

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

#### Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

Chairman: KENNETH O. HENDERSON, Cannon Instrument Co., 2139 High Tech Road, State College, PA 16803,

(814) 353-8000, Fax: (814) 353-8007, e-mail: kenohenderson@worldnet.att.net

First Vice-Chairman: BEN R. BONAZZA, TI Group Automotive Systems, Caro Research Center, 326 Green Street, Caro, MI, 48723

(989) 673-8181 ext. 227, Fax: (989) 673-3241, e-mail: bbonazza@us.tiauto.com

Second Vice-Chairman: JANET L. LANE, ExxonMobil Research & Engrg., 600 Billingsport Rd, Paulsboro, NJ 08066-0480

(856) 224-3302, Fax: (856) 224-3616, e-mail: janet.l.lane@exxonmobil.com

First Secretary: RALPH A. CHERRILLO, Shell Global Solutions (US) Inc., Westhollow Tech Ctr., 3333 Highway 6 South,

Houston, TX 77082 (281) 544-8789, Fax: (281) 544-8150, e-mail: ralph.cherrillo@shell.com

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

Fax: (815) 458-0217, e-mail: macvarlen@aol.com

Staff Manager: DAVID R. BRADLEY, (610) 832-9681, Fax: (610) 832-9668, e-mail: dbradley@astm.org

Issued: March 24, 2009 Reply to: Dan Worcester

Southwest Research Institute

528 Tom Slick Ave San Antonio, TX 78228 Phone: 210.522.2405

Fax: 210.684.7523

Email: dan.worcester@swri.org

The unapproved minutes of the March 12, 2009 Sequence VI Surveillance Panel conference call.

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.

The meeting was called to order at 10:00am by Chairman Charlie Leverett.

#### Agenda

The Agenda is Attachment 1.

#### 1.0 Roll Call

The attendance list is Attachment 2.

### 2.0 Approval of Minutes

The minutes from the 03.05.2009 meeting were not posted.

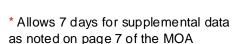
#### 3.0 Action Item Review

- 3.1) The Surveillance Panel will recommend the reference oils to be used for VID tests. (09/10/08) Open.
- 3.2) The Statistical Group will review BL Shift (BLB vs. BLA) after the Precision Matrix Phase II is completed. (10/06/08) Open pending Phase II of Precision Matrix.
- 3.3) The Statistical Group will review outlier criteria after the Precision Matrix Phase II is completed. (01/06/08) Open pending Phase II of Precision Matrix.
- 3.4) The SP is to determine requirements for the next batch of BL by the next Surveillance Panel meeting. Open pending completion of Phase II is currently in Scope & Objectives.
- 3.5) OHT will notify SP when the new engine supply arrived. (12/16/08). The engine build is estimated to start 04.2009 at the GM plant.
- 3.6) The Surveillance Panel will hold weekly conference calls until all issues relater to oil selection are resolved for Phase II. (02/18/09) This will take place through the completion of Phase II.
- 3.7) This was an earlier action item which was dropped and now back into place, Labs should start creating a list of acceptable engine reconditioning practices. The SP will review the list and make final recommendations on parts and actions required. (02/18/09) OPEN
- 3.8) TMC will ship oils A, B, C, D & X to participating labs so they may start the first Phase II run on oils D once the lab is ready. (02/26/09) This is completed.
- 3.9) The SP decide to monitor oil pressure and have the Statistical Group review the complete data set (Phase I & II) to see if oil pressure correlates to performance. (02/26/09) Open until Phase II is completed
- 3.10) It has been recommended that stage weighting be reviewed as part of the Phase I & II analysis. (02/26/09) Open until Phase II is completed
- 3.11) SwRI to supply additional information on orifice blockage in their engine 11B. Done
- 3.12) SwRI will supply BL data on engine 11B prior to and after the re-assembly of the engine. They should also re-install the original tensioner on this engine prior to final assembly. (03/05/09)
- 3.13) Labs should review the Oberg filters and determine if we need to modify to determine to detect them in a by-pass mode. (03/05/09) We will have additional discussions today in the Old Business Section (4.2) below.
- 3.14) Rich and Charlie will pull the VIB engine survey from 2007 and determine how many labs requested engines. (03/05/09) Rich has supplied this information and I will send it to each lab as a reminder.

- 3.15) Charlie will contact AER to see how much reimbursement they want for the special order cams not used. (03/05/09) Completed, AER has valued these cams at \$675 per set I will be contacting the labs concerning the engines they requested on the 2007 survey.
- 3.16) Charlie will send out a schedule of upcoming meeting. (03/05/09) Completed but may be changed.
- 3.17) Bill Busher will arrange room rate at the Sea World Marriott for April 14 & 15 SP meeting to be hosted by SwRI. (03/05/09)
- 3.18) ExxonMobil will supply BL data on engine 11B prior to and after the re-assembly of the engine. (03/05/09)
- 4.0 Old Business
- 4.1) Timeline Update (as-of 02/26/09) shown below:

## Estimated Timeline for Completion of VID PM and Issuance of Research Report as-of 2/26/09

Phase I Completion 3/10/2009	Data Start review Phase II completed Oil 1 by SG 3/10/2009 3/16/2008	SP Conference Call to discuss SG data review & oils 2 & 3 selection 3/17/2008	Start Phase II Oil 2 3/17/2008	Start of Phase II Oil 3 3/24/2009	* All Data in for review by SG 4/7/2009	SG Reports data review to VI SP 4/14/2009	Issue Research Report 4/21/2009
------------------------------------	--	--	---	--	--	--	--



4.2) Oil pressure by-pass at the external Oberg filters - I believe we could drill & tap the plug that holds the spring in place to detect if the filter is in by-pass (seeing a pressure reading), OHT is looking into obtaining additional plugs if we decide to pursue this option. The other option is the tail-tail light, Guy mentioned due to it being brass it may not be wise to have it in contact with the oil, but it would only be in contact if in the by-pass mode. The question is does the SP want to pursue either option and if we do we need to establish guidelines on what we do if by-pass was to occur during a test. It was decided the gasket material was lodged in the engine, and there will be no further action on this item.

#### 5.) New Business

5.1) The VID Precision Matrix Test on Oil D at SwRI was invalid because of a torque system failure. The torque was offset 8.5 NM at EOT with a corresponding shift in MAP. This resulted in a 4.64% BLS. The load cell/load amp are being investigated. Afton has also noted dyno problems on this test, and asked that other labs watch for possible issues.

They were going to run oil "D" as the first run in Phase II so after a discussion with Rich and Charlie it was decided that they continue with this oil.

The SP needs to determine how to handle this, due to them getting compensated for tests run in Phase I this test can not be omitted, some options are:

- a. Run oil D at the completion of the rerun of the invalid test from Phase I to stay on the original schedule.
- b. Repeat oil D at the completion of Phase II.
- c. Use one of the three runs in Phase II to obtain an additional data on one of the other two reference oils selected.

The contract is worded that Phase II can begin at the completion of the last Phase I test, so SwRI will repeat the last run as Phase I.

5.3) For, reference Oil Selection (oils 2 & 3), are there any comments at this time? We will hold a call on Tuesday of next week (03/17/09 @ 10:00 CDT) to get the recommendation from the Statistical Group.

MOTION: The timeline will be moved back one week to allow analysis time for the STAT Group.

Charlie Leverett/George Szappanos 11 for, none against, and one waive.

ACTION: Charlie Leverett will confirm Tracey King's vote.

5.4) Based on the above motion, the face to face meeting will move to the STAT Group on 04.21 and the Surveillance Panel on 04.21 in the afternoon, and the morning of the 22<sup>nd</sup>. All would be held in Detroit.

ACTION: Bill Buscher will work with Ben Weber on meeting rooms for ILSAC and PCEOCP as those group meeting will now move to the following week. ILSAC would need the released Research Report for their meeting. Jim Linden has agreed to supply a meeting room at GM.

The meeting adjourned at 10:58am.

# ATTACHMENT ONE

## Sequence VI Surveillance Panel Conference Call

Thursday March 12, 2009

@ 10:00 AM CST

Call-in Number is: 866-298-0814

Conference Code: 2709134

# **Agenda**

#### <u>1.0) Roll Call</u>

### 2.0) Approval of minutes

2.1) Approve the minutes from 03/05/09 conference call.

#### 3.0) Action Item Review

- 3.1.) The Surveillance Panel will recommend the reference oils to be used for VID tests. (09/10/08) Open
- 3.2) The Statistical Group will review BL Shift (BLB vs. BLA) after the Precision Matrix Phase II is completed. (10/06/08) Open pending Phase II of Precision Matrix
- 3.3) The Statistical Group will review outlier criteria after the Precision Matrix Phase II is completed. (01/06/08) Open pending Phase II of Precision Matrix
- 3.4) The SP is to determine requirements for the next batch of BL by the next Surveillance Panel meeting. Open pending completion of Phase II is currently in Scope & Objectives.
- 3.5) OHT will notify SP when the new engine supply arrived. (12/16/08). Open as of 03/05/09 the build will occur April 09.
- 3.6) The Surveillance Panel will hold weekly conference calls until all issues relater to oil selection are resolved for Phase II. (02/18/09) Open until Phase II is completed
- 3.7) This was an earlier action item which was dropped and now back into place, Labs should start creating a list of acceptable engine reconditioning practices. The SP will review the list and make final recommendations on parts and actions required. (02/18/09) OPEN

- 3.8) TMC will ship oils A, B, C, D & X to participating labs so they may start the first Phase II run on oils D once the lab is ready. (02/26/09) Completed
- 3.9) The SP decide to monitor oil pressure and have the Statistical Group review the complete data set (Phase I & II) to see if oil pressure correlates to performance. (02/26/09) Open until Phase II is completed
- 3.10) It has been recommended that stage weighting be reviewed as part of the Phase I & II analysis. (02/26/09) Open until Phase II is completed
- 3.11) SwRI to supply additional information on orifice blockage in their engine 11B. Done
- 3.12) SwRI will supply BL data on engine 11B prior to and after the reassembly of the engine. They should also re-install the original tensioner on this engine prior to final assembly. (03/05/09)
- 3.13) Labs should review the Oberg filters and determine if we need to modify to determine to detect them in a by-pass mode. (03/05/09) We will have additional discussions today in the Old Business Section (4.2) below.
- 3.14) Rich and Charlie will pull the VIB engine survey from 2007 and determine how many labs requested engines. (03/05/09) Rich has supplied this information and I will send it to each lab as a reminder.
- 3.15) Charlie will contact AER to see how much reimbursement they want for the special order cams not used. (03/05/09) Completed, AER has valued these cams at \$675 per set I will be contacting the labs concerning the engines they requested on the 2007 survey.
- 3.16) Charlie will send out a schedule of upcoming meeting. (03/05/09) Completed but may be changed.
- 3.17) Bill Busher will arrange room rate at the Sea World Marriott for April 14 & 15 SP meeting to be hosted by SwRI. (03/05/09)
- 3.18) ExxonMobil will supply BL data on engine 11B prior to and after the re-assembly of the engine. (03/05/09)

## 4.) Old Business

4.1) Timeline Update (as-of 02/26/09) shown below:

Estimated Timeline for Completion of VID PM and Issuance of Research Report as-of 2/26/09

Phase I Completion	Start Phase II Oil 1 (VID-D)	Data review completed by SG	SP Conference Call to discuss SG data review & oils 2 & 3 selection	Start Phase II Oil 2	Start of Phase II Oil 3	* All Data in for review by SG	SG Reports data review to VI SP	Issue Research Report
3/10/2009	3/10/2009	3/16/2008	3/17/2008	3/17/2008	3/24/2009	4/7/2009	4/14/2009	4/21/2009

\* Allows 7 days for supplemental data as noted on page 7 of the MOA

4.2) Oil pressure by-pass at the external Oberg filters - I believe we could drill & tap the plug that holds the spring in place to detect if the filter is in by-pass (seeing a pressure reading), OHT is looking into obtaining additional plugs if we decide to pursue this option. The other option is the tail-tail light, Guy mentioned due to it being brass it may not be wise to have it in contact with the oil, but it would only be in contact if in the by-pass mode. The question is does the SP want to pursue either option and if we do we need to establish guidelines on what we do if by-pass was to occur during a test.

#### 5.) New Business

5.1) The VID Precision Matrix Test on Oil D at SwRI was invalid because of a torque system failure. The torque was offset 8.5 NM at EOT with a corresponding shift in MAP. This resulted in a 4.64% BLS. The load cell/load amp are being investigated.

They were going to run oil "D" as the first run in Phase II so after a discussion with Rich and Charlie it was decided that they continue with this oil.

The SP needs to determine how to handle this, due to them getting compensated for tests run in Phase I this test can not be omitted, some options are:

- a. Run oil D at the completion of the rerun of the invalid test from Phase I to stay on the original schedule.
- b. Repeat oil D at the completion of Phase II.

- c. Use one of the three runs in Phase II to obtain an additional data on one of the other two reference oils selected.
- 5.2) From the decision above how does this change the timeline?
- 5.3) Reference Oil Selection (oils 2 & 3), any comments at this time? We will hold a call on Tuesday of next week (03/17/09 @ 10:00 CDT) to get the recommendation from the Statistical Group.

## 6.) Next Meeting

6.1 We will hold a conference call March \_17\_ @ 10:00 CDT.

## 7.) Meeting Adjourned

# ATTACHMENT TWO

# ASTM SEQUENCE VI SURVEILLANCE PANEL Conference Call 03/12/09

OH Technologies, Inc. P.O. Box 5039 Mentor, OH 44061-5039 General Motors Research & Development 30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC 6555 Penn Ave.	Phone: 440-354-7007 Fax: 440-354-7080 dhbowden@ohtech.com Phone: 586-986-1888 james.l.linden@gm.com Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Jason voting for DB  Present  Gordon voting for AR  Present  Present
P.O. Box 5039 Mentor, OH 44061-5039 General Motors Research & Development 30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 440-354-7080 dhbowden@ohtech.com  Phone: 586-986-1888  james.l.linden@gm.com  Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present  Gordon voting for AR  Present
P.O. Box 5039 Mentor, OH 44061-5039 General Motors Research & Development 30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 440-354-7080 dhbowden@ohtech.com  Phone: 586-986-1888  james.l.linden@gm.com  Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present  Gordon voting for AR  Present
Mentor, OH 44061-5039 General Motors Research & Development 30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Phone: 586-986-1888  james.l.linden@gm.com  Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Gordon voting for AR  Present
General Motors Research & Development 30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Phone: 586-986-1888  james.l.linden@gm.com  Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Gordon voting for AR  Present
30500 Mound Rd./MC 480-106-160 Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053 Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	james.l.linden@gm.com Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Gordon voting for AR Present
Warren, MI 48090-9055 Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053 Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present
Infineum 1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Phone: 908-474- Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present
1900 East Linden Ave. Linden, NJ 07036-0735 Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 908-474-3637  Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present
Linden, NJ 07036-0735  Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC	Phone: 313-845-4068 rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	
Ford Motor Company 21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC	rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	
21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC	rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	
21500 Oakwood Blvd POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC	rromano@ford.com  Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	
POEE Bldg Rm DR 167 MD 44 Dearborn, MI 48121-2053  Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238  ASTM TMC	Phone: 210-647-9422 Fax: 210-523-4607 charlie.leverett@intertek.com	Present
Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 210-523-4607 charlie.leverett@intertek.com	Present
Intertek Automotive Research 5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 210-523-4607 charlie.leverett@intertek.com	Present
5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 210-523-4607 charlie.leverett@intertek.com	Present
5404 Bandera Road San Antonio, TX 78238 ASTM TMC	Fax: 210-523-4607 charlie.leverett@intertek.com	Present
San Antonio, TX 78238 ASTM TMC	charlie.leverett@intertek.com	
ASTM TMC		1
	1	
6555 Penn Ave.	Phone: 412-365-1034	Present
	Fax: 412-365-1047	
Pittsburgh, PA 15206-4489	Dml@tmc.astm.cmri.cmu.edu	
	rimothy.iviiranda@bp.com	
		_
		Present
600 Billingsport Road	Fax: 856-224-3628	
Paulsboro, NJ 08066	mark_r_mosher@exxonmobil.com	
	Phone: 606-329-5708	Present
1		
		Dill vetice for CC
		Bill voting for GS
San Antonio, TX 78228		
Lubrizol	Phone: 440-347-	Present
29400 Lakeland Blvd.	Fax: 440-347-4096	
Wickliffe, OH 44092	George.Szappanos@lubrizol.com	
		Present
		1 Toodin
		Barrand
Chrysier		Present
	tek1@chrysler.com	
Chevron Oronite Company LLC	Phone: 731-5605	Present
	Fax: 731-5621	
Gair Antonio, 170 70220	mode one violite Adoctioni	
ConocoPhillips Lubricants R&D	office 580-767-6894	Present
		1 TOSCIN
rassenger car Engine Oil	-	
	ps.com	
	BP Castrol Lubricants USA 1500 Valley Road Wayne, NJ 07470 ExxonMobil 600 Billingsport Road Paulsboro, NJ 08066 Ashland, Inc. 21st and Front Streets Ashland, KY 41101 Southwest Research Institute (SwRI) 6220 Culebra Road San Antonio, TX 78228 Lubrizol	BP Castrol Lubricants USA 1500 Valley Road Wayne, NJ 07470  ExxonMobil 600 Billingsport Road Phone: 856-224-2132 Fax: 856-224-3628 Paulsboro, NJ 08066 Ashland, Inc. 21st and Front Streets Ashland, KY 41101 Southwest Research Institute (SwRI) 6220 Culebra Road San Antonio, TX 78228 Lubrizol Phone: 440-347- 29400 Lakeland Blvd. Wickliffe, OH 44092 Afton Research Center 500 Spring Street Richmond, VA 23218 Chrysler  Chevron Oronite Company LLC 4502 Centerview Ste. 210 San Antonio, TX 78228  ConocoPhillips Lubricants R&D  Phone: 973-305-3334 Timothy.Miranda@bp.com Phone: 856-224-2132 Fax: 856-224-3628 mark_r_mosher@exxonmobil.com Phone: 606-329-5708 Fax: 606-329-3009 Tlcaudill@ashland.com Phone: 522-5913 Fax: gstubbs@swri.edu Phone: 440-347- Fax: 440-347-4096 George.Szappanos@lubrizol.com Phone: 804-788-5214 Fax: 804-788-6358 Dave_Glaenzer@ethyl.com Phone: Fax: tek1@chrysler.com  Chevron Oronite Company LLC 4502 Centerview Ste. 210 San Antonio, TX 78228  ConocoPhillips Lubricants R&D  Office 580-767-6894

## ASTM SEQUENCE VI SURVEILLANCE PANEL Conference Call 03/12/09

Conference Call 03/12/09							
Name	Address		Phone/Fax/Email	Attendance			
	<del>-</del>						
<b>Guest Present at me</b>	<u>eting</u>						
Jason & Adam Bowd	on						
John Zalar	E11						
Doyle Boese							
Bill Buscher							
Dan Worcester							
Chris Castanien							
Jerry Wang							
Gordon Farnsworth							
Jo Martinez							
Mike McMillan							
Todd Dvorak							
Thom Smith							
Phil Scinto							
·							