

ASTM TEST MONITORING BOARD MEETING  
December 3, 2012

Norfolk Waterside Marriott  
Norfolk, VA

---

THIS DOCUMENT IS NOT AN ASTM STANDARD; IT IS UNDER CONSIDERATION WITHIN AN ASTM TECHNICAL COMMITTEE BUT HAS NOT RECEIVED ALL APPROVALS REQUIRED TO BECOME AN ASTM STANDARD. 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

---

### **Call to Order**

ASTM D02.B0.08, the Test Monitoring Board, met on Monday, December 3, 2012 at 5:00 p.m. in the Norfolk Waterside Marriott in Norfolk, VA. There were seven voting members, five non-voting members, and eighteen visitors present in person. Two voting members, Heather DeBaun and Hind Abi-Akar participated via conference call. The attendance list is shown as Attachment A. The minutes from the June 25, 2012 meeting were approved. The agenda is shown as Attachment B.

### **Committee Reports**

Chris Castanien gave the Administrative Guidance Committee report shown as Attachment C. The report shows the projected TMC surplus for 2012 as \$161K.

Bill Buscher gave the Technical Guidance Committee report. There were no overheads. The TGC has not met during this period.

The Test Monitoring Center report is shown as Attachment D. Four board members were re-elected to 2-year terms. Several new and replacement reference oils were received by the TMC this period. Seventeen information letters passed Sub B ballot.

There was no Data Communication Committee activity this period and no report.

All reports were accepted by the board.

### **Old Business**

Frank Farber revisited last June's TMB motion to revise the Regulations Governing the ASTM Test Monitoring System for non-ASTM tests. Frank noted that comments received from the Subcommittee B straw poll and ASTM feedback resulted in additional amendments to the motion. The updated revision is shown as Attachment E. A long discussion ensued about whether the revisions to the regulations were complete; Dwight Bowden suggested that a statement be added to ensure termination expenses are paid by the company or organization when monitoring services are brought to a close. A motion was made to accept Dwight's suggestion. The vote was unanimous to accept the addition. As a result the following section was added:

2.1.3 The company or organization shall agree to cover all existing and incurred costs in terminating the ASTM Test Monitoring Center's monitoring services.

Discussion continued until Ron Romano motioned, Greg Shank seconded, that the revision move forward as shown. The subsequent vote was 8 approves, 0 negatives and 1 abstain. The next step was to move the revision to Subcommittee B so that a Sub B ballot could be authorized.

### **New Business**

Robert Stockwell from GM presented Attachment F. GM would like to have the ASTM Test Monitoring Center provide services for their Oxidation & Deposit test provided that a Subcommittee B ballot to allow TMC to monitor non-ASTM tests, if authorized, passes. Several concerns were raised regarding how the project was going to be funded. The response from GM was that they intended on funding TMC start-up costs and first year lab visit expenses. The 1<sup>st</sup> year of monitoring (post-precision matrix) would be underwritten by GM to ensure all TMC expenses are covered. No ASTM TMC funds would be used to support the GM test. After a lengthy discussion over details of this request Chris Castanien and Robert Stockwell agreed to work together to detail funding and services requested so the Test Monitoring Board could revisit this item in January and February. Depending on the outcome of the Sub B ballot on the revisions to the Regulations Governing the ASTM Test Monitoring System noted under Old Business it is understood that this specific request will need to be voted on by the Test Monitoring Board and if approved will be moved to Subcommittee B for consideration. The Test Monitoring Board agreed to hold teleconferences in January and February to address this item.

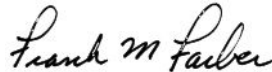
### **Next Meeting**

The next meeting is scheduled for June 24, 2013 in Montreal, Quebec.

### **Adjournment**

The meeting was adjourned at approximately 7:00 p.m.

Respectfully submitted,



Frank M. Farber, Secretary  
ASTM Test Monitoring Board

FMF/fmf  
Attachments




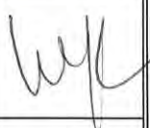


## ASTM TEST MONITORING BOARD MEETING

December 3, 2012

Norfolk Marriott

Norfolk, VA

Voting Members

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
Hind Abi-Akar	Caterpillar, Inc. Old Galeena Road Building H3000 Mossville, IL 61552-3000	Phone: (309) 578-9553 e-mail: <a href="mailto:abi-akar_hind@cat.com">abi-akar_hind@cat.com</a> FAX: (309) 578-1485	
Jason Bowden	OH Technologies 9300 Progress Parkway P. O. Box 5039 Mentor, OH 44061-5039	Phone: (440) 354-7007 e-mail: <a href="mailto:jhbowden@ohtech.com">jhbowden@ohtech.com</a> FAX: (440) 354-7080	
Chris Castanien AGC Chairman	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092	Phone: (440) 347-2973 e-mail: <a href="mailto:cca@lubrizol.com">cca@lubrizol.com</a> FAX: (440) 944-8112	
Heather DeBaun	International Truck & Engine Corp 10400 W. North Avenue Melrose Park, IL 60160	Phone: (708) 865-3788 e-mail: <a href="mailto:heather.debaun@navistar.com">heather.debaun@navistar.com</a> FAX: (708) 216-0680	
Steve Kennedy	ExxonMobil Paulsboro Technology Center 600 Billingsport Road Paulsboro, NJ 08066-0480	Phone: (856) 224-2432 e-mail: <a href="mailto:steven.kennedy@exxonmobil.com">steven.kennedy@exxonmobil.com</a> FAX: (856) 224-3613	
William Lam	Afton Chemical Corporation 500 Spring Street P.O. Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-5236 e-mail: <a href="mailto:bill.lam@aftonchemical.com">bill.lam@aftonchemical.com</a> FAX: (804) 788-6388	
Andrew Ritchie	Infineum USA, L.P. 1900 East Linden Avenue Linden, NJ 07036-0536	Phone: (908) 474-2097 e-mail: <a href="mailto:andrew.ritchie@infineum.com">andrew.ritchie@infineum.com</a> FAX: (908) 474-3637	
Ron Romano	FCSD, Service Product Dev, SEO Diagnostic Service Center II Room 410 1800 Fairlane Drive Allen Park, MI 48101	Phone: (313) 845-4068 e-mail: <a href="mailto:romano@ford.com">romano@ford.com</a> FAX:	
Greg Shank	Volvo Powertrain 13302 Pennsylvania Avenue Hagerstown, MD 21742	Phone: (301) 790-5817 e-mail: <a href="mailto:greg.shank@volvo.com">greg.shank@volvo.com</a> FAX: (301) 790-5815	

# ASTM TEST MONITORING BOARD MEETING

December 3, 2012

Norfolk Marriott

Norfolk, VA

Non-Voting Members

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
Wes Venhoff L-37	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092-2298	Phone: (440) 347- e-mail: <a href="mailto:Wes.Venhoff@Lubrizol.com">Wes.Venhoff@Lubrizol.com</a> FAX: (440) 347-4096	
Don Bell OSCT	Afton Chemical Corporation 500 Spring Street PO Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-6332 e-mail: <a href="mailto:don.bell@aftonchemical.com">don.bell@aftonchemical.com</a> FAX: (804) 788-6243	
William Buscher, III Sequence IVA TGC Chairman	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-6802 e-mail: <a href="mailto:wbuscher@swri.org">wbuscher@swri.org</a> FAX: (210) 684-7523	WAB
G. E. Callis Two-Stoke Cycle	Spectrum Corporation 1523 SE Prestwick Lane Port St. Lucie, FL 34952-6038	Phone: (561) 337-5060 e-mail: <a href="mailto:ecallis@spectrumcorporation.com">ecallis@spectrumcorporation.com</a> FAX: (561) 337-5061	
Mark Cooper T-8/T-8E, T-11, T-12	Chevron Oronite Company, LLC 4502 Centerview Drive, Suite 210 San Antonio, TX 78228	Phone: (210) 731-5606 e-mail: <a href="mailto:mawc@chevrontexaco.com">mawc@chevrontexaco.com</a> FAX: (210) 731-5699	
Mark Devlin Gelation Index	Afton Chemical Corporation 500 Spring Street, P.O. Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-6322 e-mail: <a href="mailto:mark.devlin@aftonchemical.com">mark.devlin@aftonchemical.com</a> FAX: (804) 788-6388	
Frank Farber TMC	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206-4489	Phone: (412) 365-1030 e-mail: <a href="mailto:fmf@astmtmc.cmu.edu">fmf@astmtmc.cmu.edu</a> FAX: (412) 365-1030	
Joe Franklin Subcommittee B	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 523-4671 e-mail: <a href="mailto:joe.franklin@intertek.com">joe.franklin@intertek.com</a> FAX: (210) 681-8300	JF
Fred Gerhart Sequence VIII	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-3842 e-mail: <a href="mailto:fgerhart@swri.org">fgerhart@swri.org</a> FAX: (210) 684-7523	
Dave Glaenger Sequence IIIF/IIIG	Afton Chemical Corporation 500 Spring Street, P.O. Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-5214 e-mail: <a href="mailto:dave.glaenger@aftonchemical.com">dave.glaenger@aftonchemical.com</a> FAX: (804) 788-6358	
John Glaser Intertek	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 647-9459 e-mail: <a href="mailto:john.glaser@intertek.com">john.glaser@intertek.com</a> FAX: (210) 684-6074	
Rebecca Grinfield EOFT, EOWT HD Elastomers	Southwest Research Institute 6620 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-3652 e-mail: <a href="mailto:bgrinfield@swri.edu">bgrinfield@swri.edu</a> FAX: (210) 684-5907	
Jerry Gropp B03 Chairman	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092	Phone: (440) 347-1223 e-mail: <a href="mailto:jlg@lubrizol.com">jlg@lubrizol.com</a> FAX: (440) 347-1555	JG
Jim Gutzwiller Scote/C13	Infineum USA, L.P. 4335 West Piedras Drive, Suite101 San Antonio, TX 78228	Phone: (210) 732-8132 x13 e-mail: <a href="mailto:james.gutzwiller@infineum.com">james.gutzwiller@infineum.com</a> FAX: (210) 732-8480	

ASTM TEST MONITORING BOARD MEETING

December 3, 2012

Norfolk Marriott

Norfolk, VA

Attachment A

Page 3 of 3

Visitors

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
Jim Linden	LINDEN CONSULTING, LLC	LINDENJIM@HOTMAIL.COM 248-321-5343	✓
Irwin Goldblatt	bp lubricants	irwin.goldblatt@bp.com 973-686-3206	✓
Brent Calcut	Afton	brent.calcut@aftonchemical.com 248-350-0640	✓
Norbert Nann	Nann Consultant, Inc	NORBANN1@AOL.COM 845-297-4333	✓
MIKE McMILLAN	MLM CONSULTING, INC	MMCMILLAN123@COMCAST.NET	✓
Galen Greene	BASF	973 873 4816 galen.greene@BASF.COM	✓
ADAM GILMORE	HORIBA	732 546 1792 adam.gilmore@horiba.com	✓
CHARLES BAKER	EXXONMOBIL	856 224 2880 CHARLES.L.BAKER@EXXONMOBIL.COM	✓
Dr. DEEPAK SAXENA	INDIAN OIL CORPORATION INDIA	saxenad@indianoil.in	✓
Joan Evans Bob Salguero	Infineum	joan.evans@infineum.com robert.salguero@infineum.com	✓ ✓
DON SMOLENSKI	Evonik Oil Additives	donald.smolenski@evonik.com	✓
Beth Schwab	Afton Chemical	beth.schwab@aftonchemical.com 804-788-5229	✓
Charles Passat		804-677-1805 passatc@yahoo.com	✓

Janet Barber Southwest Research Inst. 210-522-6824 jbarber@swri.org ✓

DWIGHT BOWDEN OH TECHNOLOGIES INC 440-354-7007 DWBOWD@OHTECH.COM ✓

MATTHEW BOWDEN OH TECHNOLOGIES INC 440-354-7007 MJBowden@ohtech.com

Allison Athey Volvo GTT 5 301-573-5684  
allison.athey@volvo.com ✓

**ASTM TEST MONITORING BOARD MEETING**  
**Monday – December 3, 2012**  
**5:00 - 6:30 PM**  
**Norfolk Waterside Marriott**  
**Norfolk, VA**

**AGENDA**

- 1. Call to Order**
- 2. Approval of June 25, 2012 Minutes**
- 3. Membership**
- 4. Receive, Accept and Take Action on Reports**
  - Administrative Guidance Committee – Chris Castanien**
  - Technical Guidance Committee – Bill Buscher III**
  - Test Monitoring Center – Frank Farber**
  - Data Communications Committee – Frank Farber**
- 5. Old Business**
- 6. New Business**
- 7. Next Meeting**
  - Monday June 24, 2013 Montreal, Quebec**
- 8. Adjournment**

## AGC Semi-Annual Report to the Test Monitoring Board

June 2012  
To  
December 2012

December 3, 2012

## AGC Membership

- Chris Castanien      Lubrizol (Chair)
- John Glaser            Intertek Automotive Research
- Dewey Szemenyei    Afton Chemical
- Dave Bradley         ASTM
- Ben Weber             Southwest Research Institute
- Frank Farber          TMC (Non-Voting)

Membership Changes?

- None

## AGC Responsibilities

- Advise the TMC Administrator on general business activity
- Advise the TMC Administrator in finalizing the annual budget, manpower requests and contract recommendations
- Prepare an annual evaluation and salary recommendations of the TMC Administrator and Staff for presentation to the Board

## TMC Fiscal Performance

■ Fiscal Year 2004	-\$205,293
■ Fiscal Year 2005	\$125,648
■ Fiscal Year 2006	\$124,141
■ Fiscal Year 2007	\$177,815
■ Fiscal Year 2008	\$ 70,864
■ Fiscal Year 2009	\$469,773
■ Fiscal Year 2010	\$415,224
■ Fiscal Year 2011	\$483,558
■ Fiscal Year 2012	\$161,000*

\* Projected

## FY 2012 TMC Projected Performance

- Projected expenses are above budget
- Projected income is above budget
- Projecting a surplus of \$161,000

## FY 2012 TMC Projected Performance

<u>Line Item</u>	<u>2011 EOY<sup>1</sup></u>	<u>2012 Budget</u>	<u>2012 Projected</u>
Total Expenses	\$2,137,291	\$2,424,700	\$2,733,670
Revenues	\$2,587,559	\$1,982,656	\$2,883,647 <sup>2</sup>
Revenue - Expense	\$ 450,268	-\$442,004	\$149,977
Interest	\$33,290	\$37,000	\$10,560
Net	\$ 483,558	-\$405,044	\$160,537
Reserves	\$4,355,718 <sup>3</sup>	\$3,950,674 <sup>4</sup>	\$4,516,255
Months Reserve	24	19	20
Fee Adjustments	None	None	None
New Tests	None	None	None
Reg. FT Headcount	13	14	15

<sup>1</sup> Values from audit report  
<sup>2</sup> Based on Jan-October monthly average  
<sup>3</sup> Net Assets Un-Restricted and Un-designated  
<sup>4</sup> Derived from 2011 EOY audit reserve and Net from budget

### TMC Forecast – FY 2013 Assumptions

- Salary increases, 2.9% (2013)
  - Benefits (fringe)
    - 28.6% (2013)
    - 30.1% (2014)
  - Continued participation in new development

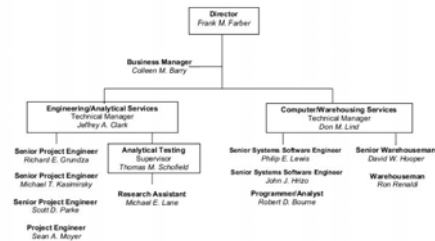
### TMC – 2012 Budget Notables

- Reference oil purchase over budget
- Obsolete reference oils discarded
- Sale of remaining Sequence VI baseline and flush oil occurred
- Addition of new TMC staff member
- Reference testing better than expected

### TMC 2013 - 2014 Budget

Income and Expenses	2012 Forecast	2013 Budget	2014 Budget
Salaries	1,118,100	1,258,982	1,295,492
Temporary Help	3,007	5,400	5,600
Benefits (28.6%)	324,249	362,559	375,039
<b>Total Salaries &amp; Benefits</b>	<b>1,445,356</b>	<b>1,626,941</b>	<b>1,676,131</b>
Overhead	748,000	822,000	855,000
Travel	\$95,190	60,000	60,000
Telephone	\$11,916	16,200	16,400
Office Supplies	\$76,348	13,800	17,800
Contract Services	\$31,116	16,000	16,000
Labor Supplies	\$28,400	40,000	40,000
Training & Education	\$5,000	5,000	5,200
Production Materials	\$3,750	10,000	12,000
Rating Workbooks	\$18,085	37,000	32,000
Acad.	\$17,000	17,000	17,000
Reference Oils	\$142,000	150,000	160,000
<b>Other Operating Expenses</b>	<b>346,781</b>	<b>316,800</b>	<b>327,800</b>
Depreciation	4,560	5,000	5,000
Cost of Oil Sold	189,000	280,000	190,000
<b>Total Operating Expenses</b>	<b>\$2,733,676</b>	<b>\$2,980,182</b>	<b>\$3,010,932</b>
Total Revenue	\$2,883,647	2,488,544	2,889,992
Interest	10,000	20,000	21,000
<b>Total Operating Revenue</b>	<b>\$2,893,647</b>	<b>\$2,508,544</b>	<b>\$3,010,992</b>
<b>Net Income (Loss) from Operations</b>	<b>\$160,537</b>	<b>(\$471,438)</b>	<b>\$0</b>
Total Fund - Liquid Assets	\$6,076,265	\$4,587,526	\$4,110,891
Months Operating Assets	22.0	18.5	16.4
Fee Adjustments (+/-)	As Needed	As Needed	As Needed
New Tests	0	3	10
Reg. FY Headcount	15	15	15
Capital	12,000	23,500	19,500

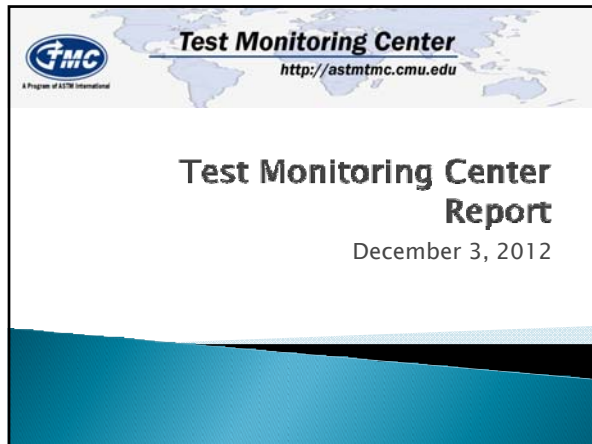
### TMC Organizational Chart



### Action Items

Approval of this report





## Administrative /Financial

- ▶ The 2013 TMC budget was submitted to ASTM headquarters in September.
- ▶ The current financial status of the TMC will be part of the Administrative Guidance Committee report.

Test Monitoring Center logo and "A Program of ASTM International" are at the bottom right.

## Staffing

- ▶ The TMC staff count is now at 15 full-time employees. The TMC is employing some temporary student help in our chem lab and warehouse group.

Test Monitoring Center logo and "A Program of ASTM International" are at the bottom right.

## 17 Information Letters Passed Sub B Ballot

Test Area	Rev.	Approved	Description
EOAT	12-1	5/17/2012	Test Fuel Name Change
T-8	12-1	5/18/2012	Specified Fuel Designation Change and Partial Rebuild Allowance
T-11	12-1	5/18/2012	Specified Fuel Designation Change and Rebuilt Engine Reference Requirement Change
1K1N	12-1	5/24/2012	Specified Fuel Designation Change
1P	12-1	5/24/2012	Specified Fuel Designation Change
1R	12-1	5/24/2012	Specified Fuel Designation Change
ISM	12-1	6/11/2012	Specified Fuel Designation Change
RFWT	12-1	6/11/2012	Specified Fuel Designation Change
VG	12-1	6/12/2012	Use of Bishop Cylinder Heads
T-12	12-1	6/21/2012	Updated STWN Hardware Correction Factors
L60-1	10-1	7/27/2010	1. Clarification of Validity for Tests Experiencing Excessive Oil Loss 2. Revised Instrumentation Calibration
L60-1	12-1	7/18/2012	1. Correction of Typographical Error for Ogdan Heater 2. Alternate Primary Heater Part Numbers 3. Alternate Alternator Case Number
VID	12-2	7/30/2012	Restarting Stage Data Generation During BSFC Measurements
ISB	12-2	8/30/2012	Calibration Period Change
L-60-1	12-2	9/4/2012	Required Alternator Change
T-10	12-1	9/20/2012	T-10/T-10A Fuel Designation Update
VID	12-3	10/10/2012	1. Changes to Coolant Flow Calibration Procedure 2. Additional AFR Device 3. Removal of Requirement to Use the Same Type Valve in the Oil Heat/Cool System

Test Monitoring Center logo and "A Program of ASTM International" are at the bottom right.

## TMB Elections

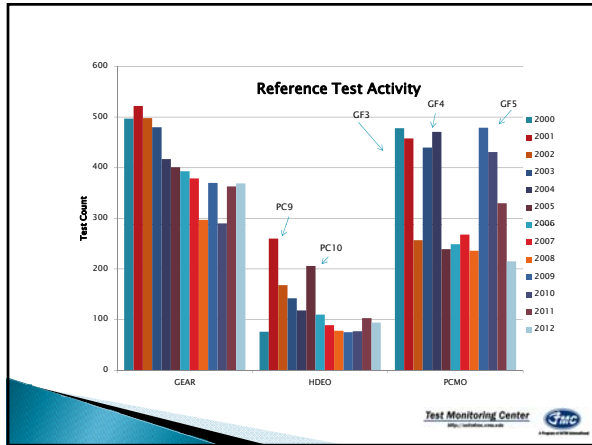
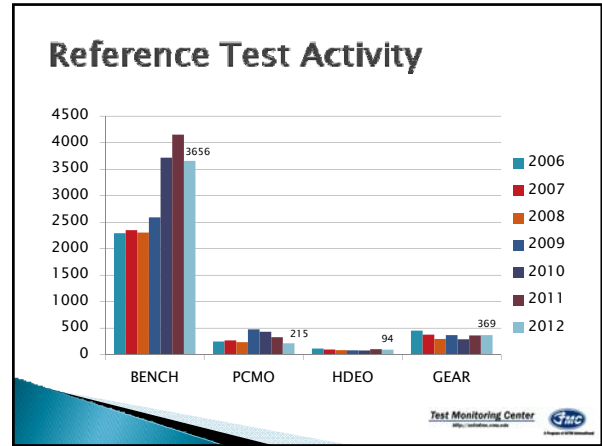
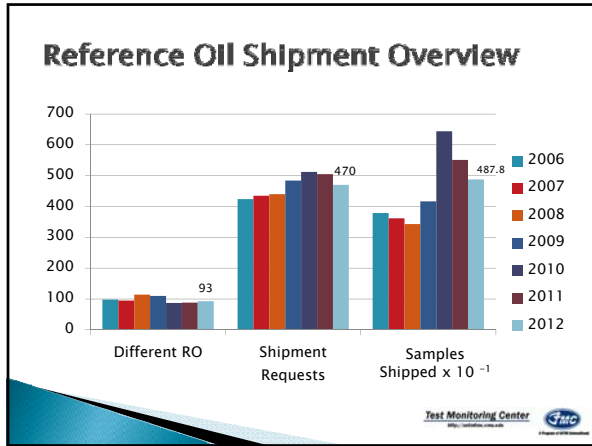
- ▶ Four current board members are up for re-election to 2-year terms. The ballots closed December 1, 2012.
- ▶ All were re-elected:
- ▶ Ron Romano
- ▶ Greg Shank
- ▶ Bill Lam
- ▶ Steve Kennedy

Test Monitoring Center logo and "A Program of ASTM International" are at the bottom right.

## Reference Oil Procurement

Test Type	Oil Code	Quantity (gallons)
T-11	822 (820 Replacement)	5000
T-12	821	1500
T-8, 1P, 1R, RFWT & EOAT	1005	2000
DFLUB	A & B	110
L-14-93/D6278	RL233	1455

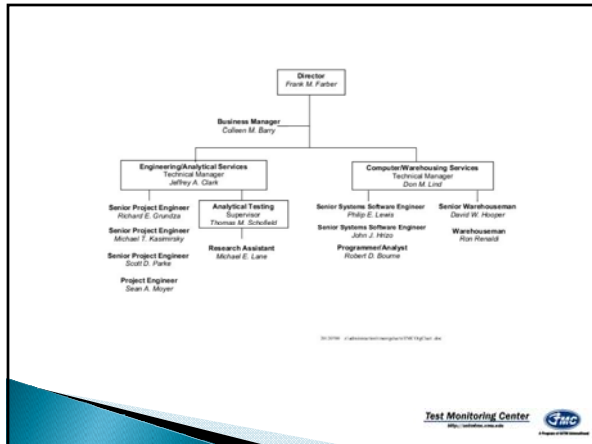
Test Monitoring Center logo and "A Program of ASTM International" are at the bottom right.



### Other Items

- ACC-MA/ATC-ERC, these projects are now in their first year of the six-year contract period.

Test Monitoring Center



### TMB Motion

At the June 2012 ASTM Test Monitoring Board (TMB) meeting, the TMB addressed a request by the ASTM Test Monitoring Center (TMC) to revise the Regulations Governing the ASTM Test Monitoring System. This revision is to allow the TMC to monitor non-ASTM test procedures. A subsequent Sub B straw poll and ASTM headquarters' review resulted in modification to the original revision request. A motion is made to the TMB to request a ballot be issued at Sub B to revise the Regulations Governing the ASTM Test Monitoring System as follows:

## ARTICLE 2 - PURPOSE

2.1 The purpose of the System is to establish, maintain and operate an independent calibration system to ensure that all tests performed using test procedures published **by ASTM** and ~~which are under the jurisdiction of ASTM Committee D02~~ **/or monitored by the ASTM Test Monitoring Center** are conducted in a valid manner so they can be interpreted properly.

The System shall be restricted to monitoring only tests ~~assigned to it by ASTM Subcommittee D02.B0~~ **approved by the Test Monitoring Board and ASTM Subcommittee D02.B0.**

**A company or organization requesting the ASTM Test Monitoring Center to monitor a non ASTM test method must enter into an agreement with the ASTM Test Monitoring Center which details the procedures and policies that shall be followed. The agreement shall be approved by an affirmative vote of at least two-thirds of the Test Monitoring Board and Subcommittee D02.B0.**

**2.1.1 The monitoring of test procedures shall be under the review of the ASTM Test Monitoring Board. The test procedures shall follow all required procedures and policies of the ASTM Test Monitoring System. Failure to follow all required procedures and policies may result in withdrawal of the monitoring services for a test procedure. An affirmative vote of at least two-thirds of the Test Monitoring Board membership is required for withdrawal of services.**

## Attachment A

### **Agreement to Provide Test Monitoring Services for a Non ASTM Test Method**

This Agreement (“Agreement”) effective \_\_\_\_\_ (the Effective Date), between ASTM International (“ASTM”), a Pennsylvania nonprofit corporation, having its principal place of business at 100 Barr Harbor Drive, West Conshohocken PA 19428 USA and \_\_\_\_\_ (Company/Organization), having its principal place of business at: \_\_\_\_\_ (Company/Organization) desires to have the ASTM Test Monitoring Center (TMC) operate an independent calibration system to ensure that all tests performed using the (name of test procedure) are conducted in a valid manner so that they can be interpreted properly. To achieve this goal, the TMC with support from (Company/organization) will perform the following services:

#### **Reference Materials**

- Work with company/organization and industry to identify new reference oils for the test.
- Maintain a series of reference materials of different performance levels to assure a minimum 5-year supply. Single homogeneous quantities will be procured.
- Maintain a supply of these reference materials which may be purchased by testing laboratories for the performance of calibration tests. Reference materials may also be supplied for other appropriate applications depending on availability.
- Work with Company/organization and industry to select new reference materials and approve new batches of currently used reference materials.
- Maintain Quality Assurance and Quality Control systems to ensure the ongoing integrity of reference materials.

#### **Test Calibration / Monitoring System**

- Develop a calibration system with company/organization and industry.
- Collect and statistically analyze reference material test data to determine stand/apparatus and laboratory calibration status, per the defined calibration system.

- Review test results and associated operational data for adherence to prescribed test procedure and for accuracy of reported results.
- Ensure that test stands and testing laboratories participating in the system are calibrated in accordance with prescribed procedures.

### **Test Calibration / Monitoring System (continued)**

- Visit test laboratories as necessary to ensure compliance with the current test procedures and assist the laboratories in solving problems.
- Work with company/organization and the individual testing laboratories to improve and standardize the operating procedures, practices, and measurement methods to improve the repeatability and reproducibility of the test.
- Monitor laboratory calibration test severity and precision and work with individual laboratories and company/organization to resolve severity and precision shifts.
- Provide the trained personnel and systems necessary to meet the monitoring requirements of the calibration system.
- Provide and maintain a control charting system.

### **Database Maintenance and Data Reporting Structure**

- Maintain a website that provides company/organization and industry access to all necessary data and documents contained in the calibration system.
- Maintain a secured relational database for test results.
- Maintain test report packages, data dictionaries, and electronic data transmission protocol.
- Receive and store results for all reference material tests.
- Provide test registration services
- Maintain data integrity, security, and back up plans.
- Provide the trained personnel, software, and systems necessary to meet all database maintenance and data report requirements
- Maintain the confidentiality of all information which is not public knowledge.

## **Reporting of Information**

- Periodically (at least semi-annually) report to company/organization and industry stakeholders as appropriate, test severity and precision trends based upon calibration test data.
- Periodically (at least semi-annually) report to company/organization and industry stakeholders as appropriate, test stand and laboratory calibration information (summarized industry wide calibration test data, and as requested, specific laboratory calibration test data).
- In cooperation with the company/organization, maintain a system for disseminating new information concerning the test procedures.
- Maintain the capability to provide supplemental data analysis as requested by company/organization and industry.

## **Industry Stake Holder Meetings**

- TMC will participate in industry stake holder meetings.
- The TMC will post meeting minutes on the website for industry retrieval.

## **Cost of Services**

- TMC will develop a fee structure so that the monitoring service is financially self supporting. Depending on test volume the fee structure could be set-up on a per test basis or semi-annual or annual billing structure.

|

The company/organization agrees to cover all existing and incurred costs in terminating the TMC monitoring services.

The company/organization agrees to defend, indemnify, and hold harmless ASTM (its members, directors, officers, employees, agents, and representatives) against any and all liability, loss, costs, damages, attorneys' fees, and expenses of whatever kind or nature that they may sustain or incur by reason of any claim against them resulting from any acts or omissions of the company/organization or that relate in any way to this Agreement, the Program, or ASTM Procedures. The provisions of this Section survive the termination of this Agreement.

The TMC and \_\_\_\_\_ (Company/Organization) agree to the above requirements and understand that failure to comply may result in termination of the program.

Name Company/Organization

Name

Title

Date

ASTM International

Name

Title

Date



## GM Oxidation & Deposit Test (GM IIIH)

ASTM Test Monitoring Board  
December 3, 2012

General Motors Company



## GM IIIH Testing To date

- Total of 6 tests run at the San Antonio labs
- Two different oils tested; one a reference oil with promising results
- Expect to run all IIIG reference oils in the near future
- Focusing on finalizing test conditions and hardware
- Test procedure expected to be finalized by Q1 2013
- GM funded precision matrix at the San Antonio labs to start Q2 2013
- Procedure and parts to be made available to additional laboratories in Q2 2013

General Motors Company



## Severity & Precision Monitoring

- An LTMS similar to current IIIG will be implemented
- Will use industry statisticians to establish system

General Motors Company



## GM IIIH Self-funded Test Monitoring

- GM prefers to have the ASTM Test Monitoring Center provide monitoring services.
  - GM will fund start-up of TMC monitoring costs.
  - GM will fund TMC lab visit costs to all labs during the 1<sup>st</sup> year.
  - Long-term monitoring will be financially self-funded through reference oil and test fees.
    - However, GM intends to underwrite the 1<sup>st</sup> year of TMC monitoring costs as these charges are adjusted to ensure all TMC costs related to the GM IIIH test are covered.

General Motors Company



## GM IIIH Reference Data

- GM prefers to have the TMC provide reference data services.
  - Reference data will be stored and made available to users as is done today.
  - TMC will provide test severity and precision monitoring as is done today.
  - Any parts or operational changes which have been approved by GM will be monitored by the TMC to maintain test severity & precision.

General Motors Company



## GM IIIH Procedure & Parts Supply


- GM will control and maintain the test procedure.
- TMC will maintain a new information letter-type process to update the test procedure as necessary.
- GM and the CPD will supply tests parts as is done today.

General Motors Company



### GM IIIH Candidate Data

- GM prefers to have the TMC provide test registration services.
- If the GM IIIH is accepted into GF-6, GM will abide by the ACC test registration system.
- GM will not have access to company specific test results.



### Request

GM requests that the TMB approve the TMC providing services as outlined here and in the letter from GM to the TMB chair on July 30, 2012.

