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

Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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

November 28, 2002

Reply to: Richard E. Grundza
ASTM Test Monitoring Center
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Pittsburgh, PA 15206
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Unapproved Minutes of the November 19, 2002 Sequence IVA Surveillance Panel Meeting held in San Antonio, Texas

The meeting was called to order at 1:03 PM by Chairman Bill Buscher. A membership list was circulated for members and quests to sign in. The signed membership list is included as Attachment 1. A copy of the agenda is included as attachment 2. No changes to the membership were reported during this meeting. Minutes from the May 14th, 2002 meeting were approved as written, motion to approve, Bill Buscher, 2nd, Gordon Farnsworth.

Review of Action Items from Previous Meeting

1) 1009 targets, 4 of the 5 labs have reported data, awaiting results from 1 lab.
2) Change in location of the sample valve and modification of oil sampling procedure. Addressed via information letter 02-3
3) Revise temperature calibration frequency specified in test procedure. Addressed via information letter 02-3
4) Solicit input from labs on workshop. Complete, workshop held July 18, 2002.
5) Address calibration requirements for new engines and head replacement. Addressed via information letter 02-3.
6) Identify high and low wear cams for round robin and conduct round robin wear measurements. Ongoing. Cams select and being circulated to laboratories for measurement.

A copy of these action items and their status is included as attachment 3.

TMC Report

Frank Farber presented a summary of the TMC report (see attachment 4). Status of information letters was also addressed. Severity analysis showed severity on target and precision at historic levels. Control charts were in control, though the precision chart was close to the warning limit. Eleven test targets were published for reference oil 1007 on July 19, 2002 and will be updated when 20 and 30 tests are reported. Reference oil 1007 currently has 19 tests reported. Four data points have been reported on reference oil 1009. TMC is working on obtaining the remaining donated test and expects the result to be reported by the end of the year. Bill Buscher presented the average results on the first four results (see attachment 5), both adjusted and unadjusted. The panel agreed to set targets at 5 tests, using adjusted results, and will use this oil for 10% of the reference tests. Motion by Bill Buscher, second, Dan Worcester.

RSI Report

Rick Oliver presented the RSI report for the past six months, which is included as attachment 6. 49 results were reported, with no invalid results. Precision estimates were not made, as there were no replicate runs. RSI measures indicate test was on target for the past six months.

Fuel Supplier Report

Jim Carter presented the Fuels Supplier report (see attachment 7). Usage was 60% of the past six months. Inventory was depleted in the past two weeks. Haltermann requested the panel allow them to blend batches as needed, motion by Jim Carter, second, Gordon Farnsworth. As a further caveat, Haltermann would survey all the labs to determine batch size needed and blend accordingly. Discussion of lead time ensued and Jim explained that the batch would take two weeks to blend and another week to ship. Motion to approve the change in batch creation was passed unanimously.

Test Hardware Report

Bill Buscher gave a status of hardware being used. Five labs are currently running the 2001 hardware. Solicitation for the 2002 hardware was completed in May. Gordon Farnsworth asked if there will be any prove out testing on the new hardware. Bill explained that SWRI generally runs a few donated tests, but no formalized system exists. Bill asked that if any other labs would be moving to the 2002 hardware, that they contact Bill to see if tests can be scheduled before hand to evaluate batches prior to introduction. Bill was also tasked with an action item to assess hardware availability on earlier batches and establish when the shift to 2002 hardware will take place. Bill asked for any feedback on a more formalized system for hardware approval. If defective parts are returned to Nissan, additional hardware will not be provided, but credits will be issued against the purchasers P.O. Nissan is committed to providing hardware through at least 2008.

Engine build Workshop

A review of the engine build workshop was conducted. Labs were able to identify areas were different techniques were being utilized and agreements to standardized were also made. Test part removal and installation techniques were reviewed and cylinder head build was reviewed in detailed. All labs felt that the workshop was useful and helpful. Dave Glaenzer expressed that there were some labs that were installing the cam with test oil rather than EF-411. Bill will work on developing the procedure change to clarify the current wording in the procedure. Bill Buscher was charged with an action item to draft this change and ballot the panel via email.

Sequence IVA Surveillance Panel Meeting
November 19, 2002 San Antonio, TX

Review of Test Method Ballot

Hap Thompson, facilitator for the method, had some comments on the ballot that he required Surveillance Panel input on (Attachment 8). Comments were reviewed form Thomas Rogers. The panel agreed to make the changes noted by Mr. Rogers, with the exception of the last item, which was addressed via information letter 02-3. Some confusion was noted in that Sections 10.2. through 10.2.4 were deleted in the balloted copy, but appear to be necessary. Bill Buscher will initiate a conference call to resolve the discrepancy with regards to Sections 10.2.2 through 10.2.4. The panel agreed to accept Deanne Emory's comments as well as Lyle Bowman's comments and advise Hap to make the changes to resolve these items.

No items of old or new business were noted.

Scope and Objectives were reviewed and the status of each item was briefly discussed.

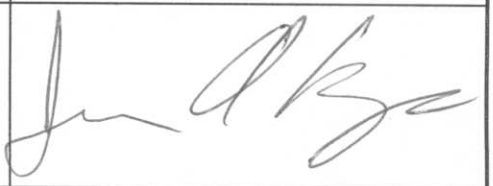
Next meeting will be at the call of the chair. The chair will review the need for a meeting in May approximately March of 2003.

Meeting was adjourned at 3:11 PM, motion by Bill Buscher, second, Jerry Brys.

Attachment 1

MEMBERSHIP
ASTM IVA SURVEILLANCE PANEL

November 19, 2002

NAME	COMPANY-ADDRESS-PHONE-FAX-EMAIL	SIGNATURE
Araiza, Beto	Test Engineering, Inc. 12718 Cimarron Path San Antonio, TX 78249 Phone No.: 210-877-0222 Fax No.: 210-690-1959 Email: baraiza@tei-net.com	
Bowden, Dwight	OH Technologies, Inc. 9300 Progress Parkway P.O. Box 5039 Mentor, OH 44061-5039 Phone No.: 440-354-7007 Fax No.: 440-354-7080 Email: dhbowden@ohtech.com	
Brys, Jerome	Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092 Phone No.: 440-347-2631 / 440-943-1200 Fax No.: ~~440-943-9013~~ 440-347-4096 Email: jabs@lubrizol.com	
Buscher III, Bill	Southwest Research Institute 6220 Culebra Road San Antonio, TX 78238-5166 Phone No.: 210-522-6802 Fax No.: 210-684-7523 Email: wbuscher@swri.edu	
Buscher, Jr., Bill	Buscher Consulting Services P.O. Box 112 Hopewell Jct., NY 12533 Phone No.: 914-897-8069 Fax No.: 914-897-8069 Email: buschwa@aol.com	
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Caudill, Timothy	Ashland Inc. 22nd & Front Streets Ashland, KY 41114 Phone No.: 606-329-5708 Fax No.: 606-329-3009 Email: tlcaudill@ashland.com	
Farnsworth, Gordon	Infineum USA L.P. 1900 E. Linden Avenue Linden, NJ 07036-0536 Phone No.: 908-474-3351 Fax No.: 908-474-3637 Email: gordon.farnsworth@infineum.com	

MEMBERSHIP
ASTM IVA SURVEILLANCE PANEL

November 19, 2002

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Mosher, Mark	ExxonMobil Research & Engineering Co. 600 Billingsport Road P.O. Box 480 Paulsboro, NJ 08066-0480 Phone No.: 856-224-2132 Fax No.: 856-224-3628 Email: mark.r.mosher@exxonmobil.com	
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ASTM IVA SURVEILLANCE PANEL

November 19, 2002

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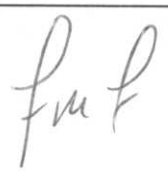
Clark, Sid	General Motors NAO R&D Center 30500 Mound Road – Box 9055 Warren, MI 48090-9055 Phone No.: 810-986-1929 Fax No.: 810-986-2094 Email: sidney.l.clark@gm.com	
Farber, Frank	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 Phone No.: 412-365-1030 Fax No.: 412-365-1047 Email: fmf@astmtmc.cmu.edu	

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November 19, 2002

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Ferner, Mark	Pennzoil / Quaker State Company 1520 Lake Front Circle The Woodlands, TX 77380 Phone No.: 713-363-8190 Fax No.: 713-363-8002 Email:	
Galbraith, Robert	Imperial Oil Limited 453 Christina St. South P.O. Box 3002 Sarnia, Ontar, Canada N7T8C8 Phone No.: Fax No.: Email: rob.galbraith@iol.sprint.com	
Grundza, Rich	ASTM Test Monitoring Center 6555 Penn Avenue Pittsburgh, PA 15206 Phone No.: 412-365-1031 Fax No.: 412-365-1047 Email: reg@astmtmc.cmu.edu	
Hsu, Jeffery	Pennzoil / Quaker State Company 1520 Lake Front Circle (77380) P.O. Box 7569 The Woodlands, TX 77387 Phone No.: 281-363-8177 (1/10/01) Fax No.: 281-363-8002 (1/10/01) Email: JefferyHsu@PZLQS.com	
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Kelly, Jack	Lubrizol Corporation 29400 Lakeland Blvd. Wickliffe, OH 44092 Phone No.: 216-943-1200 Fax No.: Email: jack@lubrizol.com	
Martinez, Jo	Chevron Oronite Company LLC 100 Chevron Way, 60-1211 P.O. Box 1627 Richmond, CA 94802-0627 Phone No.: 510-242-5563 Fax No.: 510-242-1930 Email: jogm@chevrontexaco.com	

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November 19, 2002

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Oliver, Rick	Registration Systems, Inc. 4139 Gardendale, Suite 205 San Antonio, TX 78229 Phone No.: 972-724-2136 Fax No.: 210-341-4038 Email: crickoliver@attbi.com	Rich Oliver
Olree, Robert	GM Powertrain 30500 Mound Road – Box 9055 Warren, MI 48090-9055 Phone No.: 810-947-0069 Fax No.: 810-986-2094 Email: robert.olree@gm.com	
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Rumford, Robert	Haltermann Products 1201 South Sheldon Road Channelview, TX 77530-0429 Phone No.: 281-457-2768 Fax No.: 281-457-1469 Email: rhrumford@dow.com	
Rutherford, Jim	Chevron Oronite Company LLC 100 Chevron Way, 60-1211 P.O. Box 1627 Richmond, CA 94802-0627 Phone No.: 510-242-3410 Fax No.: 510-242-1930 Email: jaru@chevrontexaco.com	
Sciacchitano, Francine	Infineum USA L.P. P.O. Box 536 Linden, NJ 07036 Phone No.: 908-474-2573 Fax No.: 908-474-3363 Email: f.sciacchitano@infineum.com	
Scinto, Phil	Lubrizol Corporation 29400 Lakeland Blvd. Mail Drop 152-A Wickliffe, OH 44092 Phone No.: 440-347-2161 Fax No.: 440-347-9031 Email: prs@lubrizol.com	PRS

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ASTM IVA SURVEILLANCE PANEL

November 19, 2002

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Venier, C.	Pennzoil Products Company P.O. Box 7569 The Woodlands, TX 77387 Phone No.: 281-363-8060 Fax No.: 281-363-8002 Email:	
Weber, Ben	Southwest Research Institute 6220 Culebra Road P.O. Drawer 28510 San Antonio, TX 78228-0510 Phone No.: 210-522-5911 Fax No.: 210-684-7523 Email: bweber@swri.org	Ben Weber
Ying, Lisa	Infineum USA L.P. 1900 East Linden Avenue Linden, NJ 07036 Phone No.: 908-474-3335 Fax No.: 908-474-2298 Email:	
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JON CARLSON	LUBRIZOL Phone No.: Fax No.: Email: JOMC@LUBRIZOL.COM	
CLAYTON T. KNIGHT	TEI Test Engineering, INC. 12718 Cimarron Path S.A. Tx 78249 Phone No.: 210 877 0228 Fax No.: 210 690 1159 Email: CKnight@Tei-net.com	
	Phone No.: Fax No.:	

NON-MEMBER MAILING LIST
ASTM IVA SURVEILLANCE PANEL

November 19, 2002

NAME	COMPANY-ADDRESS-PHONE-FAX-EMAIL	SIGNATURE
	Email:	
	Phone No.: Fax No.: Email:	
	Phone No.: Fax No.: Email:	
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	Phone No.: Fax No.: Email:	
	Phone No.: Fax No.: Email:	
	Phone No.: Fax No.: Email:	
	Phone No.: Fax No.: Email:	

Attachment 2

Sequence IVA Surveillance Panel

San Antonio, Texas
Embassy Suites Hotel
November 19, 2002
1:00 p.m. - 5:00 p.m.

A G E N D A

1.Membership changes

2.Motion and action recorder (Weber) / Secretary (Grundza)

3.Approval of minutes for May 14, 2002 meeting

4.Review action items from last meeting (Buscher)

5.TMC reference oil report (Kasimirsky)

Discuss reference oil targets for 1006-2; 1007; 1009

6.RSI candidate status and precision report (Oliver)

7.Fuel supplier report - KA24E reference fuel (Rumford)

8.Test hardware report (Buscher)

9.Review of engine build workshop (Buscher)

10. Review of IVA procedure ballot (Buscher)

11. Old business

12. New business

13. Review scope and objectives of Surveillance Panel

14. Next meeting

15. Adjourn

Motions & Action Items
IVA Surveillance Panel
May 14, 2002
As Recorded at the Meeting by Ben Weber

1. [Bill Buscher, III and Mike K] Follow the previous 1006-2 motion for bringing in the new category reference oil 1009 by October 1, 2002. Each lab will donate 1 1009 test on a current calibrated test stand, and consequently their stand reference period will be extended by one run. Motion passed unanimously.
   In process. Lab F, A and E1 have reported data. Still waiting on data from the other participating labs.

2. [Bill Buscher, III and Mike K] Change the location of the oil sample valve from the oil filter block to the oil pan drain and modify sections 6.3.12.3 and 11.3.4 appropriately. Motion passed unanimously. Effective June 1, 2002.
   Done. Sequence IVA Information Letter No. 02-3 issued on May 30, 2002.

3. [Dave G. and Bill Buscher] Delete the requirement to calibrate the temperature sensors every 8 tests under section 10.2. Effective May 14, 2002. Motion passed unanimously.
   Done. Sequence IVA Information Letter No. 02-3 issued on May 30, 2002.

4. The test labs are requested to respond to the IVA SP chairman concerning an upcoming June 2002 IVA and VG workshop.
   Done. Sequence IVA build workshop conducted on July 18, 2002.

5. [Bill Buscher and Jerry B] Delete the requirement that a reference oil test be conducted every time the test engine is replaced. The calibration period would be now defined as 15 non-reference oil tests or six months. New engines or cylinder heads may be installed as needed and do not affect stand calibration status. The life of a test engine or cylinder head did not change i.e., a new engine is still required every 16 tests and a new cylinder head is still required every 8 tests. Effective May 14, 2002. Passed unanimously.
   Done. Sequence IVA Information Letter No. 02-3 issued on May 30, 2002.

6. The IVA SP would like to continue round robins using 2 cams with high and low wear for wear measurement consistency amongst the test labs. Test labs are to notify the chair if they have any cams to offer for this round robin. Target date for completion is November 2002.
   In process. High wear and low wear round robin camshafts have been selected and the camshafts are currently circulating through the labs.

ASTM Test Monitoring Center Semiannual Report to the Sequence IVA Surveillance Panel

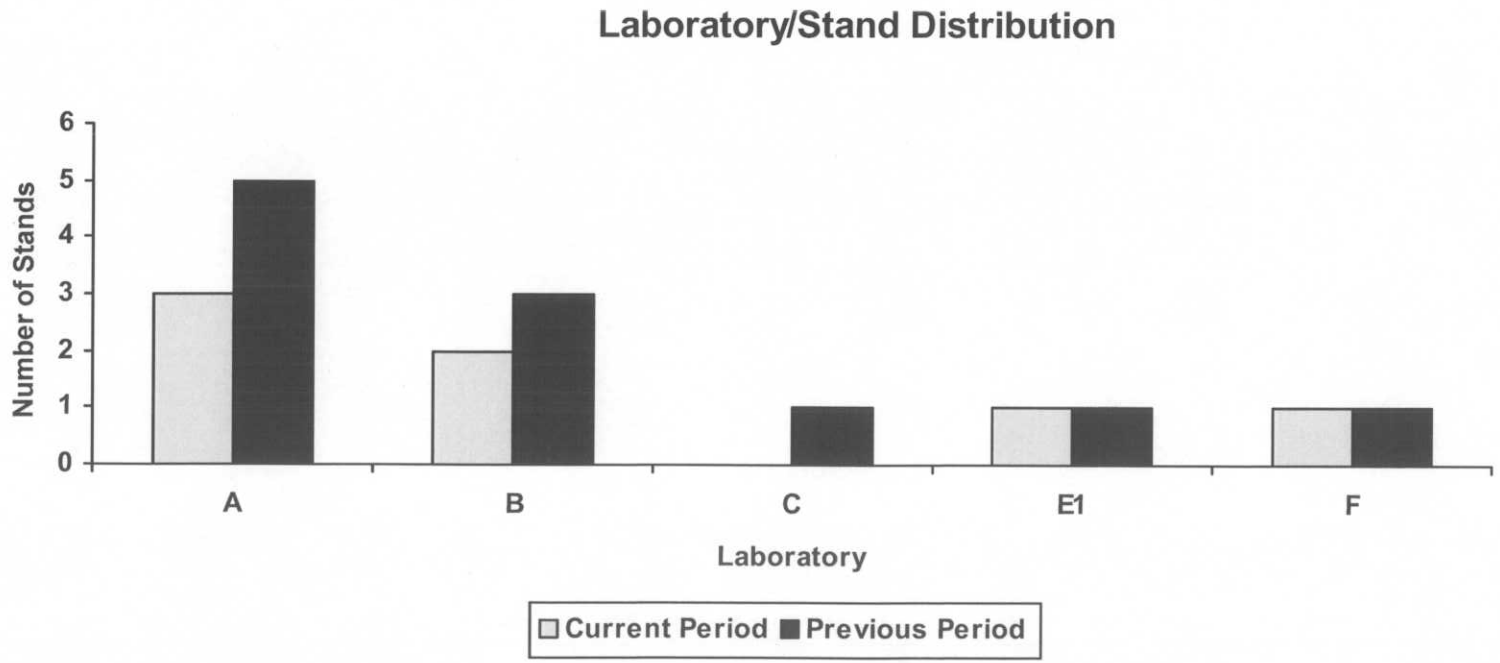
November 19, 2002

San Antonio, Texas

Attachment 4

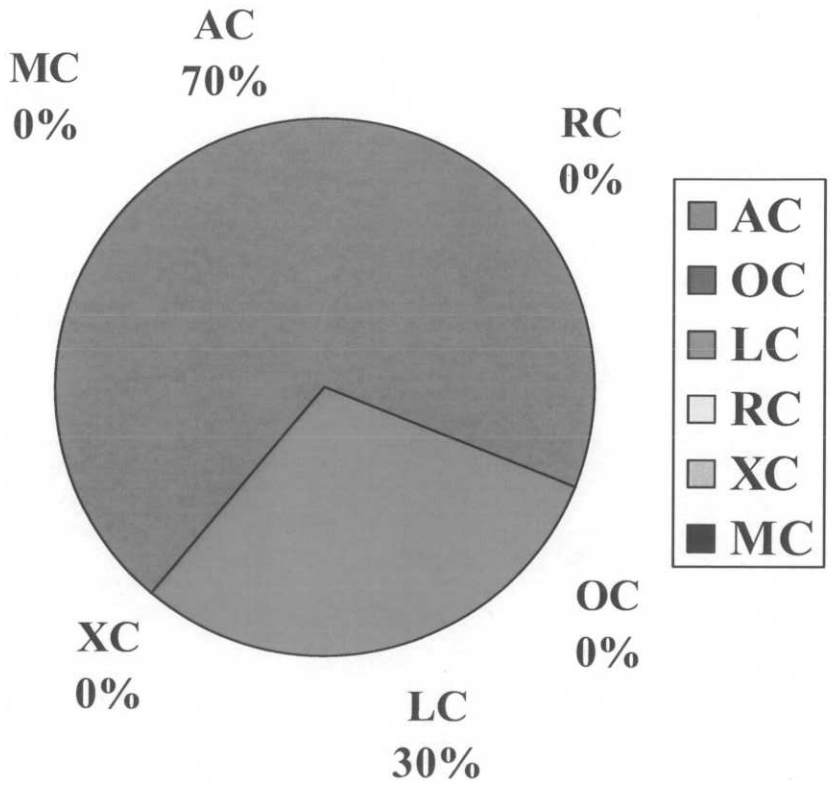
Laboratory/Stand Distribution

	Reporting Data	Calibrated as of September 30, 2002
Number of Laboratories:	4	3
Number of Test Stands:	7	5



Reference Starts

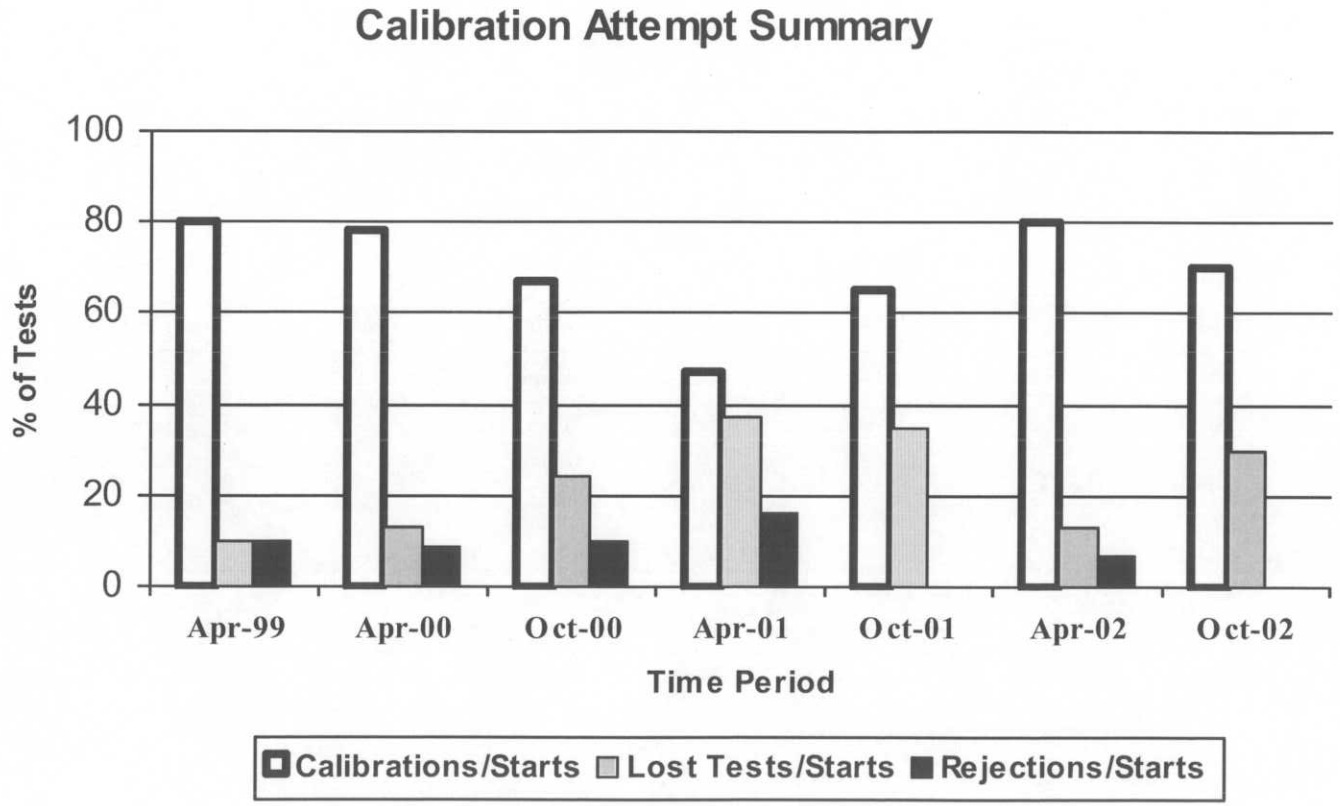
- Total Reference Starts this Period: 10
  - 7 Acceptable Calibration Tests (AC)
  - 0 Unacceptable Calibration Tests (OC)
  - 0 Tests Removed from LTMS - Stand Failed Reference Sequence (MC)
  - 3 Operationally Invalid tests (LC)
  - 0 Aborted Tests (XC)



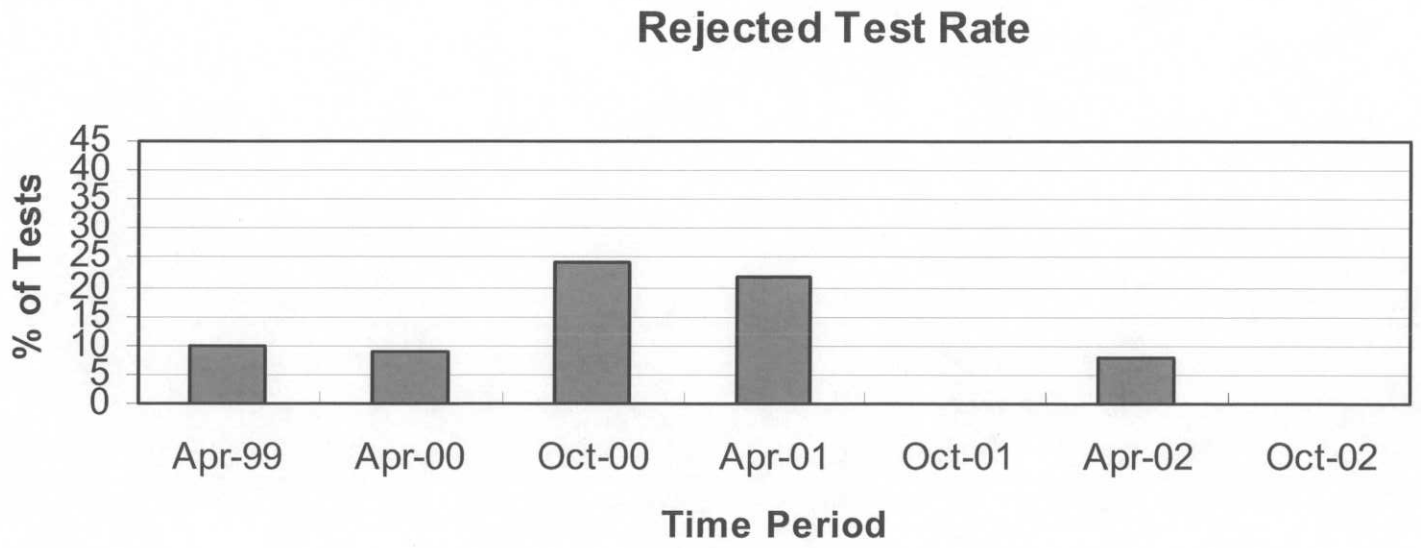
Donated & Industry Support Starts

- Total Donated & Industry Support Starts this Period: 0

Summary of Calibration Attempts



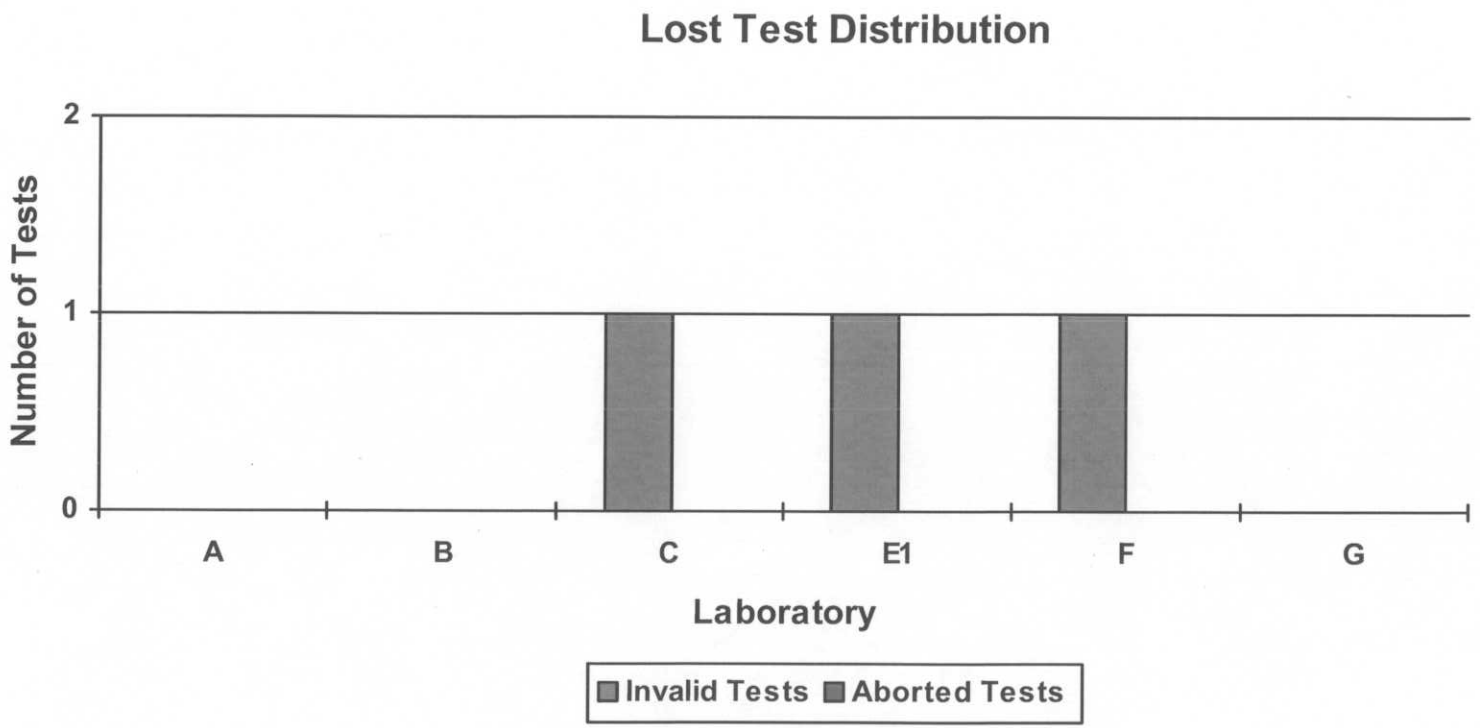
Operationally Valid Tests Rejected



Lost Test Summary

Lab	Reason for Lost Test	Number of Tests	Breakdown of Tests (LC/RC/XC)
F	Coolant Flow Measurement Problems	1	1/0/0
E1	Improper Oil Cylinder Head Thermocouple Installation	1	1/0/0
C	Oil Cylinder Head Thermocouple Calibration Offset	1	1/0/0

Lost Test Distribution



LTMS Deviation Summary

- There were no LTMS deviations written this period.
- There has been one deviation from the LTMS since it's introduction in 1999.

QI Deviations

- There were no QI Deviation written this period.

TMC Lab Visits

- No lab visits were performed this period.

Information Letters

- There was one Sequence IVA Information Letter issued this period.
  - Sequence IVA Information Letter No. 02-3, Sequence No. 9, dated May 30, 2002
    - Change to the oil sample tap location
    - Revisions to the stand calibration requirements
    - Revisions to the stand instrumentation calibration requirements
    - Various editorial corrections.

Industry Severity Summary

Industry Severity Summary

Parameter	Average Δ/s	Pooled standard deviation (degrees of freedom)	Average Δ, in micrometers
ACW	0.000	12.79 (df=4)	0.0

Average Δ/s By Laboratory

ACW Results, by Laboratory

Laboratory	Average Δ/s
A	-0.153
B	0.611
C	–
E1	-1.134
F	0.370

Figure 2 - Sequence IVA Reference Oil Data
Average Camshaft Wear

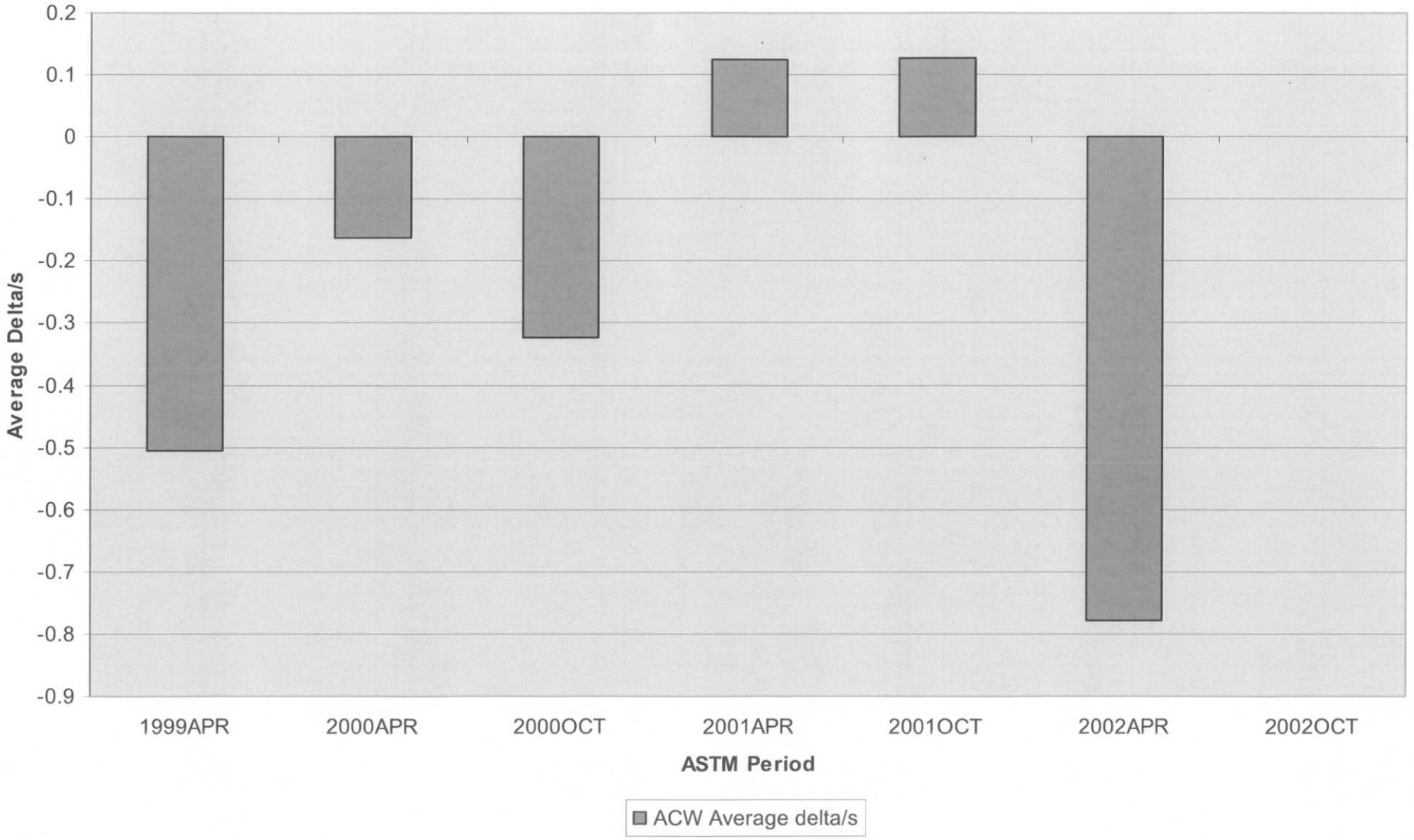
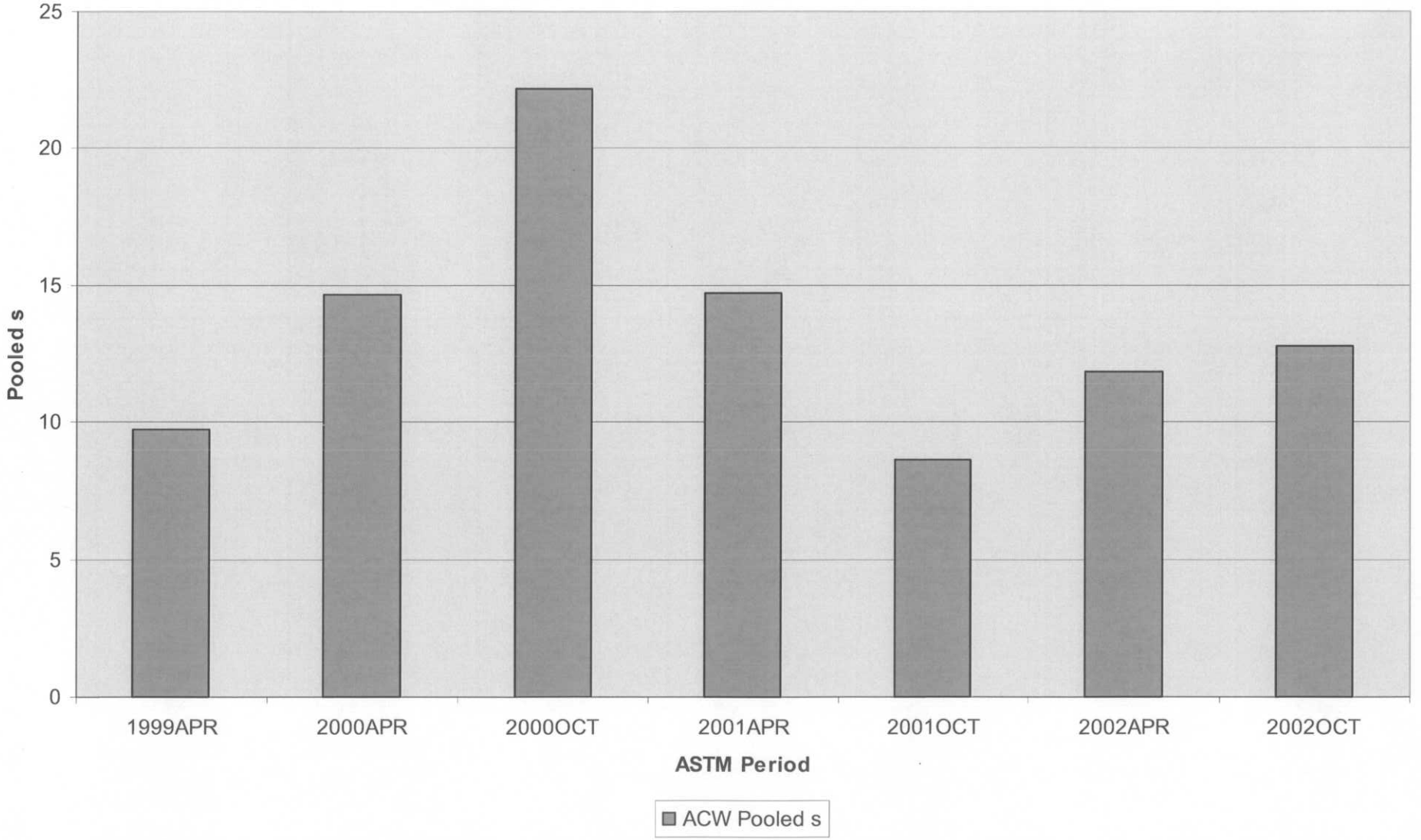


Figure 3 - Sequence IVA Reference Oil Data
Average Camshaft Wear



Hardware

- No hardware changes were made this period.

Industry Reference Oil Inventory

Oil	TMC Inventory, in gallons	TMC Inventory, in tests (4gal/test)	Laboratory Inventory, in tests	Estimated life
1006	45	11	14	1 month or less[1]
1006-2	5,154	1,288	15	3+ years[1]
1007[2]	3,763	940	16	3+ years[1]
1009	1,015	253	10	3+ years[1]

[1] Multiple test area reference oil; total TMC inventory shown

[2] Cannot be reblended

Reference Oil 1006-2

- Test Targets were updated on July 19, 2002, based upon 11 data points.
- Targets are to be updated again at 20, and 30 data points.

Target Set	Mean	Standard Deviation
Initial	88.74	12.50
Updated	90.72	11.16

Reference Oil 1009

- The Surveillance Panel approved a motion to require one donated test per calibrated laboratory on this reference oil for the purposes of test target generation. At this time the TMC has received three data points on this oil. These results are shown below:

Lab	LTMS Date	ACW
F	10/13/02	16.14
A	10/15/02	15.00
E1	10/26/02	14.33
B	11/9/02	24.33

- One other donated test is expected. The Surveillance Panel has approved no plan for introduction of this reference oil at this time.

Reference Oil 1007

- Oil reintroduced into LTMS, using targets based upon 11 data points, in November 2002.
- Targets to be updated when a total of 20 & 30 data points are available.
- As of November 12, 2002, the TMC has 19 data points on this oil (11 original; 8 additional).

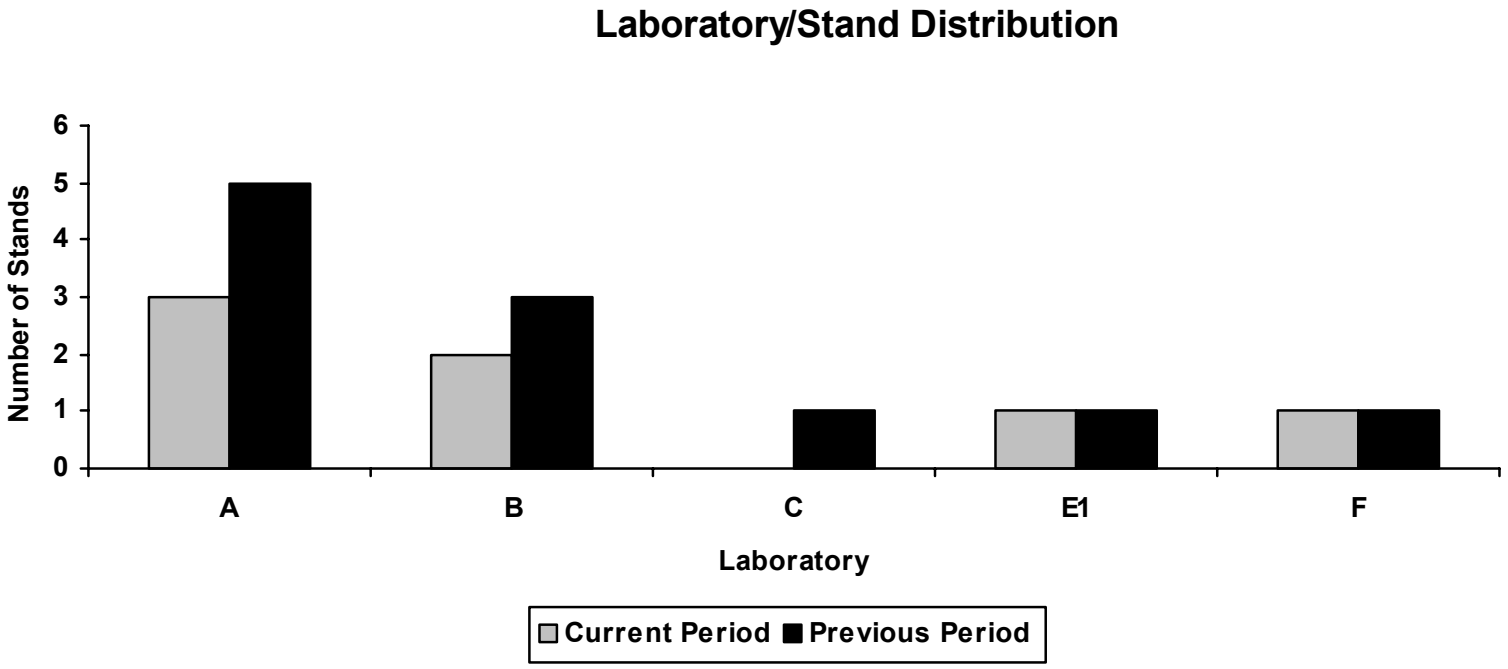
ASTM Test Monitoring Center Semiannual Report to the Sequence IVA Surveillance Panel

November 19, 2002

San Antonio, Texas

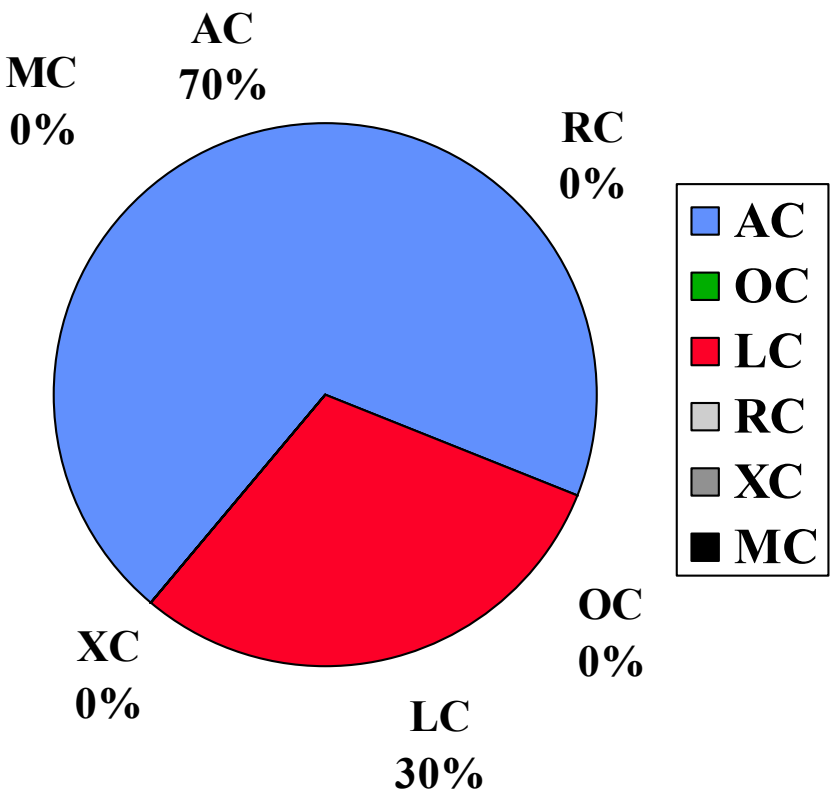
Laboratory/Stand Distribution

	Reporting Data	Calibrated as of September 30, 2002
Number of Laboratories:	4	3
Number of Test Stands:	7	5



Reference Starts

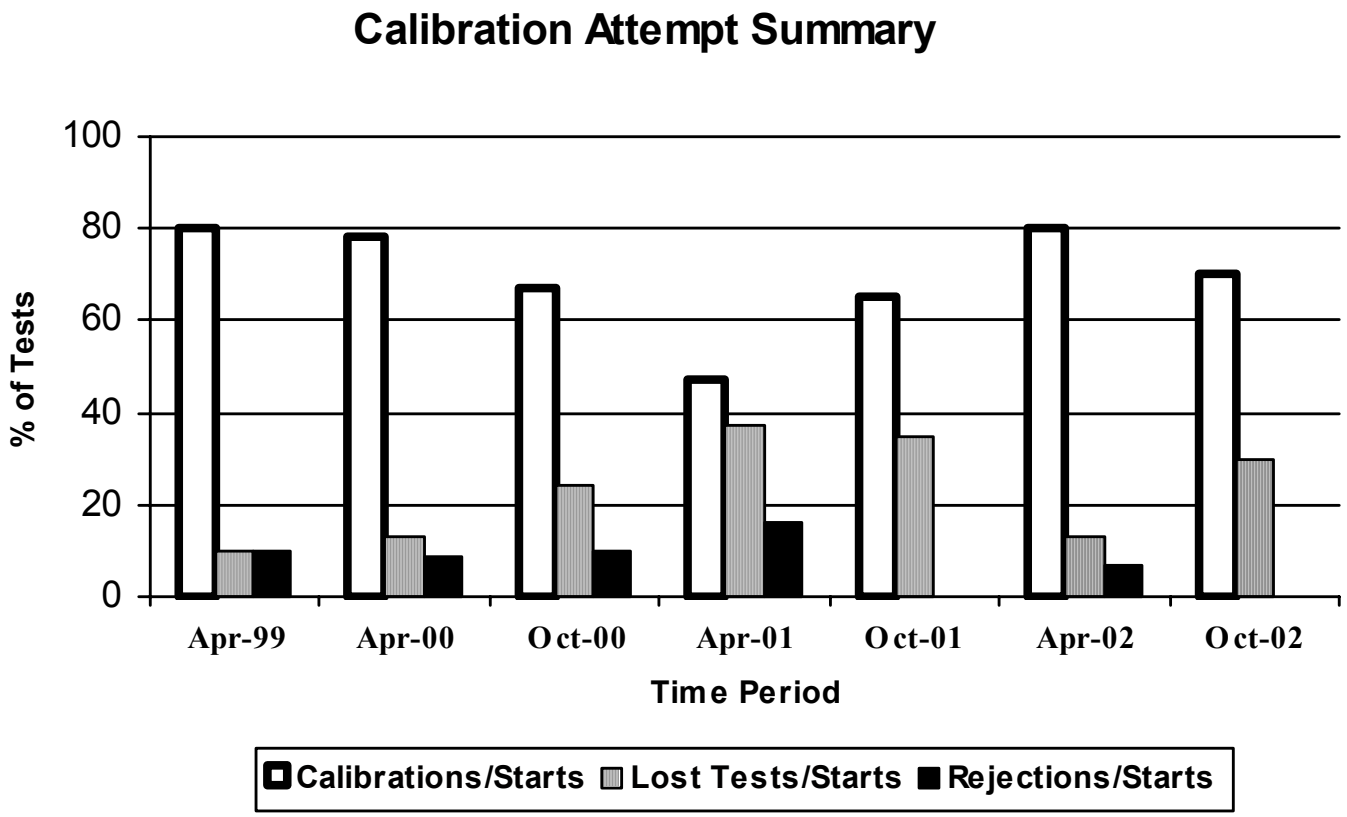
- Total Reference Starts this Period: 10
  - 7 Acceptable Calibration Tests (AC)
  - 0 Unacceptable Calibration Tests (OC)
  - 0 Tests Removed from LTMS - Stand Failed Reference Sequence (MC)
  - 3 Operationally Invalid tests (LC)
  - 0 Aborted Tests (XC)



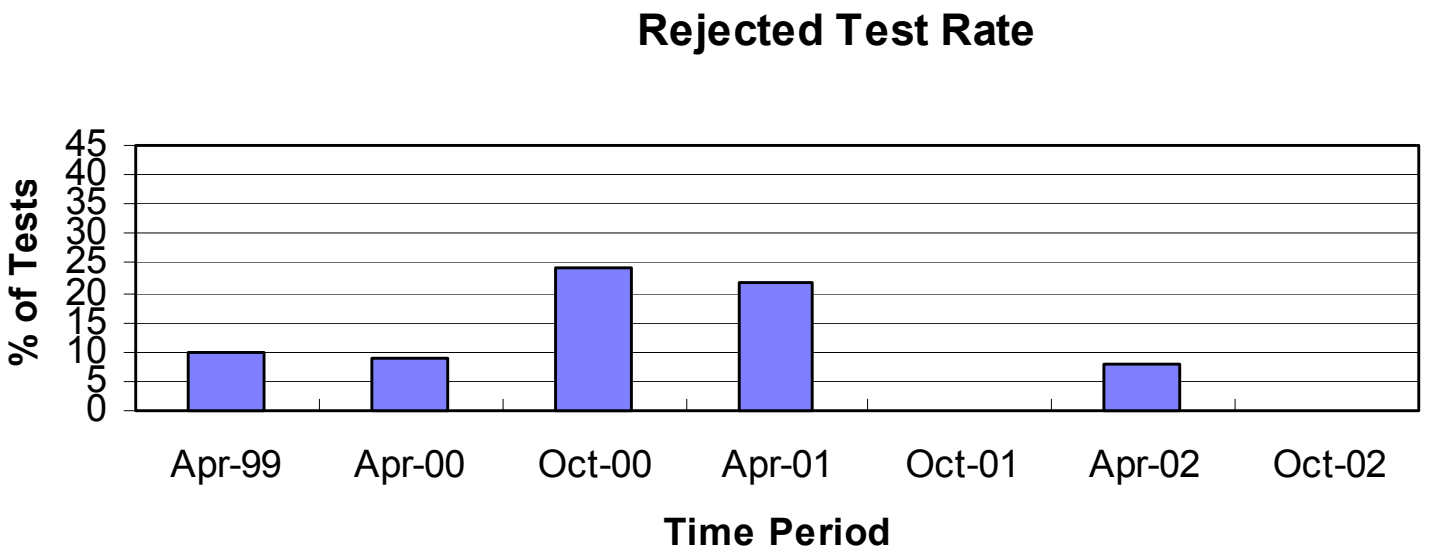
Donated & Industry Support Starts

- Total Donated & Industry Support Starts this Period: 0

Summary of Calibration Attempts



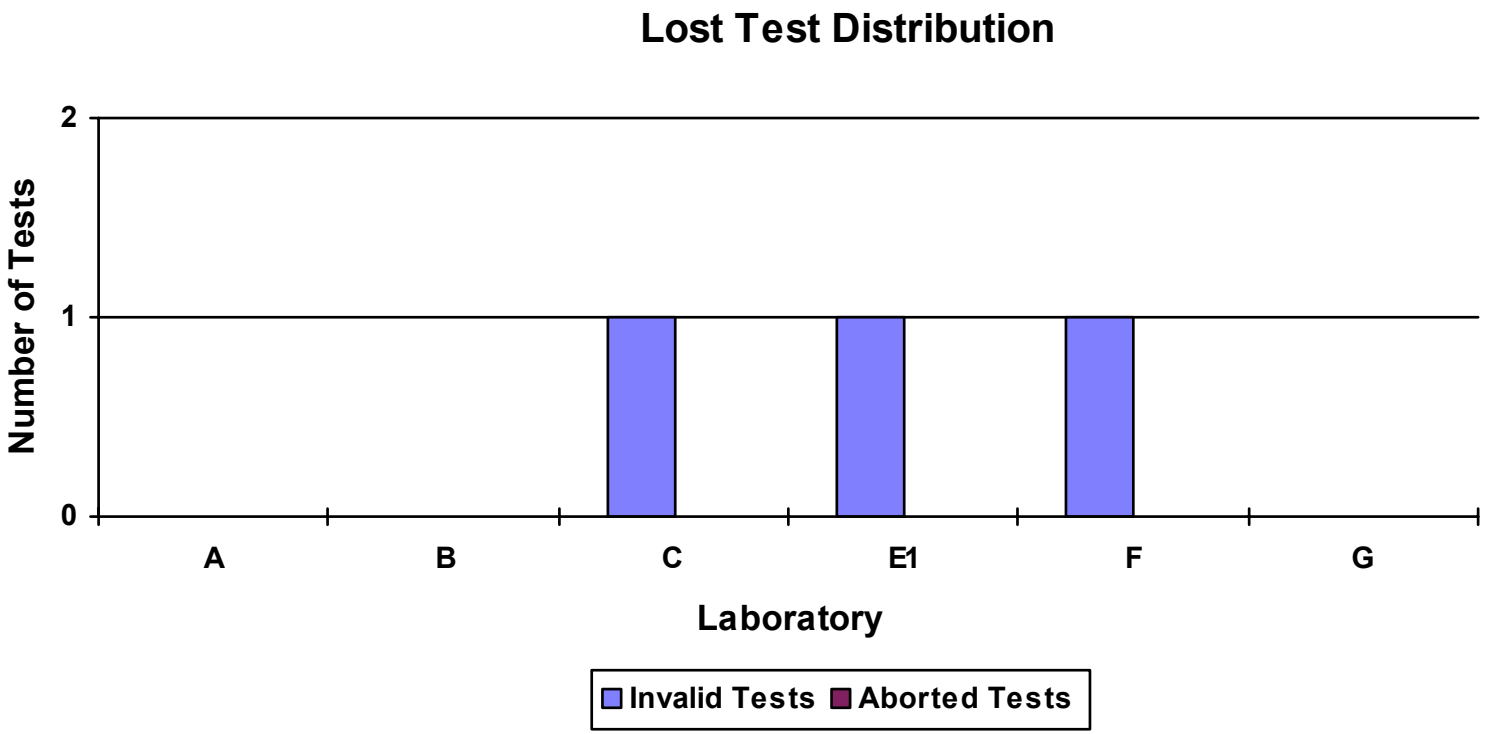
Operationally Valid Tests Rejected



Lost Test Summary

Lab	Reason for Lost Test	Number of Tests	Breakdown of Tests (LC/RC/XC)
F	Coolant Flow Measurement Problems	1	1/0/0
E1	Improper Oil Cylinder Head Thermocouple Installation	1	1/0/0
C	Oil Cylinder Head Thermocouple Calibration Offset	1	1/0/0

Lost Test Distribution



LTMS Deviation Summary

- There were no LTMS deviations written this period.
- There has been one deviation from the LTMS since it's introduction in 1999.

QI Deviations

- There were no QI Deviation written this period.

TMC Lab Visits

- No lab visits were performed this period.

Information Letters

- There was one Sequence IVA Information Letter issued this period.
  - Sequence IVA Information Letter No. 02-3, Sequence No. 9, dated May 30, 2002
    - Change to the oil sample tap location
    - Revisions to the stand calibration requirements
    - Revisions to the stand instrumentation calibration requirements
    - Various editorial corrections.

Industry Severity Summary

Industry Severity Summary			
Parameter	Average Δ/s	Pooled standard deviation (degrees of freedom)	Average Δ, in micrometers
ACW	0.000	12.79 (df=4)	0.0

Average Δ/s By Laboratory

ACW Results, by Laboratory	
Laboratory	Average Δ/s
A	-0.153
B	0.611
C	–
E1	-1.134
F	0.370

Figure 2 - Sequence IVA Reference Oil Data
Average Camshaft Wear

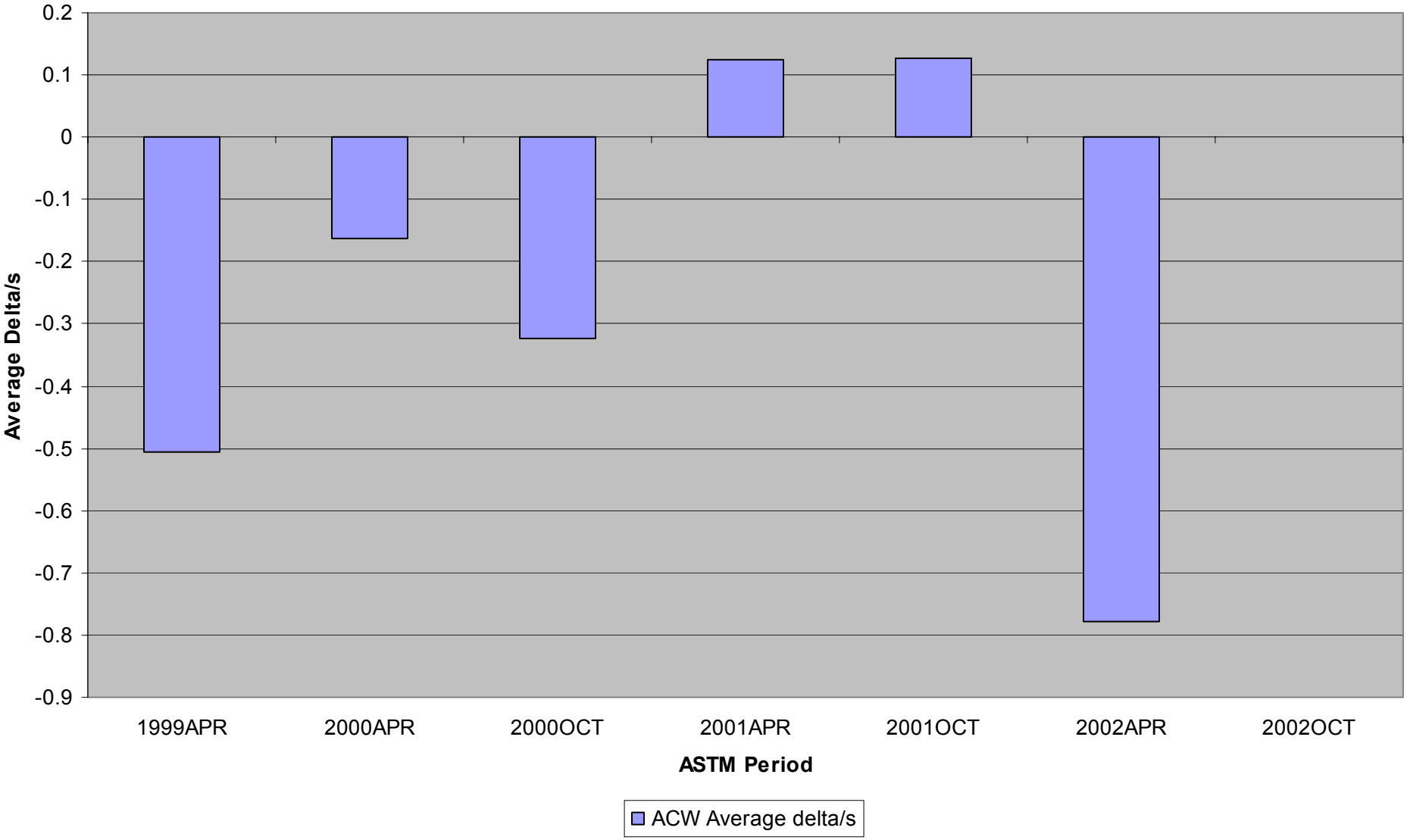
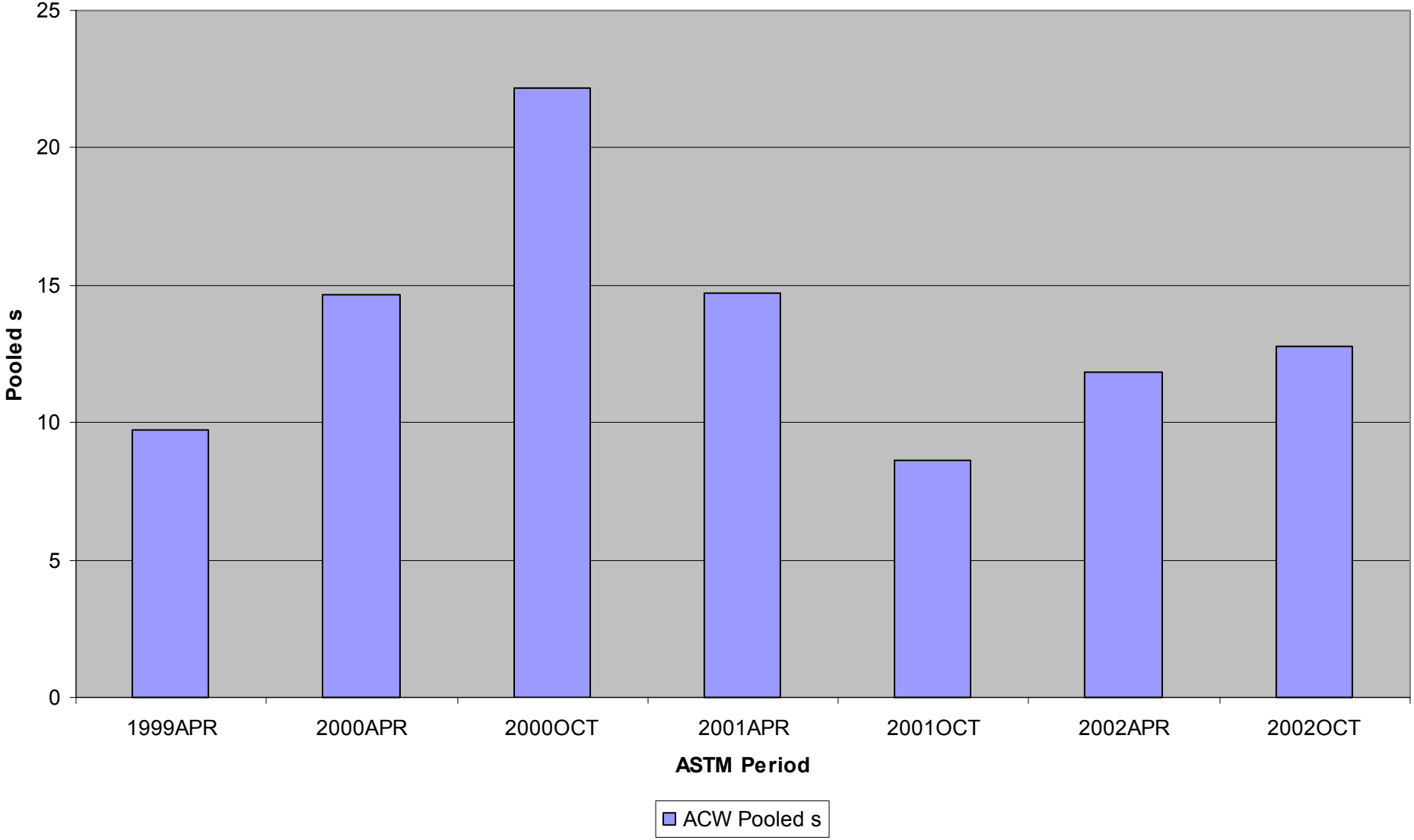


Figure 3 - Sequence IVA Reference Oil Data
Average Camshaft Wear



Hardware

- No hardware changes were made this period.

Industry Reference Oil Inventory

Oil	TMC Inventory, in gallons	TMC Inventory, in tests (4gal/test)	Laboratory Inventory, in tests	Estimated life
1006	45	11	14	1 month or less[1]
1006-2	5,154	1,288	15	3+ years[1]
1007[2]	3,763	940	16	3+ years[1]
1009	1,015	253	10	3+ years[1]

[1] Multiple test area reference oil; total TMC inventory shown
[2] Cannot be reblended

Reference Oil 1006-2

- Test Targets were updated on July 19, 2002, based upon 11 data points.
- Targets are to be updated again at 20, and 30 data points.

Target Set	Mean	Standard Deviation
Initial	88.74	12.50
Updated	90.72	11.16

Reference Oil 1009

- The Surveillance Panel approved a motion to require one donated test per calibrated laboratory on this reference oil for the purposes of test target generation. At this time the TMC has received three data points on this oil. These results are shown below:

Lab	LTMS Date	ACW
F	10/13/02	16.14
A	10/15/02	15.00
E1	10/26/02	14.33
B	11/9/02	24.33

- One other donated test is expected. The Surveillance Panel has approved no plan for introduction of this reference oil at this time.

Reference Oil 1007

- Oil reintroduced into LTMS, using targets based upon 11 data points, in November 2002.
- Targets to be updated when a total of 20 & 30 data points are available.
- As of November 12, 2002, the TMC has 19 data points on this oil (11 original; 8 additional).

Sequence IVA
Donated Reference Oil 1009 Tests

Lab	Raw ACW	Severity-Adjusted ACW	Severity-Adjustment	Cam Batch #
F	16.14	28.01	11.87	010926
A	15.00	15.00	0.00	010926
E1	14.33	23.87	9.54	010926
B	24.33	24.33	0.00	981013
C		0.00		

Industry Raw N = 4	Mean	17.450
	Standard Deviation	4.647
	MIN	9.085
	MAX	25.815

Industry Severity-Adjusted N = 4	Mean	22.803
	Standard Deviation	5.523
	MIN	12.862
	MAX	32.744

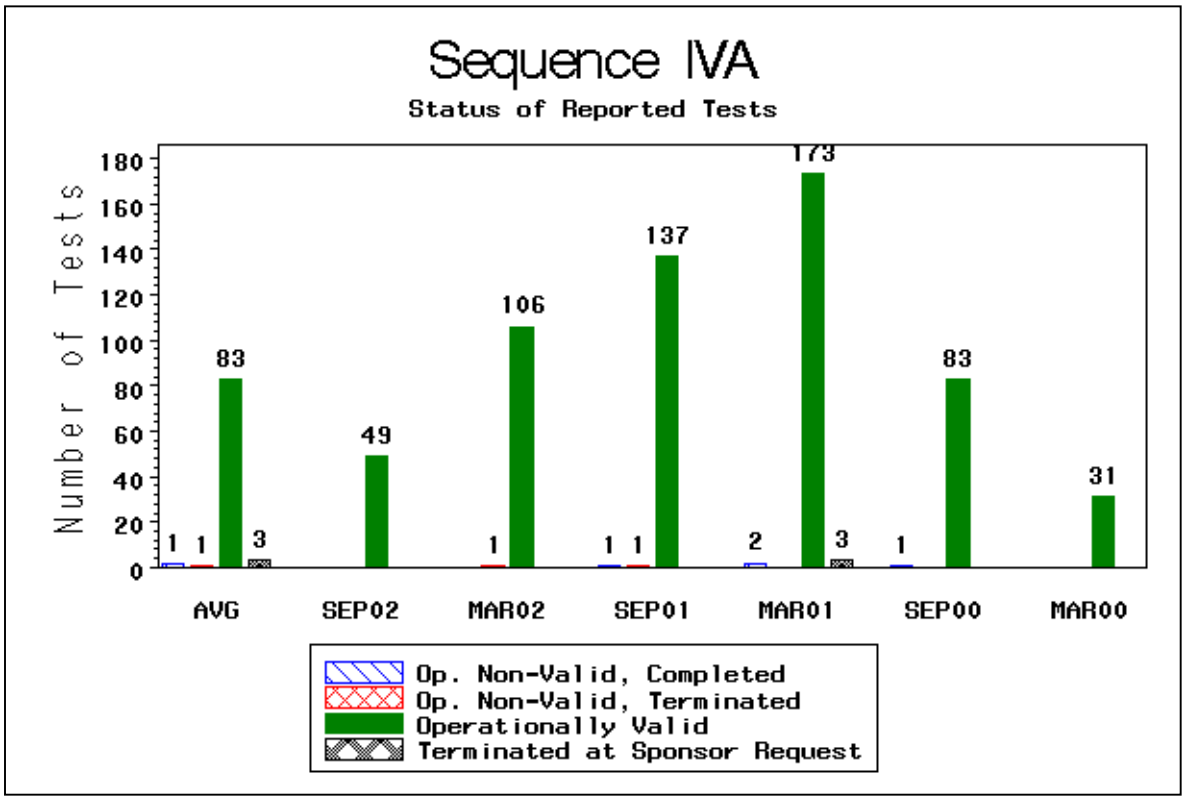
Proposed	Mean	
	Standard Deviation	
	MIN	
	MAX	

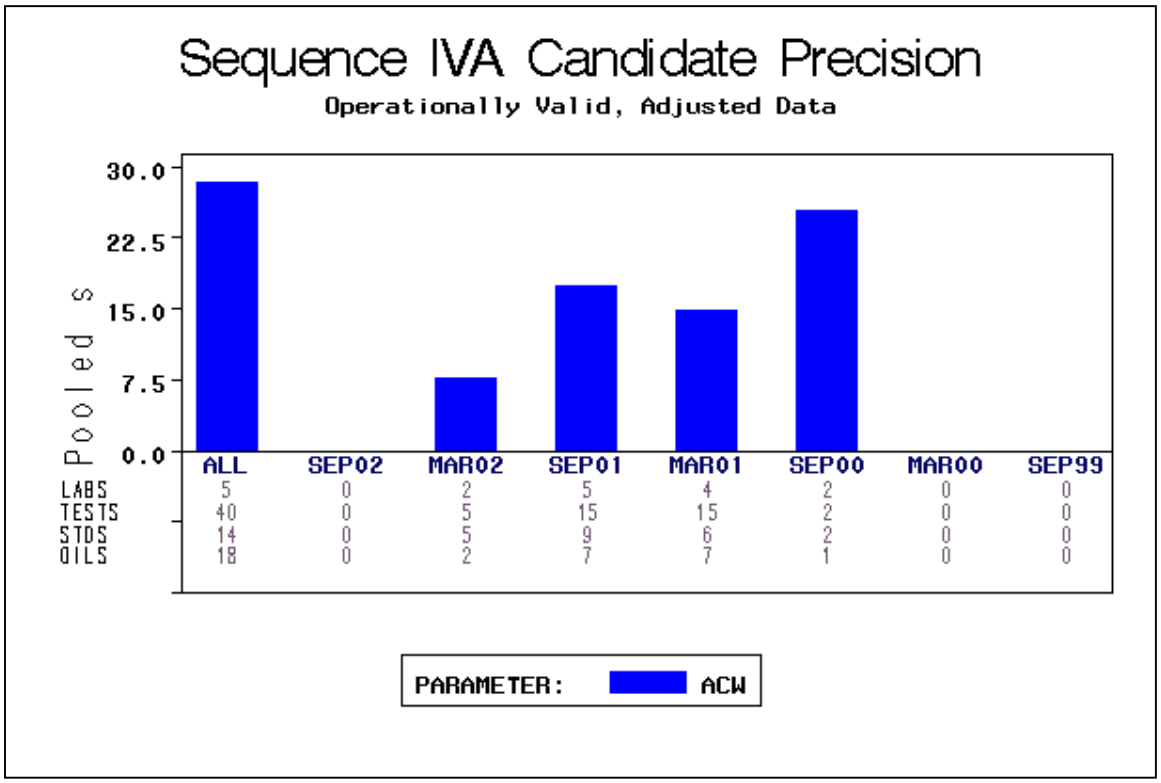
REVISED 11/18/02

RSI Sequence IVA Semi-Annual Report
Six-Month Period Ending September 30, 2002

STATUS OF REPORTED TESTS		
STATUS	**N**	**PERCENT**
Operationally Valid	49	100.0%
Total Reported Tests	*49*	*100.0%*
CAUSES FOR LOST TESTS	**N**	

SEQUENCE IVA PRECISION		
COMPONENTS OF REPLICATED DATA BASE	**N**	
Number of Tests	.	
Number of Oils	.	
Number of Labs	.	
Number of Stands	.	
Number of Stand/Engine Combinations	.	
Number of Severity Adjusted Avg Cam Wear Tests	.	
VARIABLE	**Pooled s**	**R**
Avg Cam Wear, Adjusted	-	-
Avg Cam Wear, Non-Adjusted	-	-


Sequence IVA
Status of Reported Tests
Number of Tests
180
160
140
120
100
80
60
40
20
0
1
1
83
3
49
1
106
1
1
137
2
173
3
1
83
31
AVG
SEP02
MAR02
SEP01
MAR01
SEP00
MAR00
Op. Non-Valid, Completed
Op. Non-Valid, Terminated
Operationally Valid
Terminated at Sponsor Request


Sequence IVA Candidate Precision
Operationally Valid, Adjusted Data
Pooled s
30.0
22.5
15.0
7.5
0.0
ALL SEP02 MAR02 SEP01 MAR01 SEP00 MAR00 SEP99
LABS 5 0 2 5 4 2 0 0
TESTS 40 0 5 15 15 2 0 0
STDS 14 0 5 9 6 2 0 0
OILS 18 0 2 7 7 1 0 0
PARAMETER: ACW

Haltermann PRODUCTS

KA24E – IVA

SEPTEMBER 30, 2002

SALEABLE GALLONS AT HALTERMANN PRODUCTS	5,393
GALLONS SHIPPED SIX MONTH PERIOD 10/01/2001 – 3/31/2002	11,199
AVERAGE USAGE PER MONTH	**1,867**
NUMBER OF MONTHS OF INVENTORY ON HAND	2

NOTE: INVENTORY DEPLETED AS OF 11-8-02.

KA24E TEST FUEL
HF008

Batch No.:	0109688	0011769
Tank No.:	682	682
Analysis Date:	9/27/2001	11/20/2000

METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS
		MIN	TARGET	MAX		
ASTM D86	°F	75		95	86	87
	°F				114	113
	°F	120		135	127	127
	°F				149	150
	°F				177	180
	°F				208	212
	°F	200		230	224	227
	°F				233	234
	°F				242	243
	°F				260	261
	°F	300		325	320	319
	°F				344	343
	°F	385		415	402	387
	vol %		Report		98.5	97.9
	vol %		Report		1.0	1.0
	vol %		Report		0.5	1.1
ASTM D4052	°API	58.7		61.2	59.2	58.9
ASTM D4052	kg/l	0.734		0.744	0.7420	0.7430
ASTM D323	psi	8.8		9.2	9.1	9.1
ASTM E191	wt fraction	0.8580		0.8667	0.8633	0.8610
ASTM D3343	wt fraction		Report		0.8657	0.8659
ASTM D4294	wt %	0.01		0.04	0.02	0.02
ASTM D3237	g/gal			0.05	<0.01	<0.01
ASTM D4815	wt %			0.05	<0.05	<0.05
ASTM D1319	vol %			35.0	29.9	29.9
ASTM D1319	vol %	5.0		10.0	6.2	5.5
ASTM D1319	vol %		Report		63.9	64.6
ASTM D525	minutes	1440			>1440	>1440
ASTM D130				1	1	1
ASTM D381	mg/100ml			5	1	1
ASTM D2699		96.0		97.5	97.5	97.0
ASTM D2700			Report		88.2	87.8
D2699/2700			Report		92.9	92.4
D2699/2700		7.5			9.3	9.2
ASTM D240	btu/lb		Report		18364	18388
Visual			Green		Green	Green

Affirmative with Comment

Date:	9/27/02
Ballot Number:	D02.B0 (02-05) Close Date: OCTOBER 07, 2002
Item Number:	001 NEW STANDARD TEST METHOD FOR EVALUATION OF AUTOMOTIVE ENGINE OILS IN THE SEQUENCE IVA SPARK-IGNITION ENGINE TECHNICAL CONTACT: E A HAP THOMPSON (904) 287-9596 (REFERENCE Z9728Z)

Member's Name:	THOMAS W ROGERS
Address:	EXXONMOBIL RESEARCH & ENGRG 600 BILLINGSPORT RD PAULSBORO NJ 08066
Phone Nr:	8562242751 Fax Nr: 8562243635
Email Address:	THOMAS_W_ROGERS@EMAIL.MOBIL.COM

Statement:

1. Remove all references to mandatory use of grounded thermocouples. Both grounded and ungrounded thermocouples are acceptable as stated in 10.1.3. Several sections contradict this: 6.3.1.3, 6.3.6.2, 6.3.11.1, 6.3.11.10.

2. I believe that sections 10.2.2 through 10.2.4 have been inadvertently omitted as critical parameters.

3. I believe that 11.2.1.3 should refer to "new test oil" instead of "break-in oil, REO 926-2".

4. In section 11.3.1.6, change -25 kPa to -0.025 kPa or to -25 Pa

5. It appears that the oil sample location on the engine has been changed to the bottom of the oil pan. I don't believe that this has been approved by the Surveillance Panel.

Negative
Vote from Non-Member

A negative from a non member does not stop the progress of an item to the next level of balloting. The subcommittee is encouraged to consider the negative as this person will have the opportunity to vote negative at the main committee level.

Date: 9/9/02

Ballot Number: D02B0000502 Close Date:

Item Number: 001 NEW STANDARD TEST METHOD FOR EVALUATION OF AUTOMOTIVE ENGINE OILS IN THE SEQUENCE IVA SPARK-IGNITION ENGINE TECHNICAL CONTACT: E A HAP THOMPSON (904) 287-9596 (REFERENCE Z9728Z)

Member's Name: EMORY, DEANNE M.

Address:

MILLER & WEBER INC
1637 GEORGE ST
RIDGEWOOD NY 11385-4352
USA

Phone Nr: (718) 821-7110 Fax Nr: (718) 821-1673

Email Address: info@millerweber.com

Statement:

Section 2.4 references ANSI standard MC 96.1 This standard is obsolete. It was last revised and issued in 1982. This old document was once the province of ISA, who no longer have any significant interest in temperature measurement and who essentially abandoned this, the former national standard for thermocouple temperature measurement.

Subcommittee E20.04 (Thermocouples), took their existing and up-to-date E230 standard, added the few details once contained in MC 96.1 that were not already in the standard, and submitted it for adoption by ANSI as the new US standard, which status it now enjoys.

I recommend you update section 2.4 by deleting MC96.1 and adding ANSI/ASTM E230 (Standards Specification and Temperature-Electromotive Force (EMF) Tables for Standardized Thermocouples.

Respectfully,
Deanne Emory

Affirmative with Comment

Date: 8/30/02

Ballot Number: D02.B0 (02-05) Close Date: OCTOBER 07, 2002

Item Number: 001 NEW STANDARD TEST METHOD FOR EVALUATION OF AUTOMOTIVE ENGINE OILS IN THE SEQUENCE IVA SPARK-IGNITION ENGINE TECHNICAL CONTACT: E A HAP THOMPSON (904) 287-9596 (REFERENCE Z9728Z)

Member's Name: LYLE O BOWMAN

Address: 728 MONTECILLO RD
SAN RAFAEL CA 94903

Phone Nr: 4154793004 Fax Nr:

Email Address: JBFOODIE@ATTBI.COM

Statement:

L.O. Bowman comments on the D02.BO ballot of the Sequence IVA test method (Z9728Z):Page 3, "candidate oil sample quantity" needs to be changed to "non-reference oil sample quantity" (Note: Reference to a candidate oil is appropriate only in a specification, not in the text of a test method.) Page 6, reference to a Research Report should be in a footnote when the Research Report is first mentioned in the text, not in the Referenced Documents section (see A24.5 in the Bluebook).Page 7, 3.1.2, Footnote 16 says "Standards may be obtained..". In this case, the correct wording should be "The Subcommittee B Glossary may be obtained..". The Glossary is not a standard.Page 10, Note 1, Insert a "D" in front of "4485". (See A6.2 in the Bluebook)Page 11, 6.2.5.2 delete hyphen in 14-mm. See G17.1 in the Bluebook. Hyphenate compound adjectives such as "14-mm tubing", but do not hyphenate when "mm" is a noun, as in the case of 6.2.5.2.Page 12, 6.2.5.5, delete hyphen in 14-mm.Page 14,Footnote B, delete hyphen in 13-V.The above three examples are but a few of the many throughout the rest of the text. It is assumed that the remainder will be appropriately corrected. Page 37, 9.3.6.1, the subsections now designated by small letters of the alphabet should be changed to numbers (the current ASTM editor prefers that method of designation.).Page 40, Note 3, it is assumed that labs other than SWRI will/can /are running this test method. That being the case, I think it is inappropriate to include a note saying what the SWRI lab does. I suggest rewording the note (and put it in the main text) to say that " proper procedure is to pour the clients test oil over the valve-train test parts.." (if that is generally perceived to be the proper procedure).Page 60, 13.1, I suggest replacing the current wording with that that was approved by both Section 9 and Subcommittee B; i.e. "For reference oil tests, the standardized report form set and data dictionary for reporting test results and for summarizing the operational data are required." (Note: the report forms are not mandatory for non-reference oil tests.)

Motions & Action Items
IVA Surveillance Panel
November 19, 2002
As Recorded at the Meeting by Ben Weber

1. [Bill B & Gordon F] Approve the previous meeting minutes as written. Passed unanimously.
2. [Bill B & Dan W] 1009 targets will be set using severity adjusted results when we get 5 test results (last one due by the end of this year 2002), and then recalculate again at 10, 20 & fixed at 30. Passed unanimously.
3. [Motion by Jim Carter & seconded by Gordon F] Haltermann will make KA24E fuel in smaller batches (approx. 2,000 – 20,000 gallons) on a as needed basis to eliminate the storage costs for producing large batches. Haltermann will attempt to consolidate orders when possible. Approximate delivery time from order date is 3 weeks. Passed unanimously.
4. Bill B will survey the industry to determine how many kits are currently on hand, there batch ID, and how many has each lab ordered of the new hardware. Bill will also entertain any ideas of how to prove-out this new hardware prior to its mandatory use. Bill will add this to the objective list.
5. Bill B will look into the procedure word changes regarding the use of test oil or EF411 as a pre-lube on the camshaft. Bill will follow this up with an e-mail ballot.
6. Bill B will do a conference call to look into the deletion of sections 10.2.2 through 10.2.4.