	
Gerhart, Fred	Southwest Research Institute	Phone: 210-522-3842	
	6220 Culebra Road	Fax: 210-684-7523	F.W.G.
;	P.O. Box 28510	fgerhart@swri.org	
	San Antonio, TX 78228-0510	Phone: 804-788-5214	
Glaenzer, David	Afton Chemical	Fax: 804-788-6358	$\int \infty I$
	500 Spring Street	Dave.Glaenzer@aftonchemical.com	11911
	P.O. Box 2158 Richmond, VA 23218	Dave.Glaenzer@anonchemical.com	hat
Grundza, Rich	ASTM/TMC	Phone: 412-365-1031	
Grundza, Rich	6555 Penn Ave	Fax: 412-365-1047	1 may
	Pittsburgh, PA 15206-4489	reg@astmtmc.cmu.edu	1102
Knight, Clayton	Test Engineering Inc.	Phone: 210-690-1958	P= / }
Kilgh, Olayton	12718 Cimarron Path	Fax: 210-690-1959	
	San Antonio, TX 78249-3423	cknight@tei-net.com	470
Leverett, Charlie	Intertek	Phone: 210-647-9422	
Levelett, Chame	5404 Bandera Road	Fax: 210-523-4607	$ \langle N \rangle$
	San Antonio, TX 78238	charlie.leverett@perkinelmer.com	
Matthews, Bruce	GM Powertrain	Phone: 248-830-9197	
matalono, braco	Mail Code 483-730-472	Fax: 248-857-4441	$ \Lambda V$
	823 Jocyln Avenue	bruce.matthews@gm.com	Kat .
	Pontiac, MI 48340	Placemaanonoegimeen	$ 0\rangle$
Tang, Haiying	Chrysler	Phone:	
		Fax:	
		ht146@chrysler.com	
Miranda, Timothy	BP Lubricants USA	Phone: 973-305-3334	
	1500 Valley Rd	Fax: 973-686-4039	
	Wayne, NJ 07470	Timothy.Miranda@BP.com	
Ramono, Ron	Ford Motor Company	Phone: 313-845-4068	
	Diagnostic Service Center II	Fax: 313-323-8042	
	Room 410	rromano@ford.com	
	1800 Fairlane Drive		
	Allen Park, MI 48101		
Ritchie, Andy	Infineum	Phone: 908-474-2097	D.
· •	P.O. Box 735	Fax: 908-474-3637	15 y
	1900 East Linden Ave.	andrew.ritchie@infineum.com	1 phone
	Linden, NJ 07036-0735		<u> </u>
Sutherland, Mark	Chevron Oronite Company LLC	Phone: 731-5605	
	4502 Centerview Ste. 210	Fax: 731-5621	10-
	San Antonio, TX 78228	MSUT@chevrontexaco.com	
Szappanos, George	Lubrizol Corporation	Phone: 440-347-2631	m1-
··· •	29400 Lakeland Blvd.	Fax: 440-347-4096	Va
	Wickliffe, OH 44092	George.Szappanos@lubrizol.com	4 million

ASTM SEQUENCE VIII SURVEILLANCE PANEL NON- VOTING MEMBERSHIP and GUESTS ATTENDANCE RECORD

Name	Address	Phone/Fax/Email	Attendance
BILL BUSCHEN	Swal	whuschereswri.edu	. WAB
PAT LANG	SwRI	plang @ suri.org	P.Z.
Karin Hanmann	SURI	Karin. Hanmann Esuri.	rg KH Hend
CITALISTIAN PORTESZ	AFTON	CHRISTIAN. PORTER O AFTONCHO	
EL Altman	Afton	Ed. Altman @Atton chemical.c	om D
Doyle Buese	Infineum	doyle, Boere@ infineum, com	DAR
MATTHEW BOWDEN	OH TECHNOLOG-JES	Mis bouden @ Oh tech.com	M
SERRY BRYS	LUBRIZOL	JEROMÉ, BRYS Q LUBRIROL, CO,	, //
Robert Stoc Kwieli	6.m	COGM.COM	×75
Scot Stap	Chevy Performance	Jcoff. Stay @ tgidiration	<i>45</i>
, left Kettman	Olevy Perf	jett. Ke Hman ægu. com	<i>JK</i>

ASTM SEQUENCE VIII SURVEILLANCE PANEL NON- VOTING MEMBERSHIP and GUESTS ATTENDANCE RECORD

Name	Address	Phone/Fax/Email	Attendance
KURT KNAPP	CHEVIZON PHILLIPS CHEMIER FEELS	KNAPP'KAC CPCLOM CON	Justin
VO MARTINEZ	ORONITE Richmond, Ca	Jøgmæchevrm.cn	
Stan Moyer	tm.c Phtisburay PA	sam @astmtmc.cmv.edu	Lety
JEFF Clark	TMC Pittsburgh, PA	jaceastmtmc.unva	^{au} - 360
MA TT Sniddler	BM		ON Phone
24.28.261	· · · · · · · · · · · · · · · · · · ·		



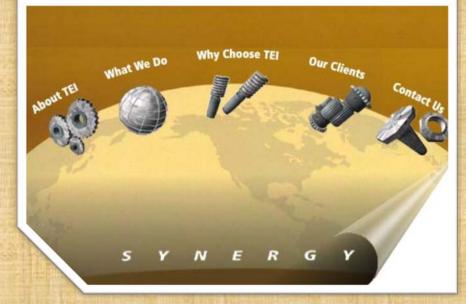
100034-1 Connecting Rod Bearings Batch 09/2010

490 sets in stock at TEI



LEAD Based Powder Mix used in the production of Labeco bearings will be available for future productions with no plans to phase it out per Paul Ovares, Federal Mogul





2012 Annual Order

Solicitation Letters for Labeco annual parts order were mailed out to the labs in early January 2012 and are in process of being filled.



ASTM D02.B1 Semi-Annual Report Passenger Car Reference Oil Testing April 2012

Passenger Car Engine Oil Testing Executive Summary

► VIB

- No test activity this period.
- VID
 - Targets Updated in December for reference oil 1010.
 - Results reported on new blend of 541
- VIII
 - No significant monitoring issues.



Calibrated Labs and Stands*

Test	Labs	Stands
IIIF	4	4
IIIG/A/B	6	16
IVA	3	4
VG	4	8
VIB	0	0
VID	6	12
VIII	2	3

*As of 3/23/2012



Test Activity Levels >>> October 1, 2011 –

March 31, 2012

Test Monitoring Center



http://astmtmc.cmu.edu

Failed Tests

Test Status	Test	Number of Tests
Screened ACLW >20µm	IIIF	1
Severe Viscosity Increase	IIIG	1
Severe Viscosity Increase and WPD	IIIG	1
Mild Average Cam Wear	IVA	4
Stand EWMA Precision Alarm, FEI2	VID	1
Severe Stripped Viscosity Result	VIII	2
Severe Stripped Viscosity, BWL Precision Alarm	VIII	1
Total		10



Lost Tests*

*Invalid and aborted tests

Test Status	Cause	IIIF	IIIG	IVA	VG	VID	VIII
Aborted	Oil Temperature Control	1	0	0	0	0	0
Aborted	Blown Head Gasket	0	1	0	0	0	0
Invalid	Engine Oil Thermocouple Failed	0	0	1	0	0	0
Invalid	Knock Sensor Wiring Issue	0	0	0	0	1	0
Total		1	1	1	0	1	0



http://astmtmc.cmu.edu

A Program of ASTM International

Test Severity >>> October 1, 2011 – March 31, 2012



Test Severity (cont.)

- VID
 - FEI1 and FEI2 are in control.
 - Charts shown in <u>Appendix 1.e.</u>

- VIII
 - BWL and SVIS parameters are in control.
 - Charts shown in <u>Appendix 1.f.</u>



Test Precision

>>> October 1, 2011 – March 31, 2012



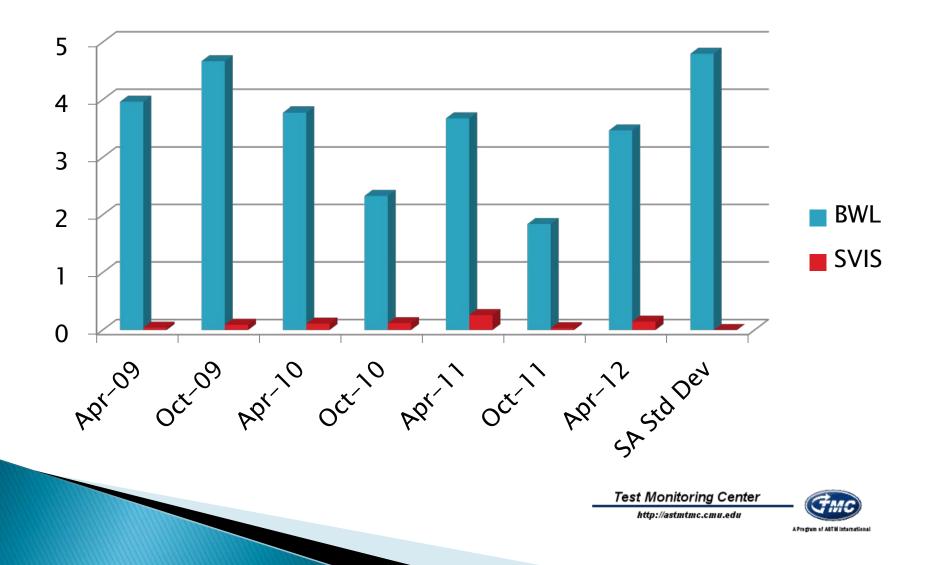
Test Precision Estimates

- Presented on an six month basis.
- Data presented for past four years.





Sequence VIII Precision Estimates



Information Letters

>>> October 1, 2011 – March 31, 2012

Test Monitoring Center



http://astmtmc.cmu.edu

Information Letters*

Test	Date	IL	Торіс
IIIG	November 29 , 2011	11–4, Seq. 34	Added provisions for strainers in coolant system Updated tolerances for cam and lifter measurement devices
IIIG	December 12, 2011	11–5, Seq. 35	Added First-in, First-out criteria for specific hardware and corrected harmonic balancer p/n
VID	January 11, 2012	12–1, Seq. 9	Clarified procedure for oil additions during new engine break-in

*Available from TMC Website

Test Monitoring Center



http://astmtmc.cmu.edu

A Program of ASTM Internations

Reference Oil Inventory

>>> Actions, Re–blends, Inventories and Estimated Life



Reference Oil Re-blends

- >Oils with ~ 2 years or less supply
 - •Re-blends no longer available
 - Oils Affected
 - 925-3 and 1007

•A replacement oil for 925-3 is being pursued and will be addressed during next meeting

1007 to be replaced with 1006-2 in IVA





Reference Oil Re-blends

- >Oils with ~ 2 years or less supply
 - •Re-blends available
 - Oils Affected
 - 541-1 and 435-2
 - Both Test areas actively working on
 - introducing these reblends.
 - •435-2 targets to be reviewed at next meeting



Reference Oil Inventory Estimated Life

Oil	Tests	Original Blend Amount	Quantity Shipped in last 6 months	TMC Inventory	Lab Inventory	Estimated Life
433-1	IIIF	1045	40	198	48	2.5 years
434	IIIG	550	0	5	12	<1 year
434-1	IIIG	660	0	254	24	5+ years
435	IIIG	550	0	2	4	<1 year
435-2	IIIG	550	37	437	28	5+ years
438	IIIG	990	24	712	32	5+ years
540	VID	1100	25	463	40	5+ years
541	VID	550	35	5	45	<1 year





A Program of ASTM Internations

Reference Oil Inventory Estimated Life

Oil	Tests	Original Blend Amount	Quantity Shipped in last 6 months	TMC Inventory	Lab Inventory	Estimated Life
541-1	VID	550	25	515	20	5+ years
542	VID	1100	85	358	65	5+ years
704-1	VIII	897	12	206	10	5+ years
925-3	VG	975	0	10	6	<1 year
1006-2	IVA, VG, VIII	5500	91	3772	63	5+ years
1007	IVA, VG	1968	40	21	41	<1 year
1009	IVA, VG	1100	34	379	33	5+ years
1010	IIIG, VID	1100	55	712	60	5+ years





A Program of ASTM Internations

LTMS Deviations

>>> October 1, 2011 – March 31, 2012

Test Monitoring Center



http://astmtmc.cmu.edu

LTMS Deviations

•One IVA LTMS Deviation in Current Period

- •Test sounded a stand precision EWMA Alarm, cleared after one test
- •Alarm due to change in hardware and oil selection
- •Stand calibrated with out additional tests

Historical Count of PCEO LTMS Deviations

Test	LTMS Deviations
IIIF	5
IIIG	5
IVA	6
VG	8
VID	1
VIII	3



TMC Laboratory Visits

>>> October 1, 2011 –

March 31, 2012

Test Monitoring Center



http://astmtmc.cmu.edu

TMC Lab Visits

•Two III lab visits this period.

No issues at one lab, identified discrepancies in fuel injector flow measurements

•Two VID lab visits this period.

No issues identified during visits.



http://astmtmc.cmu.edu

Test Monitoring Center

Test Area Timelines

>>> October 1, 2011 – March 31, 2012



Test Area Timeline Additions

Test	Date	Торіс	IL
IIIG	20111129	Added provisions for strainers in coolant system Updated tolerances for cam and lifter measurement devices	11-3
IIIG	20111212	Added First-in, First-out criteria for specific hardware and corrected harmonic balancer p/n	11-4
VID	20120111	Clarified procedure for oil additions during new engine break-in	12-1
IVA	20120204	Reintroduced reference oil 1006–2, targets with $N = 4$	
IVA	20120204	Reintroduced reference on 1000-2, targets with N = 4	
IVA	20120209	Updated standard deviation for severity adjustments	

*As of 3/31/2012



Additonal Information

>>> October 1, 2011 –

March 31, 2012



Additional Information

Available on TMC Website:

- Live Reference Test Data Bases
- Surveillance Panel Meeting Minutes
- Test Area Alarm Logs
- Complete Test Area Timelines
- LTMS Manual

www.astmtmc.cmu.edu

Test Monitoring Center http://astmtmc.cmu.edu



A Program of ASTM Interna



A Program of ASTM International



Test Monitoring Center

http://astmtmc.cmu.edu

Appendix 1 PCMO Reference Oil Testing Control Charts April 2012

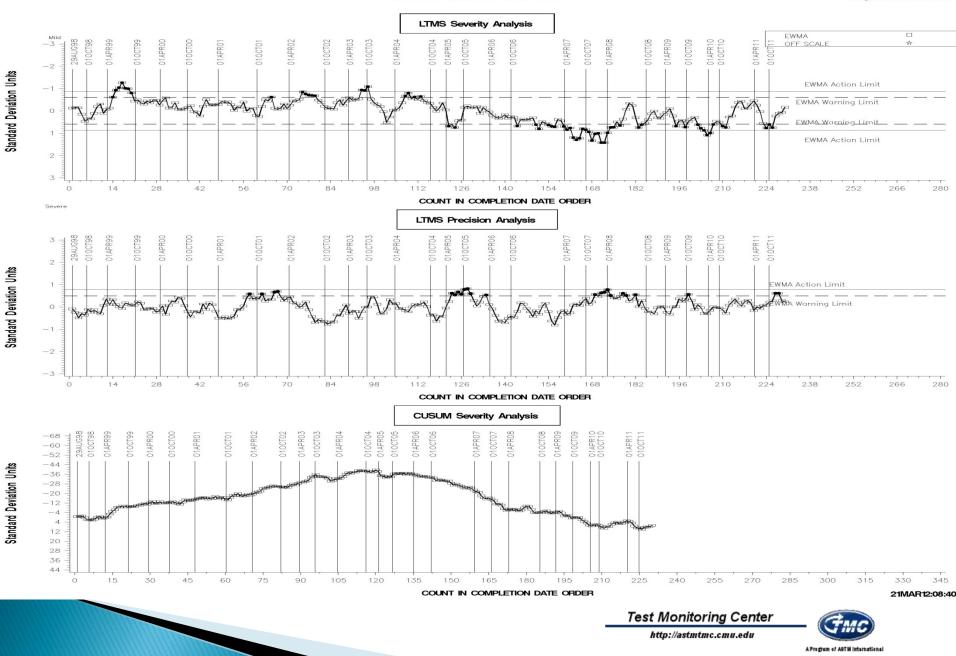
Appendix 1.f Sequence VIII Control Charts

Severity, Precision, and CuSum



SEQUENCE VIII INDUSTRY OPERATIONALLY VALID DATA

FINAL BEARING WEIGHT LOSS



SEQUENCE VIII INDUSTRY OPERATIONALLY VALID DATA

STRIPPED VIS. @ 100 DEG C



