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Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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Unapproved Minutes of the May 6, 2009
Sequence VG Surveillance Panel Meeting
held in Warren, MI

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The meeting was called to order at 1:00 pm by Chairman Andy Ritchie.

A list of attendees is included as attachment 1

Agenda Review

Bill Buscher is Action & Motion recorder.

The Agenda was accepted as shown on Attachment 2.

Sequence VG Meeting Minutes
May 6, 2009
Warren, MI

Membership Changes

No membership changes were noted.

Meeting Minute Status

The November 12, 2008 meeting minutes were approved by the surveillance panel.

Review of Action Items from Last Meeting

Motions and Action Items

Motions and Action Items

As Recorded at the Meeting by Bill Buscher

1. Action Item – Chairman to request that the LTMS task force chairman, Dan Worcester, schedule a meeting in January 2009 to conduct a comprehensive review of the different LTMS systems utilized by the PCMO test types and their pros and cons. **Complete LTMS Task Force met in January and will continue to address LTMS changes**
2. Action Item – Haltermann to supply the raw data for the individually adjusted shipments of SVGGM2 fuel as an addendum to the Fuel Supplier Report. **Complete**
3. Action Item – For the current batch of SVGGM2 fuel, the three labs with open orders will determine final fuel allotments, to result in a simultaneous fuel batch switch over. Also estimate when the current batch of SVGGM2 fuel will be depleted. **Complete, labs addressed allotments shortly after the meeting**
4. Action Item – Haltermann to determine what their Michigan facility's capacity is for fuel adjustments. The intent would be to perform a single adjustment on the remaining 33,200 gallons of SVGGM2 fuel. **Complete, no longer an issue, fuel shipped to labs and new facility is capable of making adjustments.**
5. Action Item – SwRI test results to be distributed to the Surveillance Panel when available to get a preliminary feeling for the success of the pilot batch of SVGGM2 fuel. If necessary, an earlier conference call will be scheduled to discuss the SwRI results and potential actions. **Complete. Test distributed and small batch was acceptable.**

6. Action Item – When the Surveillance Panel meets by conference call at the completion of the first two tests on the pilot batch of SVGM2 fuel, determine the best “move-forward” plan, based upon the test results and the estimate on depletion of the current batch of SVGM2 fuel. Conference call scheduled for Tuesday, 11/25/08, at 2:00pm Eastern. **Complete, weekly calls held.**
7. Action Item – Haltermann to investigate options to expedite the availability of the new batch of SVGM2 fuel prior to the Surveillance Panel conference call. **Complete, Haltermann had batch available in March**
8. Action Item – Chairman to schedule bi-weekly conference calls during the prove-out of the new batch of SVGM2 fuel. **Complete**
9. Action Item – Will look for some assistance from ILSAC chair to acquire additional reference oils meeting the Surveillance Panel’s objectives (GF-5 capable oil). **Complete. Jim Linden will continue to pursue.**
10. Motion – All Sequence VG tests run to completion should report all data, no matter what the reported validity is. Descriptive comments to be included for all reported invalid tests.

Ed Altman / Rich Grundza / Passed with 1 Waive

11. Action Item – Under guidance of the TGC, create a test fuel task force to include TMC, fuel supplier, and SP chairmen. This group will investigate best practices/methods for determining if the test fuel is changing. **Complete, TGC is working on this**

Test Sponsor Report

Ron Romano did not have a formal report, but was unaware of any issues outstanding. Parts orders have been placed and the first of those orders have been received. Testing has been conducted on the first of these parts has been completed and no real difficulties have been observed in testing.

Test Monitoring Center Report

A copy of the TMC report can be obtained from the TMC website. There were no questions or comments regarding the TMC report. Rich presented updated test data through May 5, 2009. A copy of the TMC presentation is included as Attachment 3.

Sequence VG Meeting Minutes
May 6, 2009
Warren, MI
ACC Monitoring Agency Report

No formal report was given. A copy of the report is available on the ACC Monitoring Agency website.

Fuel Supplier Report

Jim Carter presented the current certificate of analysis of the new batch, which is included as attachment 4. Ron Romano mention that we noted some severe results recently. There was some discussion as to whether or not the current fuel could be contributing to increased severity. Some members did express concerns that since they are down to the last of the fuel, it may be somewhat more severe. The meeting then dovetailed into quantities of fuel remaining at laboratories. Al Lopez stated that Intertek had between 10 and 11,000 gallons of fuel left, while Southwest Research was out of fuel. Afton had sufficient quantities to see it through June and Lubrizol had a similar amount. Introduction of the new fuel was discussed. Laboratories are to wait until there is 10% or less of the old fuel in a tank before introducing the new batch. Calibrated stands need not reference on the new fuel and any correction factors developed will be applied when the lab has switched to the new fuel. It was suggested that perhaps the tests on the new fuel may be used for calibration. It was decided that since these tests were paid tests and part of the fuel validation and that other laboratories may not have had the opportunity to calibrate on the new fuel, that these tests would not be used for calibration. There were discussion about the potential for an oil screen clogging correction, which because of the transformation, may adjust a very good passing result to a failing result. It was pointed out that there are different control strategies for stage III AFR control, though both labs appear to use the same strategy. An action item was assigned to form a task force to review the operational parameters in detail of the fuel approval tests, under Dan Worcester and the Operations and Hardware Task Force.

Scope and Objectives

A review of the scope and objectives was conducted. The revised scope and objectives are included as attachment 5. Andy Ritchie also gave a brief presentation of his report to subcommittee D0.02.B0.

New and Old Business

There were no items of new or old business.

A listing of Motions and Action items recorded during the meeting is included as attachment 6.

The meeting was adjourned at 2:30 pm.

VG May 6th.

1-877-334-2341

Names	Organizations	A. Rubin
A. Rubin	Infineum	Richard
D. Grundza	ASTM-TMC	William A. Bunker
Jim Linden	GM	[Signature]
Bill Buschen	SWRI	[Signature]
MARK SUTHERLAND	ORONITE	R. K. [Signature]
DAN WORCESTER	SWRI	[Signature]
Raham Kirkwood	SWRI	W. [Signature]
ERIC LIU	SWRI	E. [Signature]
DAVID GLAENZER	Afton Chemical	M. [Signature]
Ed Altman	Afton	Gary & Sam D
I. Goldblatt	BP Lubes	Sid Clark
MIKE McMILLAN	INFINEUM	Bob Chace
LARRY L. SMITH	INDIPEND USA	Bruce Matthews
Sid Clark	SWRI	Eric Johnson
Bob Chace	Intertek	Matt Snider
Bruce Matthews	GM	Jim Carter
Eric Johnson	GM	Jason Bowden
Matt Snider	GM	Dwight Bowden
Jim Carter	HARTMANN	Ron Romano
Jason Bowden	OHT	Greg Semu
Dwight Bowden	OHT	Geo. Szeppanos
Ron Romano	Ford	AL Lopez
Greg Semu	Lubrizol	Intertek
Geo. Szeppanos	LF	
AL Lopez	Intertek	

On Phone

Chris Castanien

Lubrizol

Jo Martinez

Oconite

Tim Miranda

BP/Castrol

Agenda
Sequence VG Surveillance Panel
May 6th 2009 1.00–5:00 p.m.
GM Technical Center in Warren, MI

1. Chairman comments.	
2. Attendance sign-in distribution.	
3. Membership changes.	
4. Motion and Action recorders.	
5. Approval of minutes for Nov 8th 2008	All
6. Review action items from last meeting.	Andy Ritchie
7. Test Sponsor report.	Ron Romano
8. TMC Report. - Questions on semi-annual report.	Rich Grundza
9. Laboratories inventories of old fuel.	Rich Grundza (laboratories)
10. Operational and Hardware Items.	All
11. New Fuel Batch Data review	All
12. Next steps for new fuel	All
13. Review Scope and Objectives.	All
14. Old business	All
15. New business	All
16. Adjourn	

Sequence VG Update

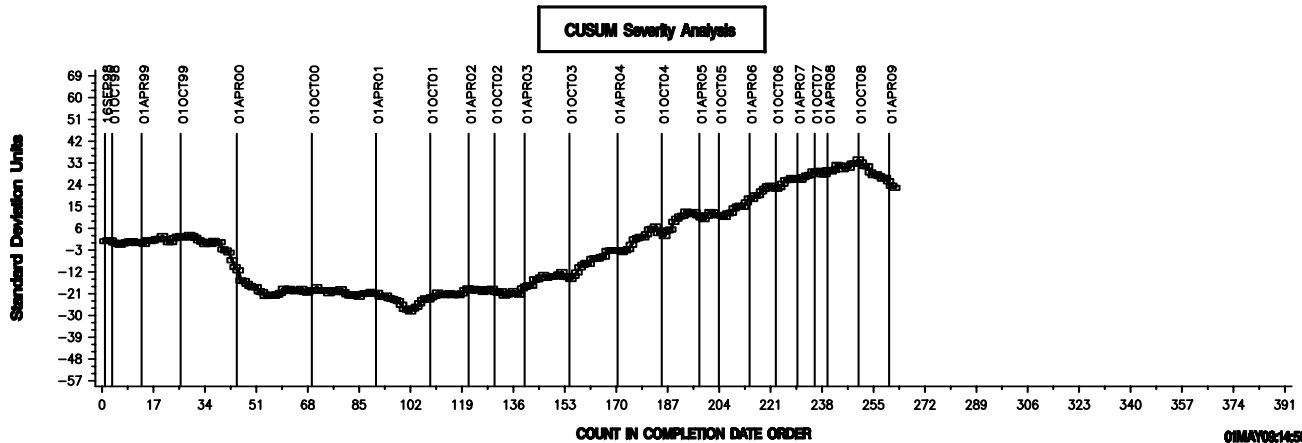
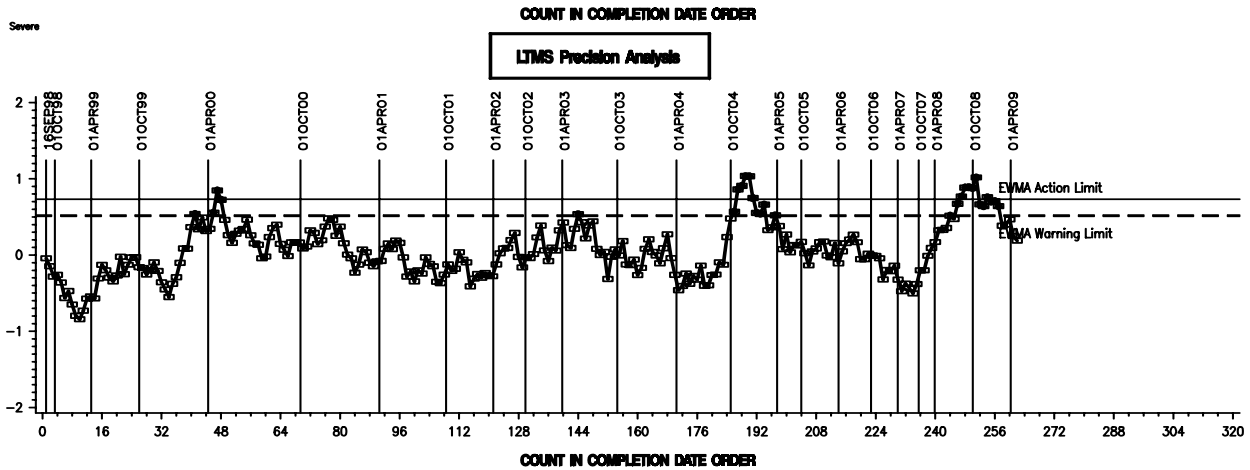
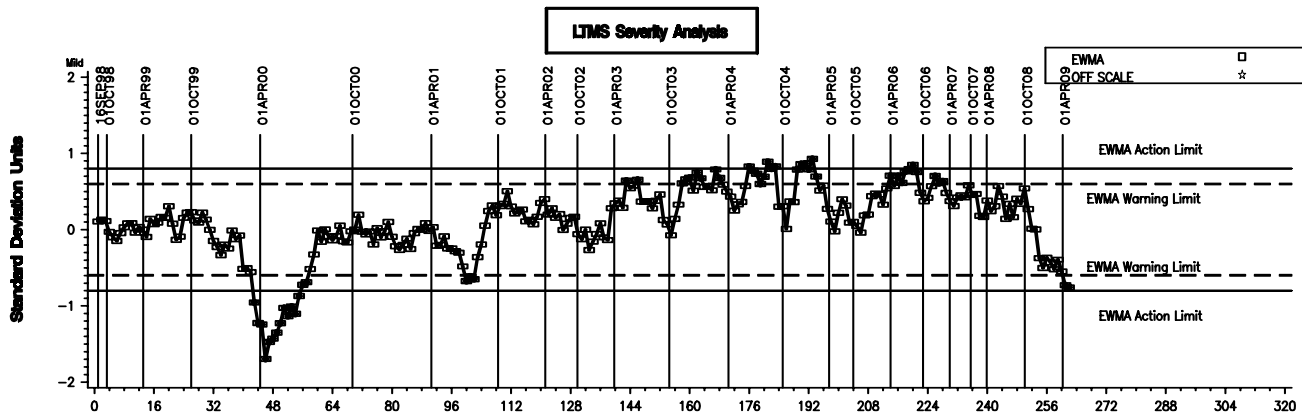
May 6, 2009

Current Trends

- Two tests reported since 4/1/2009 One test scheduled on a stand that has not been referenced since 2005.
- AES in severe warning alarm.
- RAC is in precision warning alarm.
- AEV in control.
- APV in control.
- OSCR in control.

SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

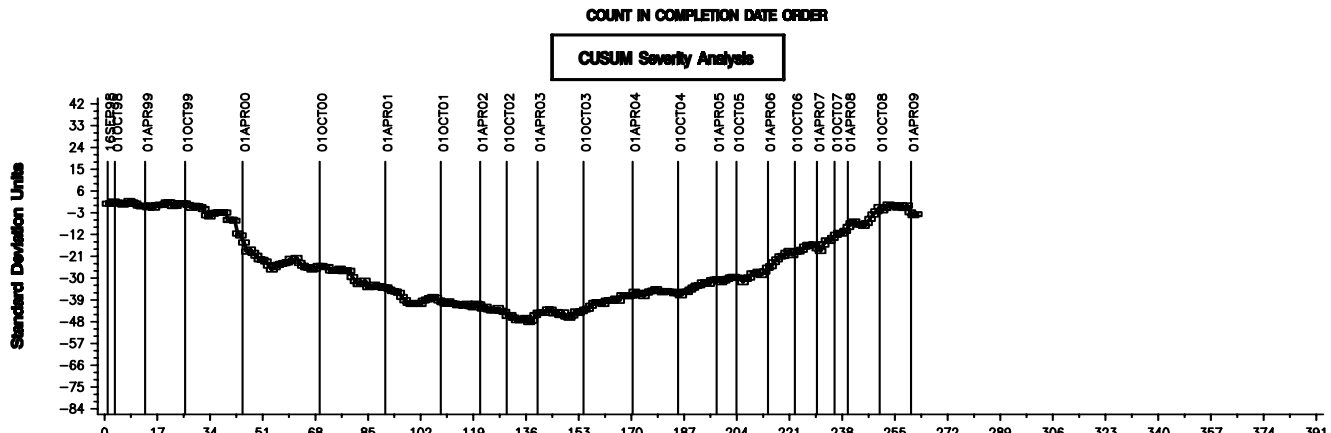
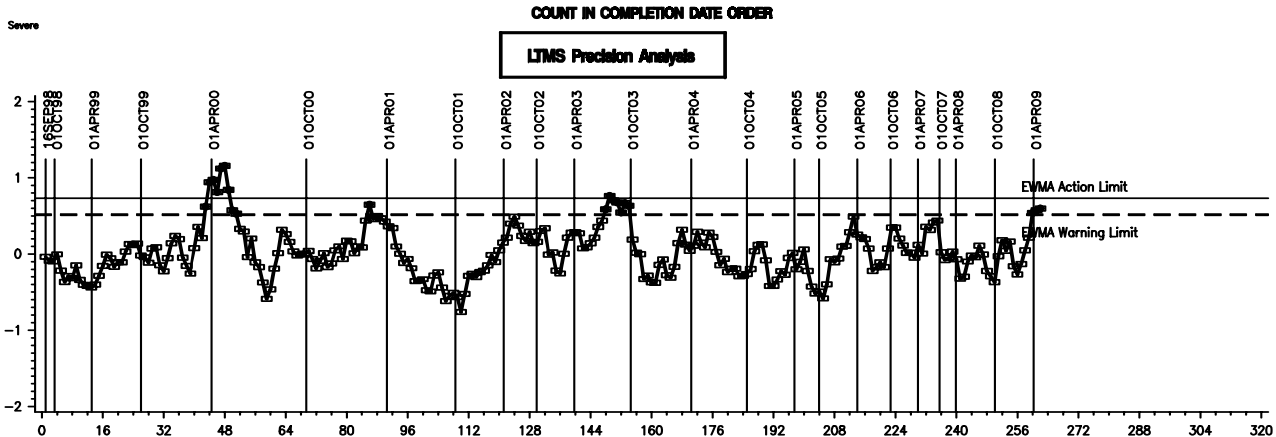
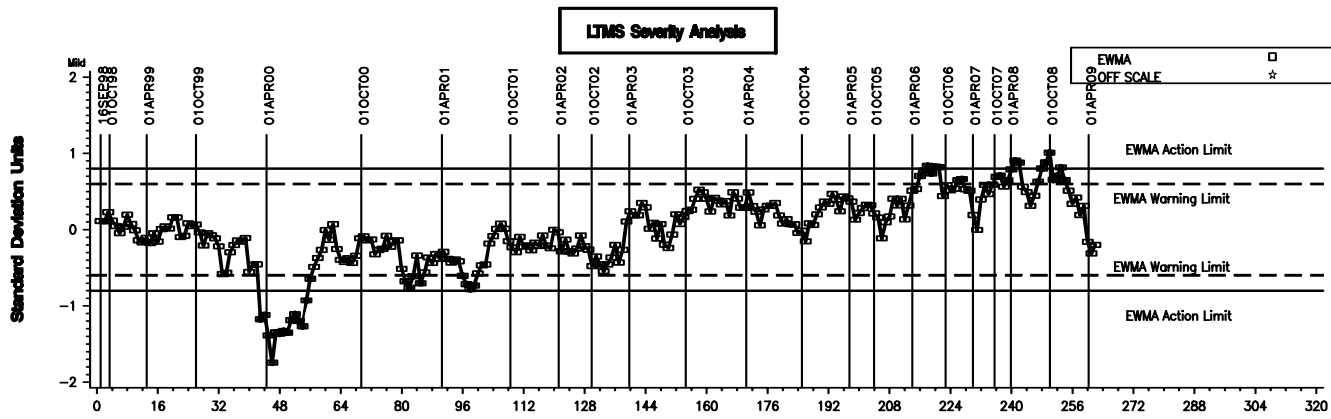
AVERAGE ENGINE SLUDGE



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SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

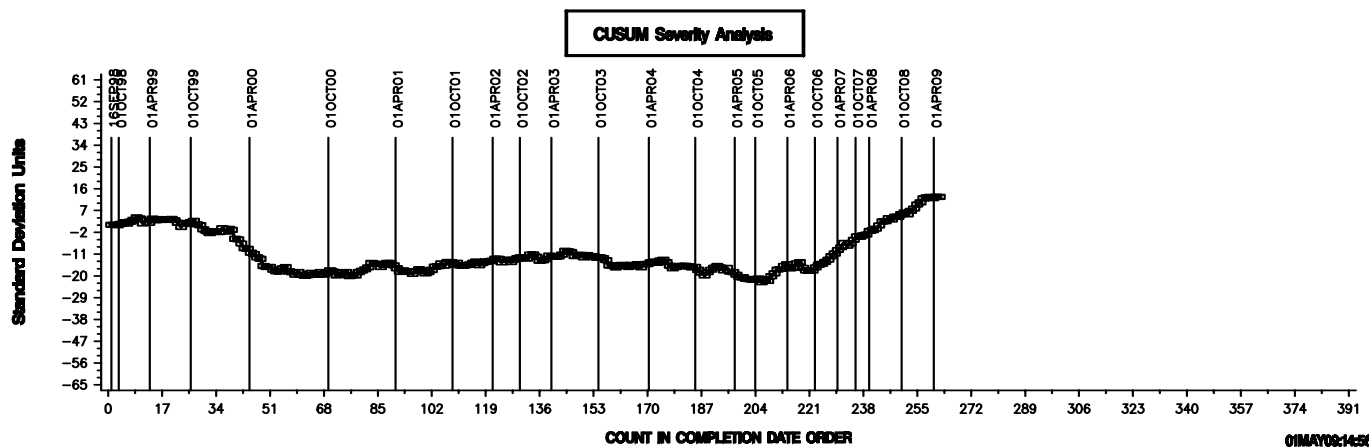
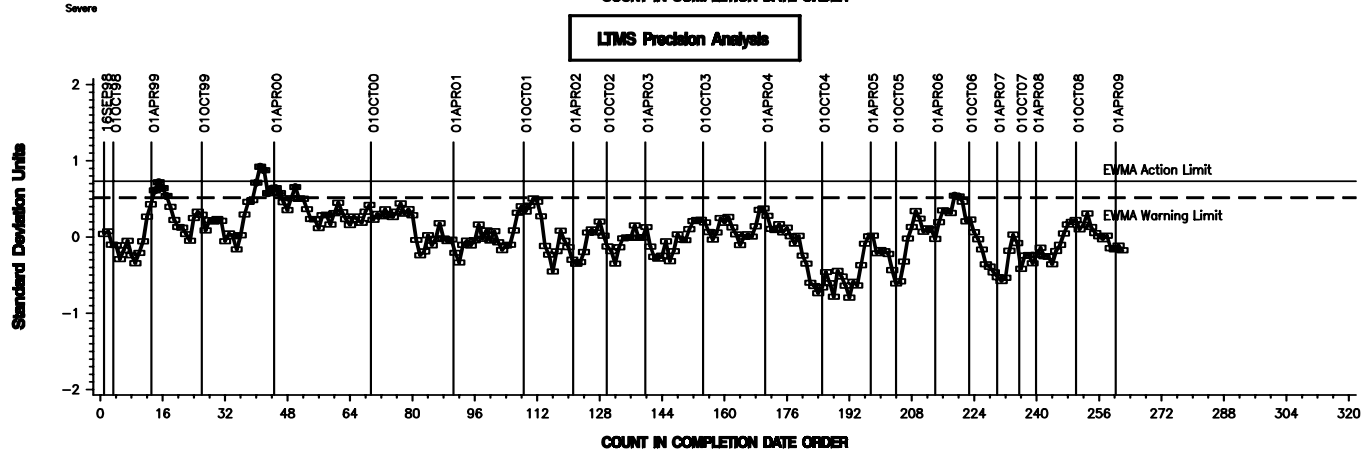
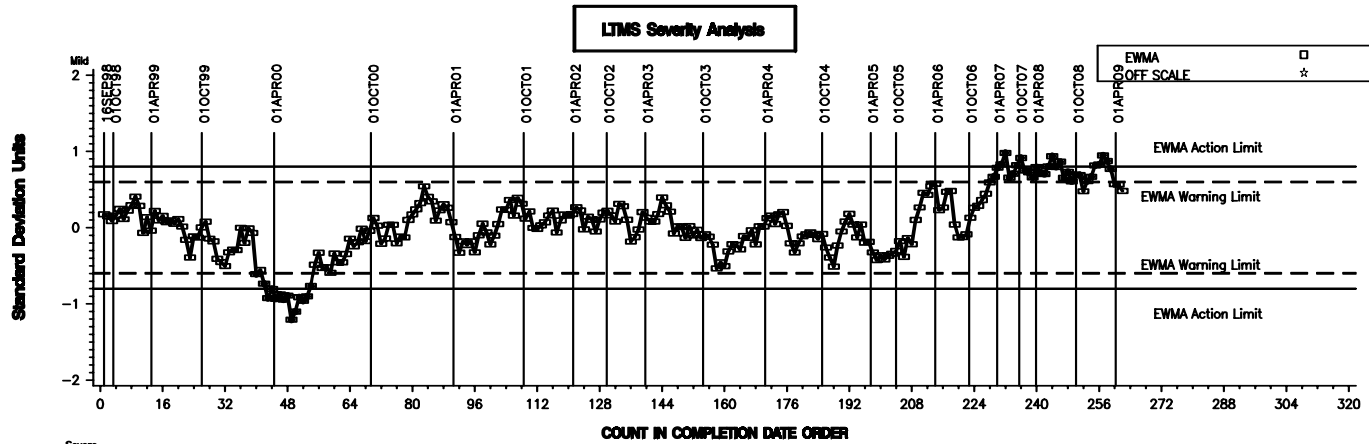
AVERAGE ROCKER COVER SLUDGE



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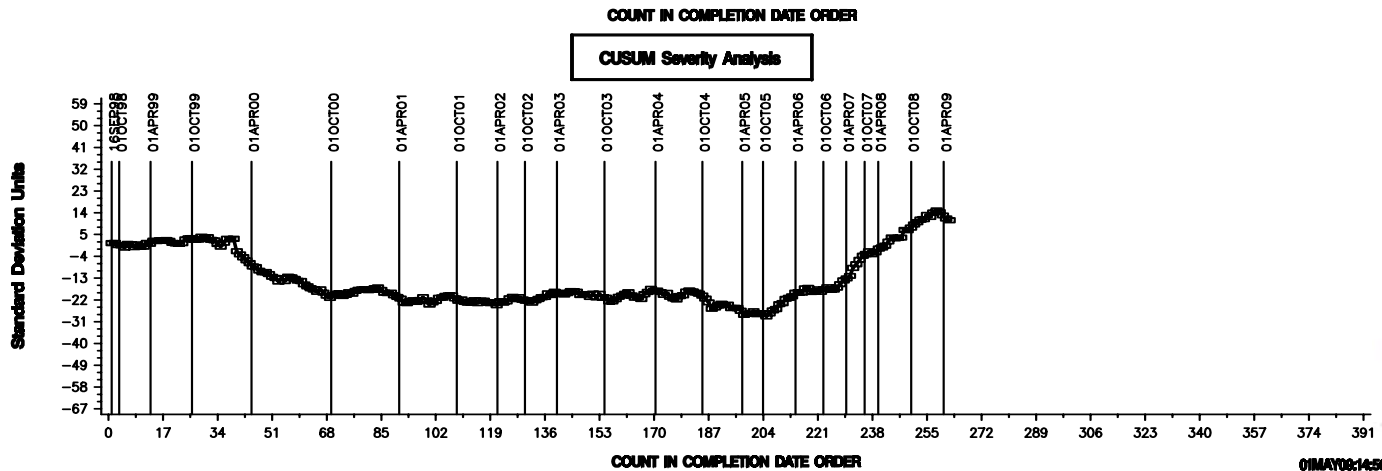
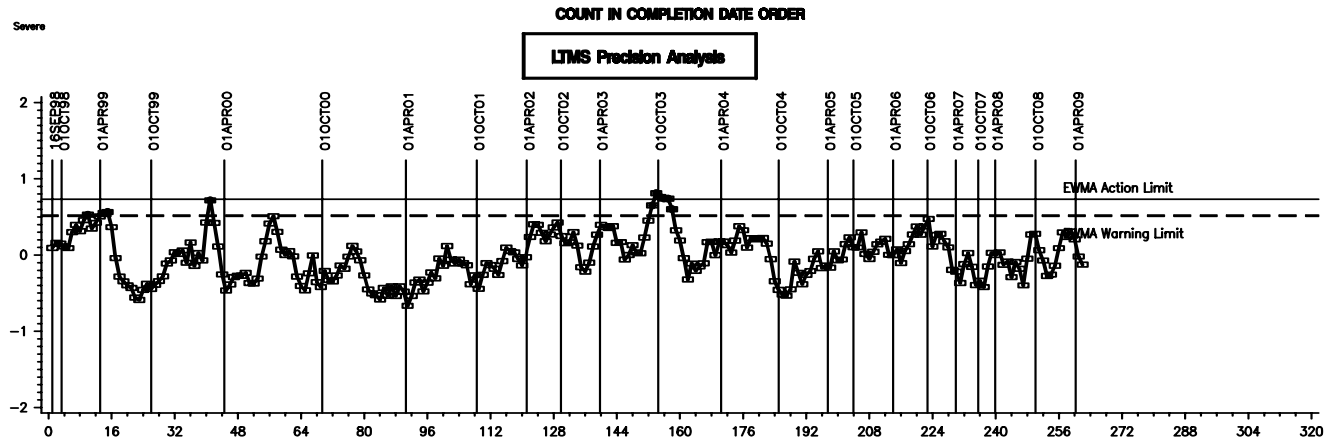
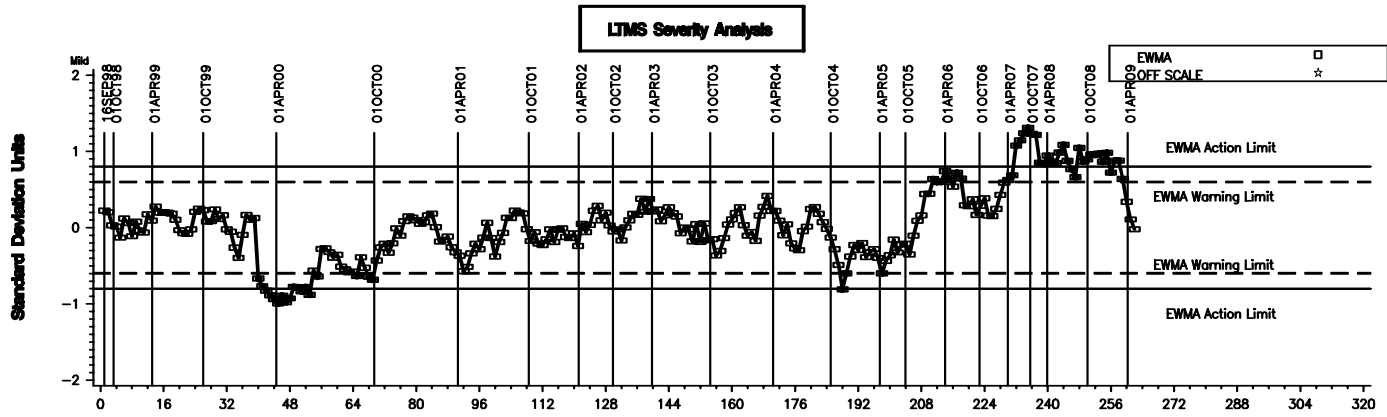
AVG. ENG. VARN. 3-PART FINAL RESULT APV + BAFFLES



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SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

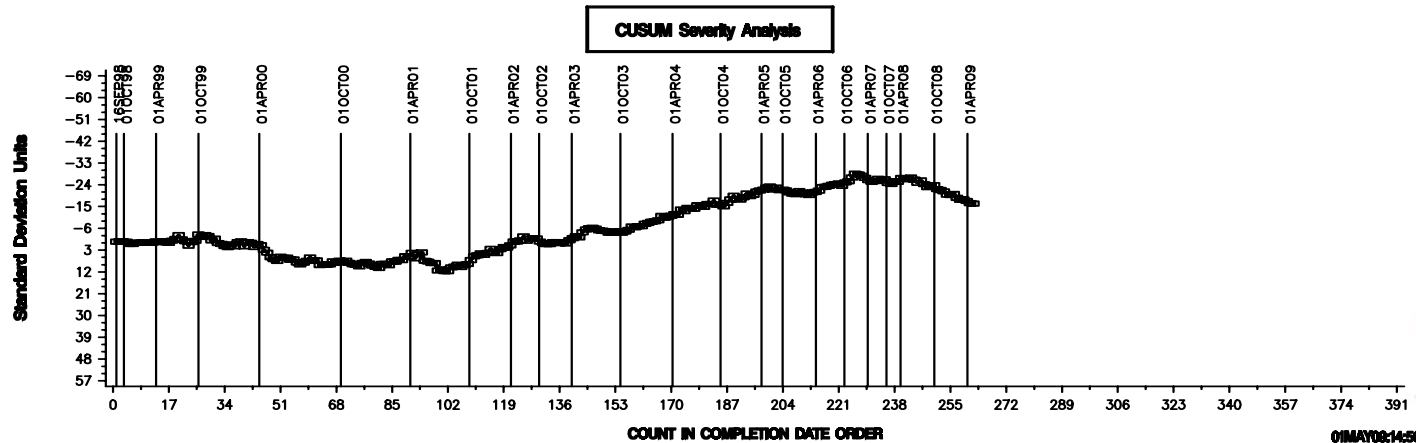
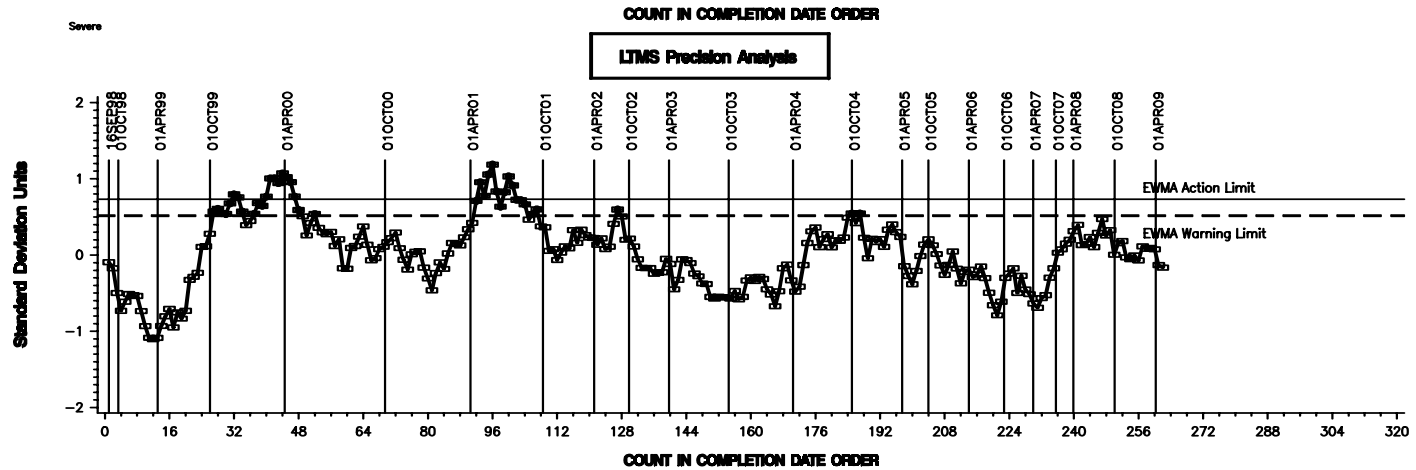
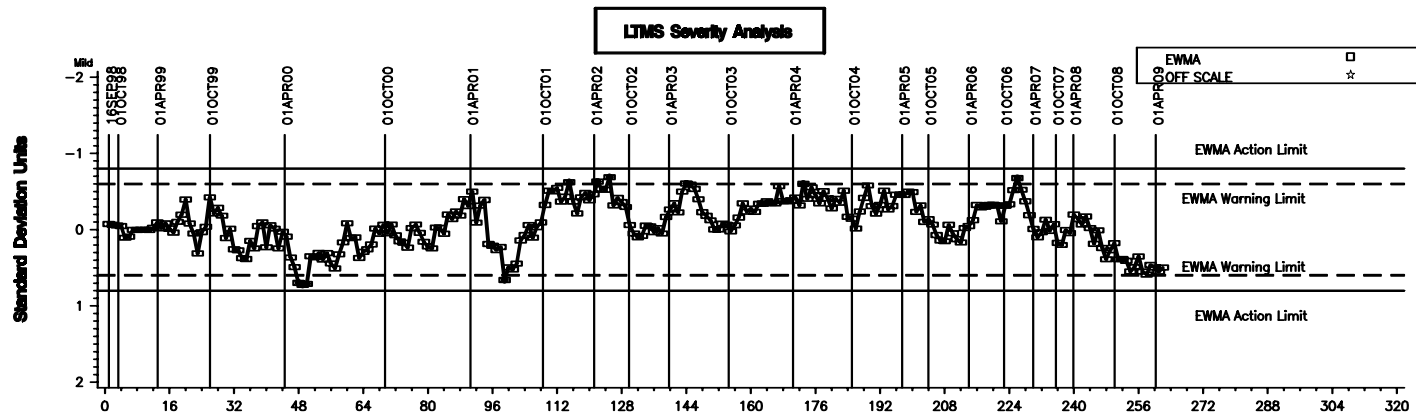
AVG PISTON SKIRT RATING



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SEQUENCE VG INDUSTRY OPERATIONALLY VALID DATA

OIL SCREEN SLUDGE



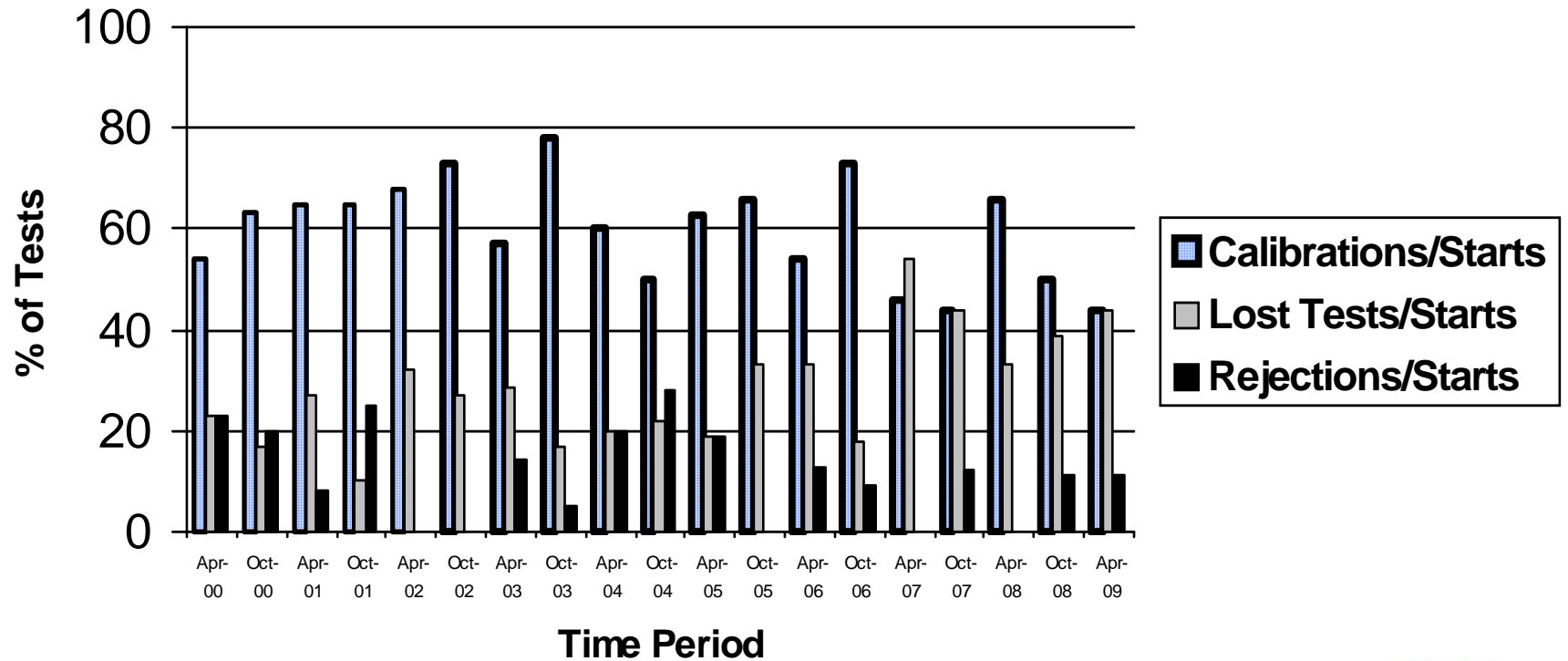
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Sequence VG Update

- Seven stands at three labs calibrated
- One additional tests running
- Calibration per start has decreased, lost test rate increased and rejected test rate is unchanged when compared to previous period.
- Pooled precision for APV degraded, AES and AEV improved and RAC and OSCAR unchanged. All rates compare well with historical rates.
- No info letters issued

	Reporting Data	Calibrated as of 9/30/08
Number of Laboratories	4	3
Number of Stands	9	7

Calibration Attempt Summary



**PRODUCT
INFORMATION**

Haltermann
PRODUCTS

T (281) 457-2768

F (281) 457-1469

PRODUCT: SVGM2
New Large Batch
Seq. VG
PRODUCT CODE HF295

Batch No.: XC2721NX10
MTS
Tank No.: 62
Analysis Date: 3/31/2009

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS
			MIN	TARGET	MAX	
Distillation - IBP	ASTM D86	°C	23.9		35.0	28.9
5%		°C				44.1
10%		°C	48.9		57.2	51.3
20%		°C				64.6
30%		°C				80.7
40%		°C				98.6
50%		°C	98.9		115.6	108.3
60%		°C				114.4
70%		°C				123.4
80%		°C				145.3
90%		°C	162.8		176.6	175.4
95%		°C				192.8
Distillation - EP		°C	196.1		212.8	208.6
Recovery		vol %		Report		98.0
Residue		vol %			2.0	1.1
Loss		vol %		Report		0.9
Gravity	ASTM D4052	°API		Report		57.6
Specific Gravity	ASTM D4052	kg/m ³		Report		0.7474
Reid Vapor Pressure	ASTM D5191	kPa	60.6		63.4	62.7
Carbon	ASTM E191	wt fraction	0.8580		0.8690	0.8632
Carbon	ASTM D3343	wt fraction		Report		0.8664
Oxygen	ASTM D4815	wt %			0.05	<0.01
Sulfur	ASTM D4294	mg/kg			200	<17.0
Lead	ASTM D3237	mg/l			2.6	<2.5
Phosphorous	ASTM D3231	mg/l			1.3	<0.2

Composition, aromatic	ASTM D1319	vol %		35.0	30.4
Composition, olefins	ASTM D1319	vol %	5.0	10.0	5.9
Composition, saturated	ASTM D1319	vol %		Report	63.8
Oxidation Stability	ASTM D525	minutes	1440		>1440
Copper Corrosion	ASTM D130			1	1a
Existent gum, washed	ASTM D381	mg/100mls		3.0	<0.5
Research Octane Number	ASTM D2699		96.0	98.0	98.0
Motor Octane Number	ASTM D2700			Report	89.2
R+M/2	D2699/2700			Report	93.6
Sensitivity	D2699/2700		7.5		9.2
Net Heat of Combustion	ASTM D240	Btu/lb		Report	18395
Additive, Ethyl antioxi	calculated	ptb		Report	3.5

Sequence VG S.P. Report

Sequence VG S.P. Scope

The Sequence V Surveillance Panel is responsible for the surveillance and continued improvement of the Sequence VG test documented in ASTM Standard D6593 as updated by the Information Letter System. Data on test precision and laboratory versus field correlation will be solicited and evaluated at least every six months. Improvements in rating technique, test operation, test monitoring and test validation will be accomplished through continual communication with the Test Sponsor, ASTM Test Monitoring Center, ASTM BO.01, Passenger Car Engine Oil Classification Panel, ASTM Light Duty Rating Task Force, ASTM Committee B0.01, ACC Monitoring Agency and CRC Motor Rating Methods Group. Actions to improve the process will be recommended when deemed appropriate based on input from the preceding. Industry transition to new engine hardware batches will be monitored and redistribution of existing hardware facilitated to accomplish uniform industry implementation. Development and correlation of updated test procedures with previous test procedures will be reviewed by the panel. This process will provide the best possible test procedure for evaluating automotive lubricant performance with respect to the lubricant's ability to prevent engine sludge, engine varnish, oil screen plugging, oil ring clogging and ring sticking.

Sequence VG S.P. Report

Sequence VG S.P. Objectives

Objectives

Target Date

1. Ensure a secure supply of SVGGM2 fuel is available to accommodate testing through GF-5, anticipating the need for one or more additional batch of SVGGM2 fuel to be blended.

May 2009

Sequence VG Surveillance Panel
May 6, 2009
1:00PM – 5:00PM
GM Technical Center
Warren, MI

Motions and Action Items

As Recorded at the Meeting by Bill Buscher

1. Action Item – O&H task force to perform a thorough Sequence VG test procedure review, and to investigate poor precision that was observed during the fuel prove-out matrix.