

ASTM Test Monitoring Executive Committee Meeting
June 23, 2014

JW Marriott Hotel
Indianapolis, IN

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Call to Order

ASTM D02.B0.08, the Test Monitoring Executive Committee, met on Monday, June 23, 2014 at 5:00 p.m. at the JW Marriott in Indianapolis, IN. There were 9 voting members, seven non-voting members and 9 visitors present. The attendance list is shown as Attachment A.

Committee Voting Members

Steve Kennedy, Present
Greg Shank, Present
Ron Romano, Dial-in
Robert Stockwell, Present
Jerry Gropp, Present
Doyle Boese, Present
Jason Bowden, Present
Steve Kirby, Present
Bill Lamb, represented by Brent Calcut

The agenda is shown as Attachment B.

Meeting Minutes

March 8, 2014 meeting minutes approved.

Membership

Two members Greg Shank and Bill Lam are not eligible for re-election at the end of 2014. Both Volvo and Afton intend on supplying replacement nominees. Joe Franklin, Sub Committee B chairman will handle the balloting for new members. The term limits for the current membership are shown below.

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Steve Kennedy					P	P	P	P							
Greg Shank	U	U	U	U	U	U	U	U							
Ron Romano			U	U	U	U	U	U							
Stephen Kirby								U	U						
Robert Stockwell								U	U						
Bill Lam	P	P	P	P	P	P	P	P							
Jerry Gropp								P	P						
Doyle Boese								P	P						
Jason Bowden						G	G	G	G						

 Eligibility

Administrative Guidance Committee (AGC) Report

Frank Farber gave the report as shown below. Frank noted that the TMC net income through May is -176,187. It was felt that the upcoming PC-11, Sequence VIE and Sequence VH matrix testing would help bring the TMC EOY net income back into the black.

AGC Semi-Annual Report to the Test Monitoring Board

January 2014
To
June 2014

June 23, 2014

AGC Membership

- Greg Shank Volvo (Chair)
- John Glaser Intertek Automotive Research
- Phil Ames Afton Chemical
- Tim Brooke ASTM
- Ben Weber Southwest Research Institute
- Frank Farber TMC (Non-Voting)

Membership Changes?

- None

AGC Responsibilities

- Advise the TMC Director on general business activity
- Advise the TMC Director in finalizing the annual budget.

TMC Fiscal Performance

- 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 \$144,627
- Fiscal Year 2013 \$93,000
- May 2014 **-\$176,187**

FY 2014 TMC Projected Performance

- Projected expenses are close to budget
- Budget revenue includes PC-11 and GF-6 Matrix income
- Projected income is below budget
- PC-11 matrix revenue expected to be \$272,000

FY 2014 TMC Projected Performance

Line Item	2013 EOY	2014 Budget	2014 Projected ²	
			w/o Matrices w/PC-11 & GF-6	Total
Total Expenses	\$3,071,303	\$3,282,486	\$3,184,697	\$3,184,697
Revenues	\$3,132,007	\$3,232,015	\$2,78,114	\$3,126,634
Revenue - Expense	\$60,704	(\$50,471)	(\$48,583)	-\$58,063
Interest	\$10,608	\$11,000	\$11,000	\$11,000
Net	\$71,312	(\$39,471)	(447,583)	(\$47,063)
Reserves ^{3,4}	\$4571,657	\$4,532,186	\$4,124,074	\$4,642,969
Months Reserve	17.9	16.6	15.5	17.5
Fee Adjustments	None	None	None	None
New Tests	None	3	0	0
Reg. FT Headcount	15	16	16	16

¹ Values from audit report
² Based on Jan-May monthly average, pGF-6=Sequence VH and VIE 20 test matrices
³ Total Net Assets-Board Designated
⁴ Derived from 2013 EOY audit reserve and Net

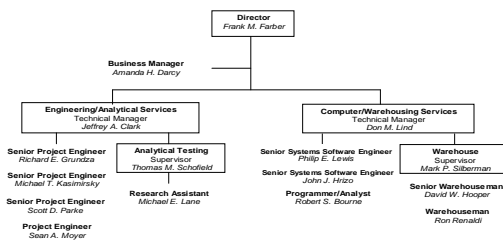
TMC Forecast – FY 2014 Assumptions

- Salary increases, 3.5% (2014)
 - Benefits (fringe)
 - 29.5% (2014)
 - 30.1% (2015)
- Continued participation in new development

TMC – 2014 Staff Items

- TMC Warehouse Supervisor hired April 2014

TMC Organizational Chart



Action Items

Approval of this report

Technical Guidance Committee (TGC) Report

Bill Buscher presented the TGC report as shown below.

ASTM
TECHNICAL GUIDANCE COMMITTEE

Semi-Annual Report

Presented by
William A. Buscher III

Updated June 25, 2014

TGC Semi-Annual Report

- No face-to-face TGC meetings were conducted in the past 6 months
- No TGC task force meetings or conference calls were conducted in the past 6 months
- No full committee activity in the past 6 months

TGC Semi-Annual Report

- During the fall PCMO surveillance panel meetings it was recommended that multiple sub-committees be established under the TGC
- The following TGC sub-committees are recommended:
 - PCMO
 - HDEO
 - GEARS
 - 2-CYCLE
 - BENCH
- Sub-committee chairs will report to TGC chair and full TGC meetings will be scheduled as required
- If this recommendation is adopted, a new TGC scope and objectives needs to be discussed and approved

TGC Semi-Annual Report

- PCMO TGC sub-committee needs to be established to address and/or advise on the following:
 - Test procedures and research reports for GF-6 tests
 - LTMS for GF-6 tests
 - Reference oils for GF-6 tests
 - Test hardware supply for GF-6 tests
 - Test fuel supply for GF-6 tests
 - End of life plan for GF-3/4/5 tests
 - GF-3/4/5 test equivalency limits for GF-6 tests
- TMB endorsed TGC forming a PCMO TGC sub-committee, lead by Bill Buscher

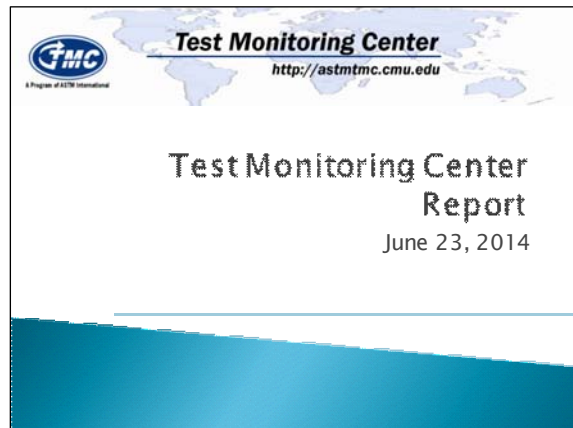
TGC Semi-Annual Report

- Opened Action Items:
 - TGC chair to locate the current TGC scope and objectives
 - TGC chair to send out slides 4 and 5 of my TGC presentation to the D.02.B0 Section 1, 2, 3, 6 and 7 chairs to make them aware of the TGC sub-committee recommendation
 - TGC chair to send out the TGC membership list to this same distribution to get it updated

All the action items from last meeting are pending. It was felt that the TGC subcommittee meetings needed to start with the PCMO surveillance panels and then move to the other sub committees. The progress on forming the sub committees has been hindered because the PCMO panels have not met in one location together. The chairman anticipated completing some of the action items by December's meeting.

Test Monitoring Center Report

Frank Farber presented the Test Monitoring Center report as shown below.



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

Test Monitoring Center Report
 June 23, 2014

Administrative / Financial

- ▶ Bench Test Area Fee Study will be reviewed under new business

Staffing

- ▶ The TMC staff count is now at 16 full-time employees. The TMC is employing some temporary student help in our chem lab.
- ▶ In April the TMC hired a warehouse supervisor to bring the warehouse staff back to 2008 manpower levels.

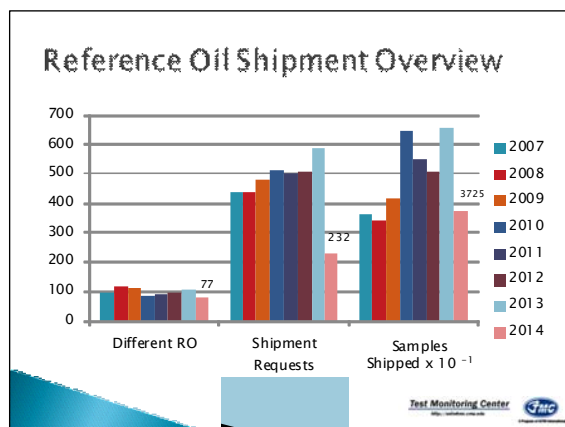
15 Information Letters Passed Sub B Ballot

Track #	Year	Effective Date	Description
T12	13-2	11/11/2013	Procedure Update – Phase 2 In-take Manifold Pressure Specs
SM	13-1	11/22/2013	New IAS Correction Factors and Reporting Methods and Corrected References for Rating Manual
C13	13-2	12/17/2013	New Piston Sealing Ring Gearing Procedure and Oil Filter Part Number Update
VG	14-1	1/7/2014	Changing Fuel Batch L-16 to going to incorporate in D2 ballot. Do not Sub B ballot!
VG	14-2	2/18/2014	Handling Negative Oil Screen Clogging
HG	14-1	2/24/2014	Change in Cylinder Heads
L-3-1	14-1	3/4/2014	1. Abrasive blast media supplier name change 2. Edit to #4 – revised supplier and name for Rating Manual 21
OSCT	14-1	3/5/2014	Instron Calibration
VD	14-1	3/5/2014	Fuel Batch Changes
T12	14-1	3/21/2014	Procedure Update – Calibration of New Engines and T12A Flexibility
HIF	14-1	3/25/2014	Use of Hardened Seat Cylinder Heads
HG	14-1	3/25/2014	Use of Hardened Seat Cylinder Heads
T8	14-1	3/25/2014	T8 Use of Rebuilt Injection Pumps and Sourcing
VG	14-3	4/2/2014	Calibration Period Change
T-12	14-2	5/6/2014	Classification of Auxiliary Oil System Line Sizes
L-42	14-1	5/14/2014	Correction factor for use with TMC reference oil 117

Reference Oil Procurement

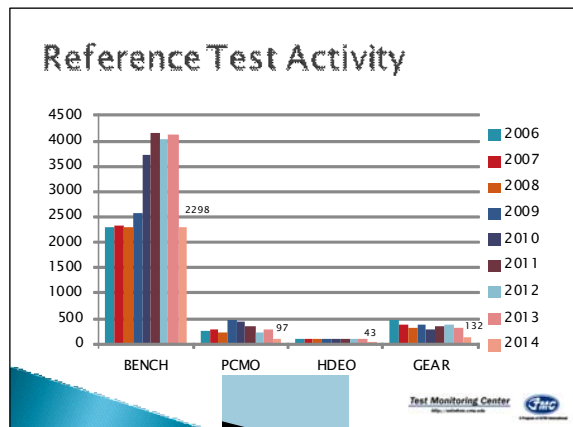
Test Type	Oil Code	Quantity (gallons)
D6278/CEC L-14-A-95	RL-233	2781
DFUB	DFA & DFB	110
Sequence IIG	434	500

Reference Oil Shipment Overview



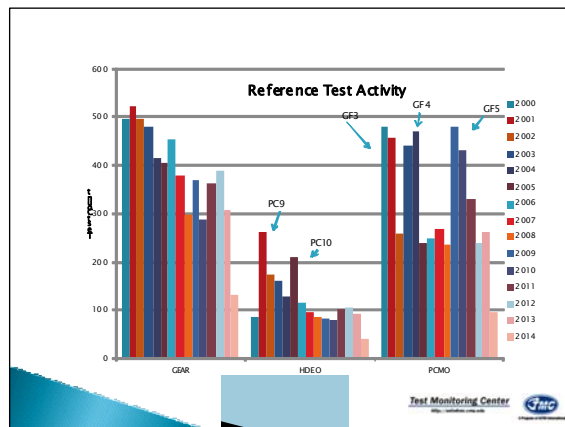
Year	Different RO	Shipment Requests	Samples Shipped x 10 ⁻¹
2007	~100	~100	-
2008	~100	~100	-
2009	~100	~100	-
2010	~100	~100	-
2011	~100	~100	-
2012	~100	~100	-
2013	~100	~100	232
2014	~100	~100	3725

Reference Test Activity



Year	BENCH	PCMO	HDEO	GEAR
2006	~2500	~50	~50	~50
2007	~2500	~50	~50	~50
2008	~4000	~50	~50	~50
2009	~2500	~50	~50	~50
2010	~2500	~50	~50	~50
2011	~2500	~50	~50	~50
2012	~2500	~50	~50	~50
2013	~2500	~50	~50	~50
2014	~2500	~50	~50	~50


Reference Test Activity



Year	GEAR	HDEO	PCMO
2006	~500	~100	~100
2007	~500	~100	~100
2008	~500	~100	~100
2009	~500	~100	~100
2010	~500	~100	~100
2011	~500	~100	~100
2012	~500	~100	~100
2013	~500	~100	~100
2014	~500	~100	~100

Other Items

- ▶ ACC-MA/ATC-ERC, these projects are now in their third year of the six-year contract period.
- ▶ GMOD test start-up is ongoing.

Test Monitoring Center 

Data Communication Committee (DCC)

No activity this period.

Old Business

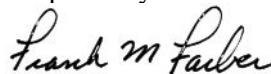
Frank Farber presented attachment B proposing a new fee structure for the bench test areas. Revenue from the bench test areas has been short of expenses since 2011. The intent of the new fee structure was to bring the net income for the bench test areas to revenue neutral by 2017. The Executive Committee has met 3 times since December 2013 on this issue and has finalized the proposal as presented. After some discussion and questions the Executive Committee unanimously approved implementing the proposal at the start of 2015.

New Business

None.

The meeting ended at 6:00 pm.

Respectfully submitted,



Frank M. Farber, Secretary
ASTM Test Monitoring Executive Committee

FMF/fmf
Attachments

ASTM Executive Committee Meeting
 June 23, 2014
 JW Marriott
 Indianapolis, IN

Attachment A
 1 of 4

Voting Members

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
Steve Kennedy Chairman	ExxonMobil Paulsboro Technology Center 600 Billingsport Road Paulsboro, NJ 08066-0480	Phone: (856) 224-2432 e-mail: steven.kennedy@exxonmobil.com FAX: (856) 224-3613	SK
Greg Shank Vice-Chairman	Volvo Powertrain 13302 Pennsylvania Avenue Hagerstown, MD 21742	Phone: (301) 790-5817 e-mail: greg.shank@volvo.com FAX: (301) 790-5815	GLS
Doyle Boese	Infineum USA, L.P. 1900 East Linden Avenue Linden, NJ 07036-0536	Phone: (908) 474-2097 e-mail: andrew.ritchie@infineum.com FAX: (908) 474-3637	DHB
Jason Bowden	OH Technologies 9300 Progress Parkway P. O. Box 5039 Mentor, OH 44061-5039	Phone: (440) 354-7007 e-mail: jhbowden@ohtech.com FAX: (440) 354-7080	JAB
Jerry Gropp B03 Chairman	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092	Phone: (440) 347-1223 e-mail: jlg@lubrizol.com FAX: (440) 347-1555	JLG
Stephen Kirby	International Truck & Engine Corp 10400 W. North Avenue Melrose Park, IL 60160	Phone: (708) 865-3788 e-mail: stephen.kirby@navistar.com FAX: (708) 216-0680	✓
William Lam	Afton Chemical Corporation 500 Spring Street P.O. Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-5236 e-mail: bill.lam@aftonchemical.com FAX: (804) 788-6388	Bill Lam WZ
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: rromano@ford.com FAX:	by phone
Robert Stockwell RFWT	General Motors 11406 Hospah Helotes, TX 78023	Phone: 210-563-0785 e-mail: robert.stockwell@gm.com FAX:	RS

ASTM Executive Committee Meeting
 June 23, 2014
 JW Marriott
 Indianapolis, IN

Attachment A
 2 of 4

Non-Voting Members

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
Don Bell OSCT	Afton Chemical Corporation 500 Spring Street PO Box 2158 Richmond, VA 23218-2158	Phone: (804) 788-6332 e-mail: don.bell@aftonchemical.com FAX: (804) 788-6243	
Mike Birke LDEOC/EOEC	Southwest Research Institute 6620 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-5310 e-mail: mbirke@swri.org FAX: (210) 522-5907	
William Buscher, III Sequence IVA TGC Chairman	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-6802 e-mail: wbuscher@swri.org FAX: (210) 684-7523	✓
Tim Brooke ASTM International	ASTM 100 Barr Harbor Drive West Conshohocken, PA 19428	Phone: (610) 832-9729 e-mail: tbrooke@astm.org FAX: (610) 832-	
G. E. Callis Two-Stoke Cycle	Spectrum Corporation 1523 SE Prestwick Lane Port St. Lucie, FL 34952-6038	Phone: (561) 337-5060 e-mail: ecallis@spectrumcorporation.com FAX: (561) 337-5061	
Angelina Chan TEOST, TEOST-MHT	The Lubrizol Corporation 29400 Lakeland Boulevard Wickliffe, OH 44092-2298	Phone: (440) 347- e-mail: Angelina.Chan@lubrizol.com FAX: (440) 347-8061	✓
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: mawc@chevrontexaco.com 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: mark.devlin@aftonchemical.com FAX: (804) 788-6388	
Frank Farber TMC	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206-4489	Phone: (412) 365-1030 e-mail: fmf@astmtmc.cmu.edu FAX: (412) 365-1030	<i>fmf</i>
Joe Franklin Subcommittee B	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 523-4671 e-mail: joe.franklin@intertek.com FAX: (210) 681-8300	<i>JF</i>
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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: dave.glaenger@aftonchemical.com FAX: (804) 788-6358	
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Jim Gutzwiller Scote/C13	Infineum USA, L.P. 4335 West Piedras Drive, Suite101 San Antonio, TX 78228	Phone: (210) 732-8132 x13 e-mail: james.gutzwiller@infineum.com FAX: (210) 732-8480	

		PHONE NUMBER	
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ASTM Executive Committee Meeting
 June 23, 2014
 JW Marriott
 Indianapolis, IN

Attachment A
 3 of 4

NAME	COMPANY AND ADDRESS	E-MAIL ADDRESS FAX NUMBER	PRESENT
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Brian Koehler HTCT	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-3588 e-mail: bkoehler@swri.edu FAX: (210) 680-1777	
Charlie Leverett Sequence VIB/VID	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 647-9422 e-mail: charlie.leverett@intertek.com FAX: (210) 523-4607	
Stefan Von Lukawiecki D5800, D6417	Safety-Kleen Canada, Inc. 300 Woolwich Street South Breslau, Ontario N0B 1M0 CANADA	Phone: (519) 648-2291 e-mail: svonluka@safety-kleen.com FAX: (519) 648-2033	
Yong-Li McFarland EOFT, EOWT	Southwest Research Institute 6620 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522- e-mail: yongli.mcfarland@swri.org FAX: (210) 522-5907	<i>YLM</i>
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Jim Moritz M11, M11EGR, ISB, ISM	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 523-4601 e-mail: jim.moritz@intertek.com FAX: (210) 523-4607	
Leonard Orzech BRT	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 523-4680 e-mail: leonard.orzech@intertek.com FAX: (210) 523-4694	
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Gil Reinhard CBT, HTCBT	Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238-1933	Phone: (210) 523-4674 e-mail: gil.reinhard@intertek.com FAX: (210) 681-8300	
Andrew Ritchie VG	Infineum USA, L.P. 1900 East Linden Avenue Linden, NJ 07036-0536	Phone: (908) 474-2097 e-mail: andrew.ritchie@infineum.com FAX: (908) 474-3637	<i>AR</i>
Dewey Szemenyei AGC	Afton Chemical Corporation 500 Spring Street P.O. Box 2158 Richmond, VA 23218-2158	Phone: (804) 788- e-mail: dewey.szemenyei@aftonchemical.com FAX: (519) 648-2033	
Angela Trader L-33-1	Intertek Automotive 5404 Bandera Road San Antonio, TX 78238-1993	Phone: (210) 264-5911 e-mail: angela.trader@intertek.com FAX: (210)	
Ben Weber B01 Chairman	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78228-0510	Phone: (210) 522-5911 e-mail: bweber@swri.edu FAX: (210) 648-7523	

Visitors

NAME	COMPANY AND ADDRESS	PHONE NUMBER E-MAIL ADDRESS FAX NUMBER	PRESENT
MIKE McMILLAN	MLM CONSULTING	MMCMILLAN127@COMCAST.NET 586-677-5188	✓
BIEL BUSCHER	SWRT	(210) 242-8992 wbuscher@swrt.com	✓
IRWIN GOLDBLATT	BP Lubricants	irwin.goldblatt@bp.com	
MATTHEW BOWDEN	OH TECHNOLOGIES	mjbowden@ohtech.com	✓
ANDRE SWARTS	SASOL NORTH AMERICA	andre.swarts@sasol.com	✓
Gordon Cox	Tennor Co. Midland, MI	989-496-2309 gcox@savantgroup.com	✓
Tina Dasbach	Institute of Materials, Midland, MI	tldasbach@savantgroup.com	✓
NORR NANN	Norr Consultants Inc	NORRNNANN1@AOL.COM	✓
ERIC JOHNSON	GM	Eric.R.Johnson@GM.com	✓
Brent Calcut	Affton	brent.calcut@affton.com	✓

ASTM Executive Committee Meeting
Monday – June 23, 2014
5:00 - 6:30 PM
JW Marriott Indianapolis
Indianapolis, IN

AGENDA

- 1. Call to Order**
- 2. Approval of Minutes**
- 3. Membership**
- 4. Receive, Accept and Take Action on Reports**
 - Administrative Guidance Committee – Greg Shank**
 - Technical Guidance Committee – Bill Buscher III**
 - Test Monitoring Center – Frank Farber**
 - Data Communications Committee – Frank Farber**
- 5. Old Business – Bench Test Fee Structure**
- 6. New Business**
- 7. Next Meeting – Monday, December 8, 2014 San Diego, CA**
- 8. Adjournment**

ASTM TMC Bench Test Fee Study

June 2014

Purpose

- The TMC was tasked with studying a per test cost model for bench billing at the March 18, 2014 Executive Committee meeting.
- Executive Committee teleconference on May 14th reviewed the per test billing structure. Recommendation was to develop a 3-year plan to make bench test areas self-supporting.
- June 17th teleconference the Executive Committee finalized a 3-year fee structure for the bench test areas.

Year End 2013 Net Income

	Light-Duty	Heavy-Duty	Gear	Bench	Other
Revenue	600,140	451,936	376,649	531,425	563,324*
Expenses	513,239	501,650	465,941	805,254	348,922
Net Income	86,901	(49,714)	(89,292)	(273,829)	214,402

*Includes Donated Oil Income

Study Considerations

- Ensure sample fees cover TMC preparation and shipping costs
- Utilize lab shipping account when possible, otherwise invoice lab for shipment
- Review per test fee model
- Reference test fees balance TMC costs
- Review test fees so lab test costs are not significantly impacted

Study Considerations (cont.)

- Per candidate fee costs were not calculated because of difficulty in determining occupied positions per bath and overall utilization

**ASTM Test Monitoring Center
2007 Reference Test Fees and Oil Prices
Effective 1/1/2007**

Test Type	Test Fee	Oil Quantity	Oil Price
TCI	\$3,000	2 gal.	\$71/gallon
TCII	\$3,000	1 qt.	\$31/sample
TCIII	\$3,000	2 gal.	\$71/gallon
IIIF	\$3,000	4 gal.	\$71/gallon
IIIG/A	\$3,490	4 gal.	\$71/gallon
IVA	\$3,000	4 gal.	\$71/gallon
VIB	\$3,000	5 gal.	\$71/gallon
VG	\$3,000	3 gal.	\$71/gallon
VIII	\$3,000	2 gal.	\$71/gallon
1K	\$3,000	10 gal.	\$71/gallon
1N	\$3,000	10 gal.	\$71/gallon
1MPC	\$3,000	10 gal.	\$71/gallon
1P	\$3,000	15 gal.	\$71/gallon
1R	\$3,000	15 gal.	\$71/gallon
ISM	\$3,000	25 gal.	\$71/gallon
ISB	\$3,000	20 gal.	\$71/gallon
C13	\$3,000	25 gal.	\$71/gallon
T8	\$3,000	35 gal.	\$71/gallon
T9	\$3,000	40 gal.	\$71/gallon
T10	\$3,000	40 gal.	\$71/gallon
T11	\$3,000	28 gal.	\$71/gallon
T12	\$3,000	25 gal.	\$71/gallon
RFWT	\$3,000	7 gal.	\$71/gallon
6V92T	\$3,000	25 gal.	\$71/gallon
M11	\$3,000	20 gal.	\$71/gallon
M11EGR	\$3,000	25 gal.	\$71/gallon
EOAT	\$3,000	12 gal.	\$71/gallon
D6417	\$490***	4 ml.	\$23/sample
GI	\$490***	25 ml.	\$23/sample
D5800	\$490***	100 ml.	\$23/sample
D6082	\$490***	525 ml.	\$31/sample
D874	\$490***	32 ml.	\$23/sample
TEOST	\$490***	130 ml.	\$23/sample
MTEOS	\$490***	17 ml.	\$23/sample
EOEC	\$6100*	750 ml.	\$31/sample
EOFT	\$6100*	290 ml.	\$23/sample
EOWT	\$6100*	290 ml.	\$23/sample
CBT	\$6100*	130 ml.	\$23/sample
HTCBT	\$6100*	130 ml.	\$23/sample
BRT	\$6100*	30 ml.	\$23/sample
L-33-1	apprx \$6575**	1 gal.	\$71/gallon
L-37	apprx \$6575**	1 gal.	\$71/gallon
L-37 Rater	\$305/4 pinions	na	na
L-42-1	apprx \$6575**	1/2 gal.	\$71/gallon
L60-1	apprx \$6575**	8 oz	\$23/sample
HTCT	apprx \$6575**	11 gal.	\$71/gallon
OSCT	apprx \$6575**	750 ml.	\$31/sample
H&M	na	1 qt.	\$31/sample

13 Bench Tests
No LDEOC or
ROBO

* billed annually

** determined based on available stands and billed semi-annually,

*** passing calibration only

contact Ellen Young at 412-365-1018 for current prices

Service Fluid 105 (1 gallon @ \$65/sample -- 5 gallons @ \$50/gal. -- 55 gallons @ \$35/gal.)

Lubricity Fluids (1/2 gal. @ \$35/sample)

PRICES SUBJECT TO CHANGE BY ACTION OF ASTM TEST MONITORING BOARD & SUBCOMMITTEE D02.B



A Program of ASTM International

**2009 Reference Test Fees and Oil Prices
Effective 1/1/2009**

Test Type	Test Fee	Oil Quantity	Oil Price
TCI	\$3,000	2 gal.	\$71/gallon
TCII	\$3,000	1 qt.	\$31/sample
TCIII	\$3,000	2 gal.	\$71/gallon
IIIF	\$3,000	4 gal.	\$71/gallon
IIIG/AB	\$3,980	4 gal.	\$71/gallon
IVA	\$3,000	4 gal.	\$71/gallon
VIB	\$3,000	5 gal.	\$71/gallon
VG	\$3,000	3 gal.	\$71/gallon
VIII	\$3,000	2 gal.	\$71/gallon
1K	\$3,000	10 gal.	\$71/gallon
1N	\$3,000	10 gal.	\$71/gallon
1MPC	\$3,000	10 gal.	\$71/gallon
1P	\$3,000	15 gal.	\$71/gallon
1R	\$3,000	15 gal.	\$71/gallon
ISM	\$3,000	25 gal.	\$71/gallon
ISB	\$3,000	20 gal.	\$71/gallon
C13	\$3,000	25 gal.	\$71/gallon
T8	\$3,000	35 gal.	\$71/gallon
T9	\$3,000	40 gal.	\$71/gallon
T10	\$3,000	25 gal.	\$71/gallon
T11	\$3,000	28 gal.	\$71/gallon
T12	\$3,000	25 gal.	\$71/gallon
RFWT	\$3,000	7 gal.	\$71/gallon
6V92T	\$3,000	25 gal.	\$71/gallon
EOAT	\$3,000	12 gal.	\$71/gallon
D6417	\$490***	4 ml.	\$23/sample
GI	\$490***	25 ml.	\$23/sample
D5800	\$490***	100 ml.	\$23/sample
D6082	\$490***	525 ml.	\$31/sample
D874	\$490***	32 ml.	\$23/sample
ROBO	\$490***	300 ml	\$23/sample
TEOST	\$490***	130 ml.	\$23/sample
MTEOS	\$490***	17 ml.	\$23/sample
EOEC	\$6100*	750 ml.	\$31/sample
EOFT	\$6100*	290 ml.	\$23/sample
EOWT	\$6100*	290 ml.	\$23/sample
CBT	\$6100*	130 ml.	\$23/sample
HTCBT	\$6100*	130 ml.	\$23/sample
BRT	\$6100*	30 ml.	\$23/sample
L-33-1	apprx \$6746**	1 gal.	\$71/gallon
L-37	apprx \$6746**	1 gal.	\$71/gallon
L-37 Rater	\$305/4 pinions	na	na
L-42-1	apprx \$6746**	1/2 gal.	\$71/gallon
L60-1	apprx \$6746**	8 oz	\$23/sample
HTCT	apprx \$6746**	11 gal.	\$71/gallon
OSCT	apprx \$6746**	750 ml.	\$31/sample
H&M	na	1 qt.	\$31/sample

14 Bench tests
ROBO added



* billed annually
 ** determined based on available stands and billed semi-annually,
 *** passing calibration only
 contact Ellen Young at 412-365-1018 for current prices
 Service Fluid 105 (1 gallon @ \$65/sample -- 5 gallons @ \$50/gal. -- 55 gallons @ \$35/gal.)
 Lubricity Fluids (1/2 gal. @ \$35/sample)
 PRICES SUBJECT TO CHANGE BY ACTION OF ASTM TEST MONITORING BOARD & SUBCOMMITTEE D02.B



A Program of ASTM International

2010 Reference Test Fees and Oil Prices Effective 1/1/2010



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Group	Test Type	Test Fee	Oil Quantity	Oil Price
Gasoline	IIIF	\$3,000	4 gal.	\$71/gallon
	IIIG/AB	\$3,980	4 gal.	\$71/gallon
	IVA	\$3,000	4 gal.	\$71/gallon
	VIB/VID	\$3,000	5 gal.	\$71/gallon
	VG	\$3,000	3 gal.	\$71/gallon
	VIII	\$3,000	2 gal.	\$71/gallon
Diesel	1K/1N/1MPC	\$3000	10 gal.	\$71/gallon
	1P/1R	\$3000	15 gal.	\$71/gallon
	ISM	\$3000	25 gal.	\$71/gallon
	ISB	\$3000	20 gal.	\$71/gallon
	C13	\$3000	25 gal.	\$71/gallon
	T8	\$3000	35 gal.	\$71/gallon
	T10	\$3000	25 gal.	\$71/gallon
	T11	\$3000	28 gal.	\$71/gallon
	T12	\$3000	25 gal.	\$71/gallon
	RFWT	\$3000	7 gal.	\$71/gallon
	EOAT	\$3000	12 gal.	\$71/gallon
Bench	D6417	\$490 ³	4 ml.	\$23/sample
	GI	\$490 ³	25 ml.	\$23/sample
	D5800	\$490 ³	100 ml.	\$23/sample
	D6082	\$490 ³	525 ml.	\$31/sample
	D874	\$490 ³	32 ml.	\$23/sample
	ROBO	\$490 ³	300 ml	\$23/sample
	TEOST	\$490 ³	130 ml.	\$23/sample
	MTEOS	\$490 ³	17 ml.	\$23/sample
	EOEC	\$6100 ¹	750 ml.	\$31/sample
	LDEOEC	\$6100¹	750 ml.	\$31/sample
	EOFT	\$6100 ¹	290 ml.	\$23/sample
	EOWT	\$6100 ¹	290 ml.	\$23/sample
	CBT	\$6100 ¹	130 ml.	\$23/sample
	HTCBT	\$6100 ¹	130 ml.	\$23/sample
	BRT	\$6100 ¹	30 ml	\$23/sample
	OSCT	~ \$6575 ²	750 ml.	\$31/sample
Gear	L-33-1	~ \$6575 ²	1 gal.	\$71/gallon
	L-37	~ \$6575 ²	1 gal.	\$71/gallon
	L-37 Rater	\$305/4 pinions	na	na
	L-42	~ \$6575 ²	1/2 gal.	\$71/gallon
	L-42 Rater	\$380/4 pinions	na	na
	L60-1	~ \$6575 ²	8 oz	\$23/sample
	HTCT	~ \$6575 ²	11 gal.	\$71/gallon
2-Cycle	TCI	\$3,000	2 gal.	\$71/gallon
	TCII	\$3,000	1 qt.	\$31/sample
	TCIII	\$3,000	2 gal.	\$71/gallon
Misc.	Diesel Fuel Lubricity (DFA & DFB)	na	1/2 gal	\$60/sample
	Service Fluid 105	na	1 gal.	\$65/sample
			5 gallons	\$50/gallon
			55 gallons	\$35/gallon
D6922 -Homogeneity and Miscibility in Automotive Engine Oils	na	1 qt.	\$31/sample	

¹ Billed annually, ² Determined based on available stands and billed semi-annually, ³ Passing calibration tests only
 Prices subject to change by action of ASTM Test Monitoring Board & Subcommittee D02.B
 Contact Ellen Young at 412-365-1018 for more up to date prices ely@astmtmc.cmu.edu

Updated 1/1/2010

**2014 Reference Test Fees and Oil Prices
Effective 1/1/2014**



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Group	TMC Test Type	ASTM D Number	Common Name	Test Fee	Oil Quantity	Oil Price
Gasoline	IIIF	D6984	Sequence IIIF	\$3,000	4 gal.	\$71/gallon
	IIIG/AB	D7320	Sequence IIIG	\$3,980	4 gal.	\$71/gallon
	IVA	D6891	Sequence IVA	\$3,000	4 gal.	\$71/gallon
	VIB/VID	D6837 / D7589	Sequence VIB & VID	\$3,000	5 gal.	\$71/gallon
	VG	D6593	Sequence VG	\$3,000	3 gal.	\$71/gallon
	VIII	D6709	Sequence VIII	\$3,000	2 gal.	\$71/gallon
Diesel	1K/1N & 1MPC	D6750 & D6618	CAT Single Cylinder	\$3000	10 gal.	\$71/gallon
	1P/1R	D6681 / D6923	CAT Single Cylinder	\$3000	15 gal.	\$71/gallon
	ISM & ISB	D7468	Cummins ISM	\$3000	25 gal.	\$71/gallon
	ISB	D7484	Cummins ISB	\$3000	20 gal.	\$71/gallon
	C13	D7546	CAT C13	\$3000	25 gal.	\$71/gallon
	T8/T8E	D5967	T-8	\$3000	35 gal.	\$71/gallon
	T10/T10A	D6987	Mack T-10	\$3000	25 gal.	\$71/gallon
	T11	D7156	Mack T-11	\$3000	28 gal.	\$71/gallon
	T12	D7422	Mack T-12	\$3000	25 gal.	\$71/gallon
	T12A	D7422	Mack T-12A	\$3000	25 gal.	\$71/gallon
	RFWT	D5966	Roller Follower Wear	\$3000	7 gal.	\$71/gallon
	EOAT	D6894	Engine Oil Aeration	\$3000	12 gal.	\$71/gallon
	Bench	D6417	D6417	Volatility by GC	\$490 ³	4 ml.
D6417QC		D6417QC	Volatility by GC – Quality Control	na	130 ml.	\$31/sample
GI		D5133	Gelation Index	\$490 ³	25 ml.	\$23/sample
D5800		D5800	Volatility by Noack	\$490 ³	100 ml.	\$23/sample
D6082		D6082	High Temperature Foam	\$490 ³	525 ml.	\$31/sample
D874		D874	Sulfated Ash	\$490 ³	32 ml.	\$23/sample
D874QC		D874QC	Sulfated Ash – Quality Control	na	1 liter	\$40/sample
ROBO		D7528	Bench Oxidation	\$490 ³	300 ml	\$23/sample
ROBO QC		ROBO QC	Bench Oxidation – Quality Control	na	1 liter	\$40/sample
TEOST		D6335	TEOST	\$490 ³	130 ml.	\$23/sample
MTEOS		D7097	MHT TEOST	\$490 ³	17 ml.	\$23/sample
EOEC		D7216	Automotive Elastomers	\$6100 ¹	750 ml.	\$31/sample
LDEOEC		D7216	GF-5 Automotive Elastomers	\$6100 ¹	750 ml.	\$31/sample
EOFT		D6795	Engine Oil Filterability	\$6100 ¹	290 ml.	\$23/sample
EOWT		D6794	Engine Oil Filterability - Water	\$6100 ¹	290 ml.	\$23/sample
CBT		D5968	Corrosion Bench Test	\$6100 ¹	130 ml.	\$23/sample
HTCBT		D6594	High Temperature Corrosion Bench	\$6100 ¹	130 ml.	\$23/sample
BRT		D6557	Ball Rust Test	\$6100 ¹	30 ml	\$23/sample
OSCT		D5662	Oil Seal Compatibility	~ \$6836 ²	750 ml.	\$31/sample
EMULSION		D7563	Emulsion Retention	na	1 liter	\$40/sample

Annual Test Counts

	2009	2010	2011	2012	2013
CBT	45	21	44	39	56
HTCBT	469	441	513	419	625
EOFT	154	188	212	195	244
EOWT	821	1268	1477	1372	1431
BRT	241	289	274	238	293
EOEC	306	180	339	449	469
LDEOC		424	702	701	545
ROBO	113	265	263	227	221
D 874	14	11	12	14	11
D 6417	28	33	34	30	32
GI	63	52	58	48	38
TEOST	32	30	72	42	41
MTEOS	103	119	112	105	133
D5800	77	69	75	63	178
FOAM	23	24	23	23	25
Total	2489	3414	4210	3965	4342

Oil Sample Fee Exhibit I 2015

	Annual Test Count	Sample Fee (\$)		Annual Revenue (\$)	
		Current	Proposed*	Current	Proposed
CBT	58	23	25	1,334	1,450
HTCBT	592	23	25	13,616	14,800
EOFT	234	23	25	5,382	5,850
EOWT	1482	23	25	34,086	37,050
BRT	312	23	25	7,176	7,800
EOEC	482	31	35	14,942	16,870
LDEOC	580	31	35	17,980	20,300
			Total	94,516	104,120

* Sample shipping is through lab shipping accounts

Oil Sample Fee Exhibit II 2015

	Annual Test Count	Sample Fee (\$)		Annual Revenue (\$)	
		Current	Proposed*	Current	Proposed
ROBO	190	23	25	4,370	4,750
D 874	12	23	25	276	300
D 6417	36	23	25	828	900
GI	38	23	25	874	950
TEOST	34	23	25	782	850
MTEOS	166	23	25	3,818	4,150
EVLO	64	23	25	1,472	1,600
FOAM	25	31	35	775	875
			Total	19,758	21,510

* Sample shipping is through lab shipping accounts

Oil Sample Fee Summary 2015

	Sample Fee (\$)		Annual Revenue (\$)	
	Current	Proposed	Current	Proposed
Exhibit I	23/31	25/35	94,516	104,120
Exhibit II	23/31	25/35	13,195	14,375
		Total	107,711	118,495

Test Fee Consideration

- Should all bench tests have the same review fee or should the test fees be adjusted on a test areas basis to maintain the current revenue distribution?

Invoicing Considerations

- CBT, HTCBT, EOFT, EOWT, BRT, LDEOC and EOEC are billed on an annual basis because yearly test counts are typically 200-1500.
- Labs feel an annual billing model keeps invoicing costs down for these tests.
- Remaining bench test areas have counts less than 200 /year and are billed on a per test basis.

Current Test Fees

	Annual		Cost/Test (\$)
	Test Count	Revenue (\$)	Current
CBT	58	12,200	210
HTCBT	592	36,600	62
EOFT	234	24,400	104
EOWT	1482	24,400	16
BRT	312	18,300	59
EOEC	482	24,400	51
LDEOC	580	24,400	42
ROBO	190	74,480	490
D 874	12	5,390	490
D 6417	36	14,210	490
GI	44	15,680	490
TEOST	34	15,190	490
MTEOS	226	66,150	490
EVLO	282	26,460	490
FOAM	26	12,250	490

Average costs

Test Fee Exhibit I 2015

(Annually Billed Tests)

	Labs	Annual Test Count	Test Fee (\$)		Annual Revenue (\$)	
			Current ¹	Proposed ²	Current	Proposed
CBT	2	58	6100	75	12,200	4,350
HTCBT	6	592	6100	75	36,600	44,400
EOFT	4	234	6100	75	24,400	17,550
EOWT	4	1482	6100	75	24,400	111,150
BRT	3	312	6100	75	18,300	23,400
EOEC	4	482	6100	75	24,400	36,150
LDEOC	5	580	6100	75	24,400	43,500
					164,700	280,500

¹Annual per lab fee

² Per test fee

Test Fee Exhibit II 2015

(Billed per Test)

	Annual Test Count	Test Fee (\$)		Annual Revenue (\$)	
		Current	Proposed *	Current	Proposed
ROBO	190	490	500	74,480	95,000
D 874	12	490	500	5,390	6,000
D 6417	36	490	500	14,210	18,000
GI	38	490	500	15,680	19,000
TEOST	34	490	500	15,190	17,000
MTEOS	166	490	500	66,150	83,000
EVLO	64	490	500	26,460	32,000
FOAM	25	490	500	12,250	12,500
				229,810	282,500

* All operationally valid tests are billed

Test Fee Exhibit III 2015

	Annual		Cost/Test (\$)	
	Test Count	Revenue (\$)	Current	Proposed
CBT	58	12,200	210	75
HTCBT	592	36,600	62	75
EOFT	234	24,400	104	75
EOWT	1482	24,400	16	75
BRT	312	18,300	59	75
EOEC	482	24,400	51	75
LDEOC	580	24,400	42	75
ROBO	190	74,480	490	500
D 874	12	5,390	490	500
D 6417	36	14,210	490	500
GI	44	15,680	490	500
TEOST	34	15,190	490	500
MTEOS	226	66,150	490	500
EVLO	282	26,460	490	500
FOAM	26	12,250	490	500

Test Fee Summary 2015

	Test Fee (\$)		Annual Revenue (\$)	
	Current	Proposed *	Current	Proposed
Exhibit I	6100	75	164,700	280,500
Exhibit II	490	500	229,810	282,500
		Total	394,510	563,000

* All operationally valid tests are billed

Overall 2015

	Annual Revenue (\$)	
	Current *	Proposed
Oil Sample	107,711	118,495
Test Fees	394,510	563,000
Income	502,221	681,495
Expenses	791,904	791,904
Net	-289,683	-110,409

*Based on test count and not actual

3-Year Plan

	Annual Revenue (\$)			
	Current *	2015	2016	2017
Oil	107,711	118,495	140,020	161,545
Test Fees	394,510	563,000	619,100	656,500
Income	502,221	681,495	759,120	818,045
Expenses	791,904	791,904	807,742	823,897
Net	-289,683	-110,409	-48,622	-5,852

*Based on test count and not actual.

3-Year Oil Sample Fee Exhibit I

	Annual Test Count	Sample Fee (\$)			Annual Revenue (\$)		
		Proposed			Proposed		
		2015	2016	2017	2015	2016	2017
CBT	58	25	30	35	1,450	1,740	2,030
HTCBT	592	25	30	35	14,800	17,760	20,720
EOFT	234	25	30	35	5,850	7,020	8,190
EOWT	1482	25	30	35	37,050	44,460	51,870
BRT	312	25	30	35	7,800	9,360	10,920
EOEC	482	35	40	45	16,870	19,280	21,690
LDEOC	580	35	40	45	20,300	23,200	26,100
				Total	104,120	122,820	141,520

3-Year Oil Sample Fee Exhibit II

	Annual Test Count	Proposed Sample Fee (\$)			Annual Revenue (\$)		
		2015	2016	2017	2015	2016	2017
ROBO	190	25	30	35	4,750	5,700	6,650
D 874	12	25	30	35	300	360	420
D 6417	36	25	30	35	900	1,080	1,260
GI	38	25	30	35	950	1,140	1,330
TEOST	34	25	30	35	850	1,020	1,190
MTEOS	166	25	30	35	4,150	4,980	5,810
EVLO	64	25	30	35	1,600	1,920	2,240
FOAM	25	35	40	45	875	1,000	1,125
				Total	14,375	17,200	20,025

3-Year Oil Sample Fee Summary

	Proposed Sample Fee (\$)			Annual Revenue (\$)		
	2015	2016	2017	2015	2016	2017
Exhibit I	25/35	30/40	35/45	104,120	122,820	141,520
Exhibit II	25/35	30/40	35/45	14,375	17,200	20,025
			Total	118,495	140,020	161,545

3-Year Test Fee Exhibit I

	Annual Test Count	Test Fee (\$)			Annual Revenue (\$)		
		2015	2016	2017	2015	2016	2017
CBT	58	75	90	100	4,350	5,220	5,800
HTCBT	592	75	90	100	44,400	53,280	59,200
EOFT	234	75	90	100	17,550	21,060	23,400
EOWT	1482	75	90	100	111,150	133,380	148,200
BRT	312	75	90	100	23,400	28,080	31,200
EOEC	482	75	90	100	36,150	43,380	48,200
LDEOC	580	75	90	100	43,500	52,200	58,000
					280,500	336,600	374,000

3-Year Test Fee Exhibit II

	Annual Test Count	Test Fee (\$)			Annual Revenue (\$)		
		2015	2016	2017	2015	2016	2017
ROBO	190	500	500	500	95,000	95,000	95,000
D 874	12	500	500	500	6,000	6,000	6,000
D 6417	36	500	500	500	18,000	18,000	18,000
GI	38	500	500	500	19,000	19,000	19,000
TEOST	34	500	500	500	17,000	17,000	17,000
MTEOS	166	500	500	500	83,000	83,000	83,000
EVLO	64	500	500	500	32,000	32,000	32,000
FOAM	25	500	500	500	12,500	12,500	12,500
					282,500	282,500	282,500

* All operationally valid tests are billed

3-Year Test Fee Summary

	Test Fee (\$)			Annual Revenue (\$)		
	2015	2016	2017	2015	2016	2017
Exhibit I	75	90	100	280,500	336,600	374,000
Exhibit II	500	500	500	282,500	282,500	282,500
			Total	563,000	619,100	656,500

* All operationally valid tests are billed

3-Year Summary

	Annual Revenue (\$)		
	2015	2016	2017
Oil Sample	118,495	140,020	161,545
Test Fees	563,000	619,100	656,500
Income	681,495	759,120	818,045
Expenses	791,904	807,742	823,897
Net	-110,409	-48,622	-5,852

* The Executive Committee will periodically review the fee structure and make changes as necessary.