HEAVY-DUTY ENGINE OIL CLASSIFICATION PANEL

OF

ASTM D02.B0.02

June 26, 2018

JW Marriott Desert Ridge Resort and Spa – Phoenix, AZ

ACTION ITEMS

MINUTES

1.0 Call to order

1.1 The Heavy Duty Engine Oil Classification Panel (HDEOCP) was called to order by Chairman Shawn Whitacre at 1:30 p.m. on Tuesday, June 26, 2018, in the Grand Sonoran Room of the JW Marriott Desert Ridge Resort and Spa, Phoenix, AZ.

1.2 There were 16 members present and 66 guests present. The attendance list is included as Attachment **2.**

2.0 Agenda

2.1 The agenda circulated prior (included as Attachment **1**) was not changed.

3.0 Minutes

3.1 The December 5, 2017 minutes were approved as written.

4.0 Membership

4.1 There were 3 membership changes. The ExxonMobil member is now Shayna Butler replacing Mike Alessi. The Cummins member changed from Ryan Denton to Autumnlynn Glass. The GM member will change from Eric Johnson to someone to be named later.

5.0 Existing tests/categories

5.1 Sean Moyer gave an update on the existing tests. **Attachment 3.** Not much has changed since December. Availability date will be changed to a rolling 5 year projection. CAT tests likely available. Mack tests likely available. Cummins tests no issues. RFWT, EOAT and IIIF/IIIG with issues.

5.2 Hind Abi-Akar updated the panel on the COAT. **Attachment 4.** Test is unavailable and subgroup is working on reducing variability. A common measurement system has been designed, 3 copies constructed by one source and distributed across labs. After improvements, both reference oils shifted aeration levels but not equally. Reference oil discrimination has been reduced. Much work is ongoing and the work is being divided among the labs to speed up the process. The plan is to keep meeting and studying to bring the test back online. This group will continue to be updated.

5.3 Suzanne Neal provided an update on the DD13. **Attachment 5.** The Surveillance Panel spent the last 6 months working on approving a new batch of liners. Pistons are the limiting factor, but approximately 266 builds still available.

6.0 Old Business

6.1 Pat Joyce gave the Ford 6.7L update for Ron Romano. **Attachment 6.** Test is 2 phases: 10 hour soot generation phase and a 200 hour wear phase. The independent labs are starting to run prove-out tests. The table of results has been updated with one additional result labeled Blue 2. A question was asked about the timeline for the next 6 months. The independent labs should be finished by end of summer, Q3. They would run prove-out oils multiple times. Development is still handled within a small group of labs and Ford.

6.2 Frank Farber discussed ballot items as updates to D4485. Frank acknowledged Lyle Bowman's contributions and that he was addressing ballots right up to his passing. Subcommittee B will handle negative ballot results. There are 5 Ballots: 2 will go through, 3 have negatives.

6.3 A specific ballot item with a CLOG recommendation regarding IIIH PVIS was discussed. The ballot had a typographical error, so will be re-balloted. The IIIH panel made a change to the transform. The Passenger Car Engine Oil Classification Panel is looking at a 70 hour test. The 70 hour result may only be reported if the requestor asks for it. A draft information letter has been developed. **Attachment 7**. The information letter will come from the Surveillance Panel, then a corrected ballot can be re-issued.

7.0 New Business

7.1 None

8.0 Next meetings

8.1 The next meeting will be December 11, 2018 at the JW Marriott Atlanta.

9.0 The meeting was adjourned at 2:05 pm.

AGENDA
D02.B0.02.1
Heavy-Duty Engine Oil Classification Panel
Tuesday, June 26, 2018 1:30pm MST
JW Marriott Desert Ridge Resort and Spa
Phoenix, Arizona USA

1) **Call to Order/Anti-trust statement**

2) **Minutes** – Approval of Minutes from December 5, 2017 Meeting in Houston, TX, USA

3) **Membership**

   a) Review current panel membership

4) **Existing tests/categories**

   a) Review of status of carry-over engine tests that support API CK-4, FA-4 and legacy categories (Sean Moyer, TMC)
   b) Update on CAT Oil Aeration Test (Hind Abi-Akar, Caterpillar)
   c) Update on DD13 Scuffing Test (Suzanne Neal, DTNA)

5) **Old Business**
   a) Update on Ford 6.7L Wear Test Development (Patrick Joyce, Lubrizol)
   b) Status of D4485 Ballot Items from Previous Semester (Frank Farber, TMC)
      i) Sequence IIIH to Sequence IIIF for API CH-4, CI-4, and CJ-4 (Robert Stockwell, Chevron Oronite, Chair Seq. III SP)

6) **New Business**

7) **HDEOCP Adjournment (transition to DEOAP)**

HDEOCP Attendance: June 26, 2018

LastName	FirstName	MiddleName	Company	Business Phone	E-mail Address
Abi-Akar	Hind		Caterpillar Inc.	309-578-9553	abi-akar_hind@cat.com
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Andersen	Jason		PACCAR Technical Center	360-757-5324	jason.andersen@paccar.com
Ansari	Matthew		Chevron Lubricants		ansa@chevron.com
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Bates	Terry		Manesty Consultant Ltd.	44-151-348-4084	batesterryw@aol.com
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Denton	Vicky		Fuels & Lubes Asia		editor@fuelsandlubes.com

HDEOCP Attendance: June 26, 2018

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Hu	Gang		Infineum	908-676-2778	gang.hu@infineum.com
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HDEOCP Attendance: June 26, 2018

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HDEOCP Attendance: June 26, 2018

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HDEOCP Attendance: June 26, 2018

LastName	FirstName	MiddleName	Company	Business Phone	E-mail Address
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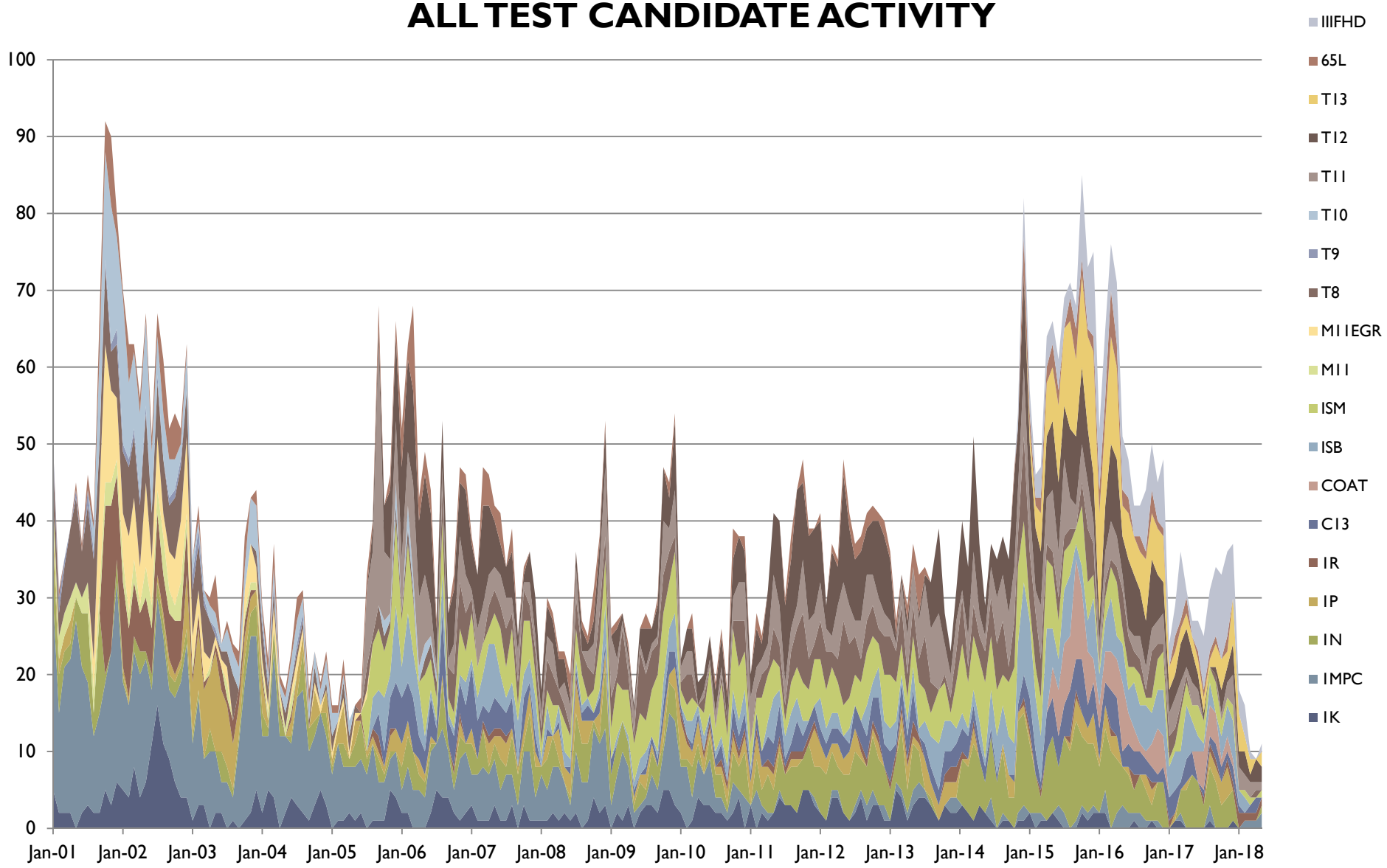
Yoon	Andy		SK Lubricants	82-109-934-9553	andy.yoon@sk.com
Zielinski	Chris		ExxonMobil		christine.a.zielinski@exxonmobil.com

D02.B0.02 Maintenance Report

June 2018

ALL TEST CANDIDATE ACTIVITY



Calibrated Labs and Stands*

Test	Labs	Stands
1K	2	2
1N	2	5
1M-PC	1	1
1P	2	2
1R	1	1
C13	3	3
ISB	2	2
ISM	2	2
EOAT	0	0
RFWT	0	0
T-8/E	2	3
T-11	3	4
T-12/T-12A	3/3	3/3
T-13	4	5
COAT	0	0
DD13	1	1

*As of 03/30/2018

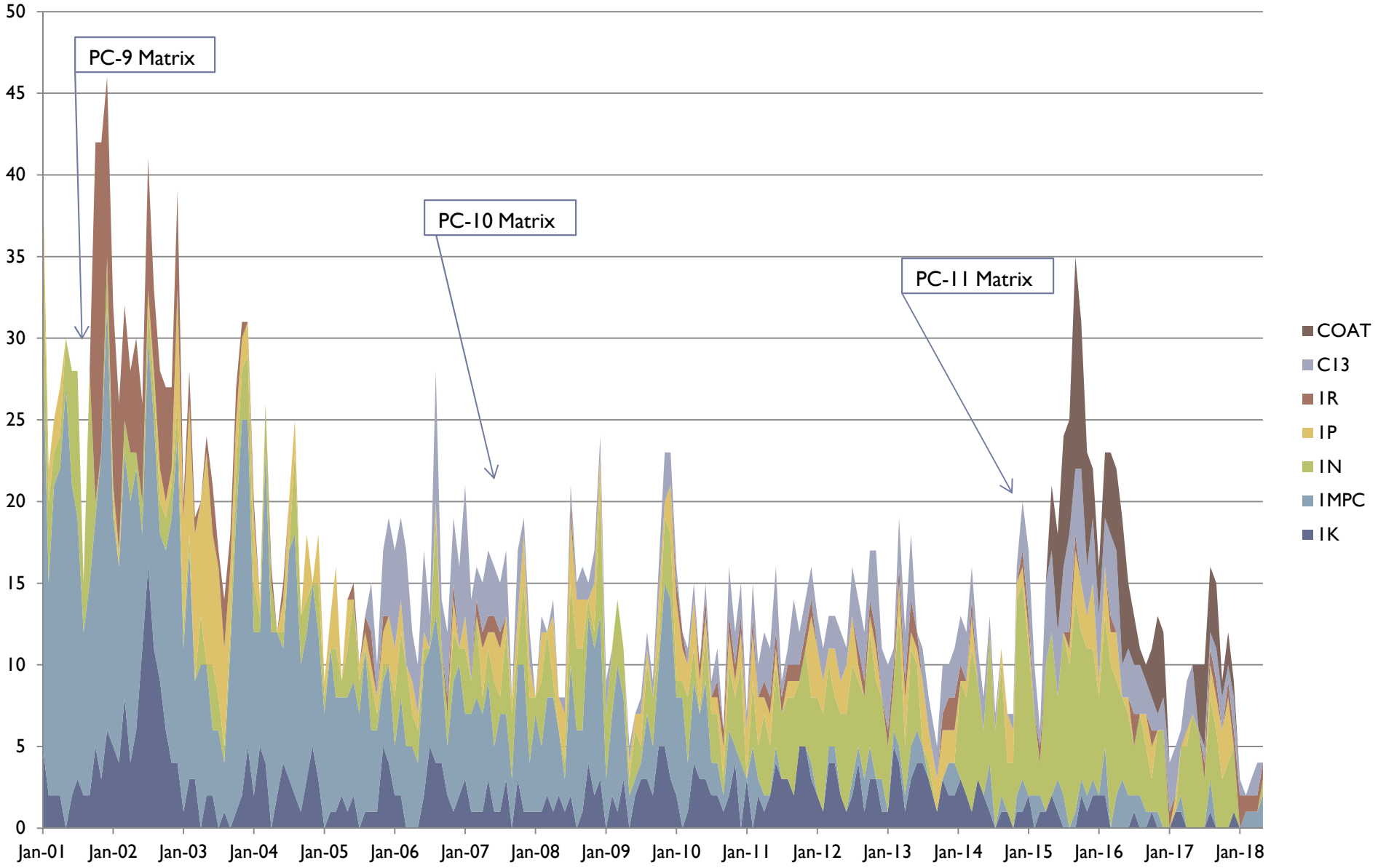
Availability of API CH-4 through CJ-4 Tests

Test	Hardware Issues	Availability Through 2023	Notes
Cat 1K/1N	Auxiliary components	Likely	1980's vintage engine. Ongoing resolution of issues with auxiliary stand and miscellaneous components.
Cat 1P/1R	No current issues	Likely	1990's vintage engine. Crankshaft can be ordered. Rings and Liners backordered.
Cat C13	No current issues	Likely	Engine block, injectors, turbos only available through reman. Liners with new material and processing but same specs were introduced 1Q 2018.

Additional Caterpillar Test Issues

- **Caterpillar Oil Aeration Test**
  - Aeration measurement system upgrades complete at each lab. Reference tests run and surveillance panel analyzing results.

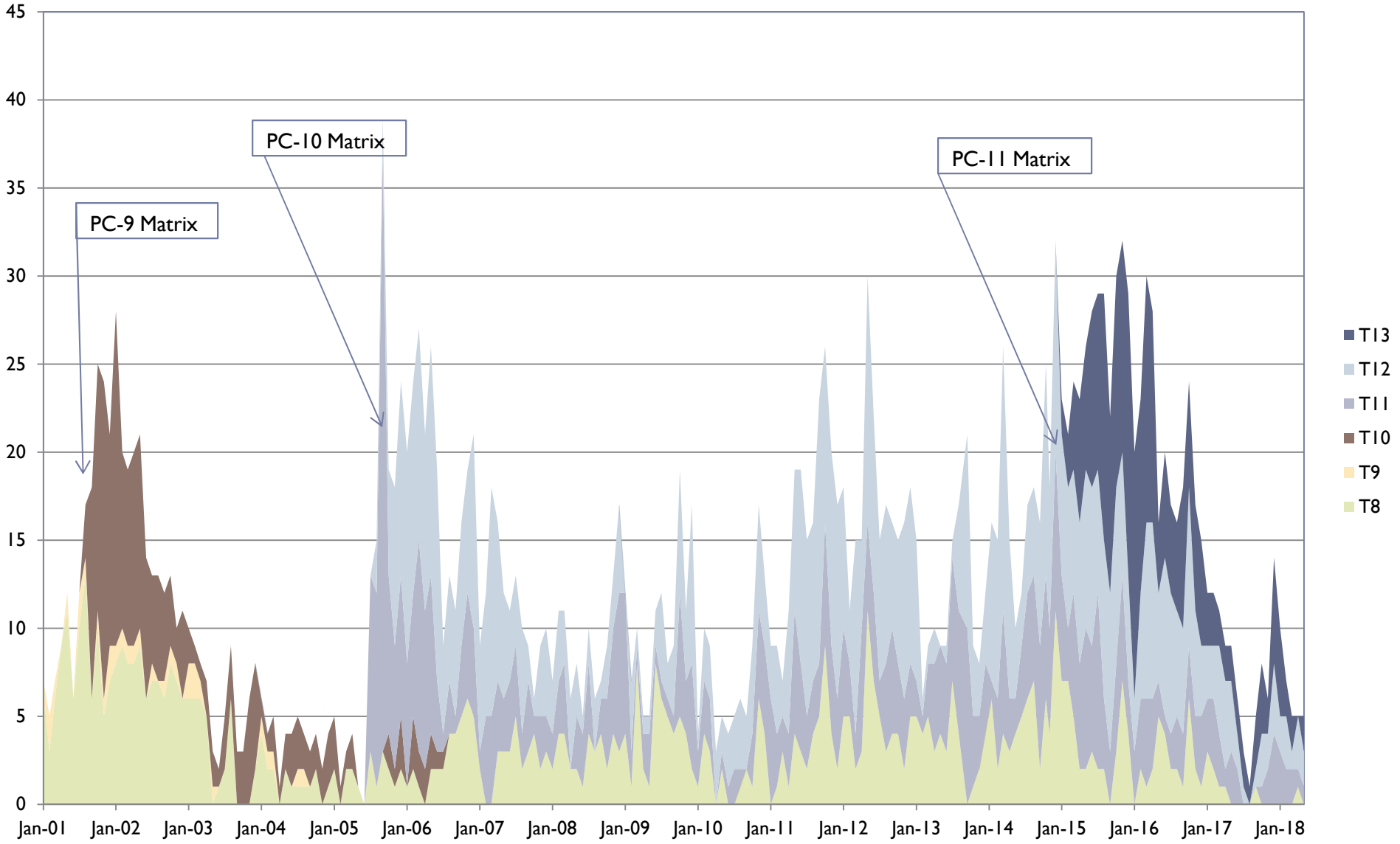
CATERPILLAR CANDIDATE ACTIVITY



Availability of API CH-4 through CJ-4 Tests

Test	Hardware Issues	Availability Through 2023	Notes
Mack T-8	No current issues	Likely	Engine block supply limited
Mack T-11	Oil Consumption	Likely	Engine production ended 2006. Finite number of engine blocks. Engine build life issues with oil consumption.
Mack T-12	Oil Consumption, head gasket	Likely	Engine production ended 2006. Low demand.

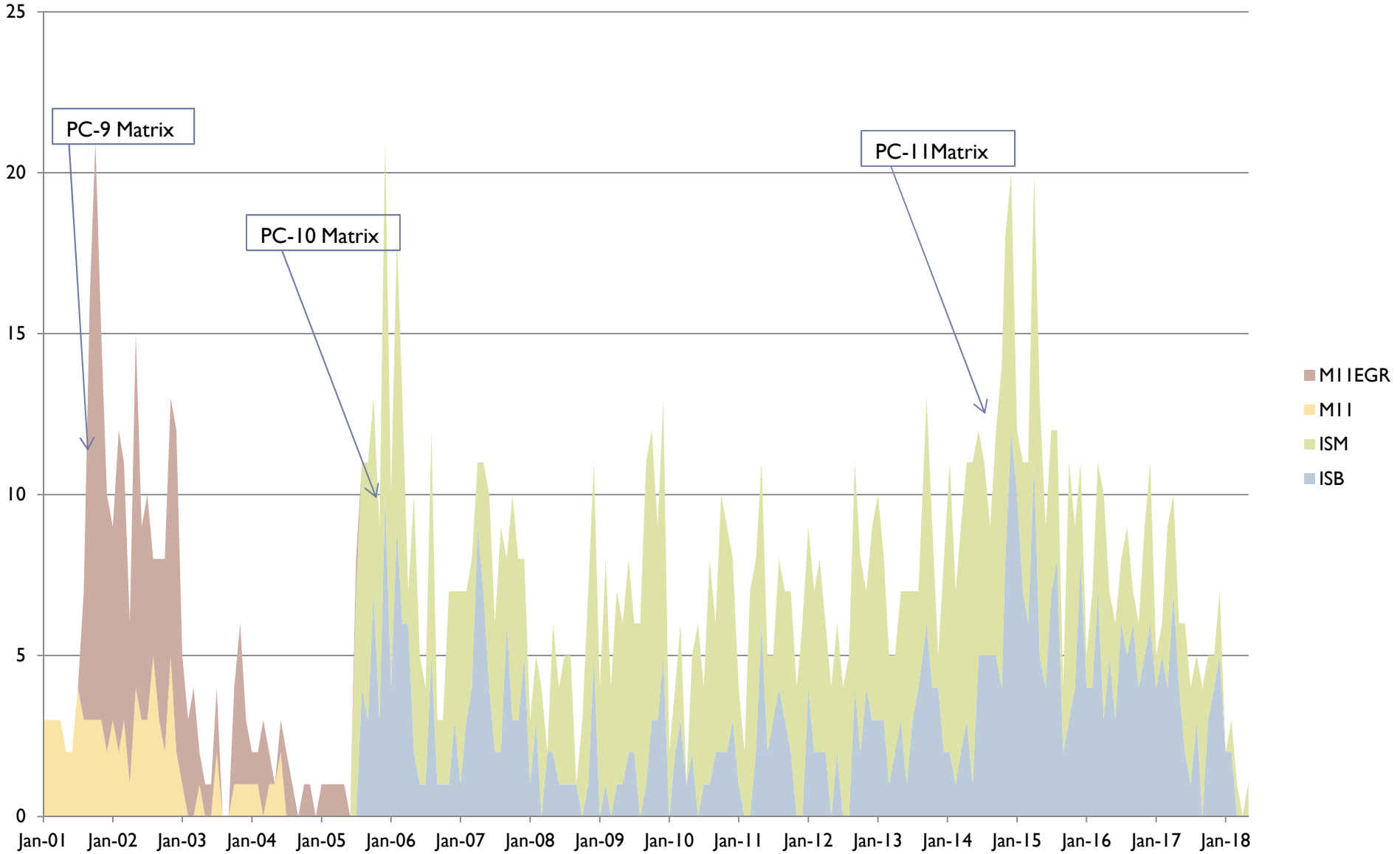
MACK CANDIDATE ACTIVITY



Availability of API CH-4 through CJ-4 Tests for PC-11

Test	Hardware Issues	Availability Through 2023	Notes
Cummins ISM	**No current issues**	**Likely**	**None**
Cummins ISB	**No current issues**	**Likely**	**None**

CUMMINS CANDIDATE ACTIVITY



Availability of API CH-4 through CJ-4 Tests for PC-11

Test	Hardware Issues	Availability Through 2023	Notes
RFWT	None	Likely	Long term supply of test parts at CPD. 6.5 L engine no longer in production at AM General, but available through supply network. Injection pump still available.
Seq IIIF/IIIG	Hardware depletion Q4 2018	No	Hardware depletion projected 4Q 2018.
EOAT	Using last known hardware	No	Oil Temperature runs higher w/ current EOAT engine. Still no official EOAT / COAT correlation. Engine hardware available for one rebuild.

B2 Action Items

- **No Action Items**
- **Comments**

COAT Updates

ASTM HDEOCP

Hind Abi-Akar

Caterpillar Inc.

Arizona, June 26, 2018

COAT – Provisional Licensing

- Caterpillar Surveillance Panel voted to suspend candidate oil testing:
  - Test optimization and reducing variability across labs
- Caterpillar Aeration Test Subgroup is currently working on reducing the variability across labs and potentially improving test repeatability

Main steps taken

Common Micromotion Box across labs

- Built and tested by one lab – same hardware

Changes to filter base

- Filter base modified and communized across labs

Density calculations via one mechanism

- Working with MM supplier, optimized constants and parameters to determine density based on MM output

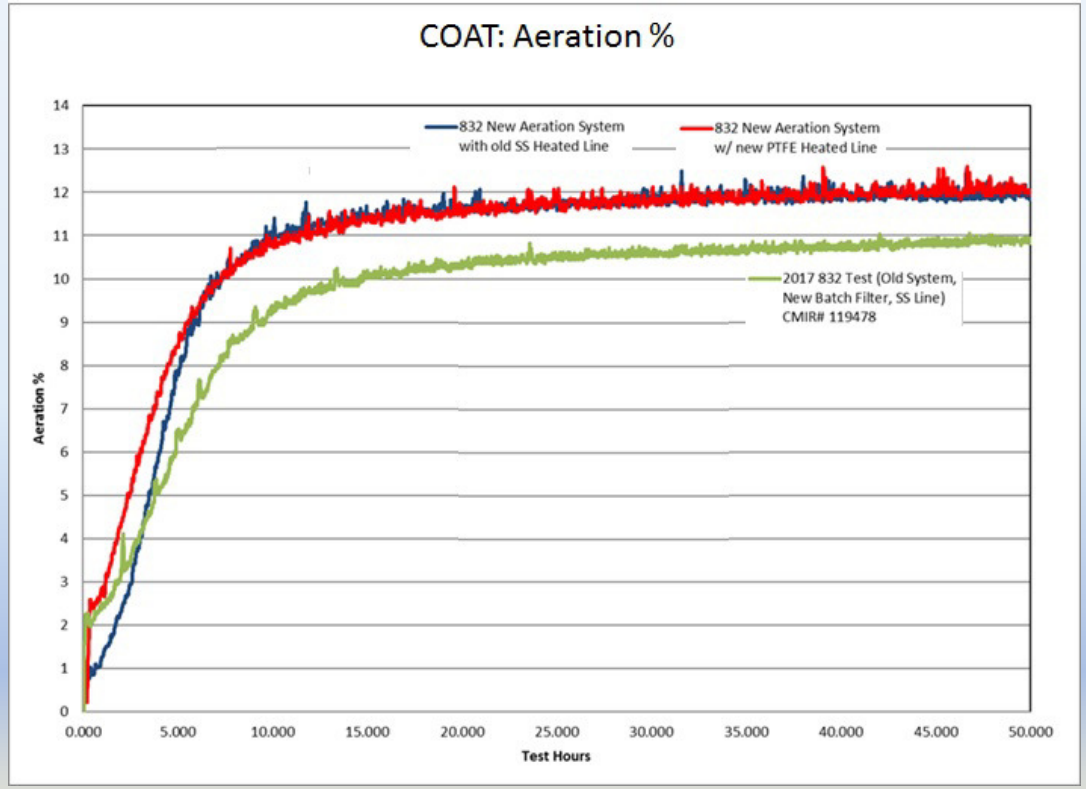
On going work

- Aeration levels have shifted up for both reference oils, but not uniformly

- Reference oil discrimination has suffered: The working group is investigating the root causes.
  - Engine hardware changes/ updates
  - Several calculated aeration methods are being considered

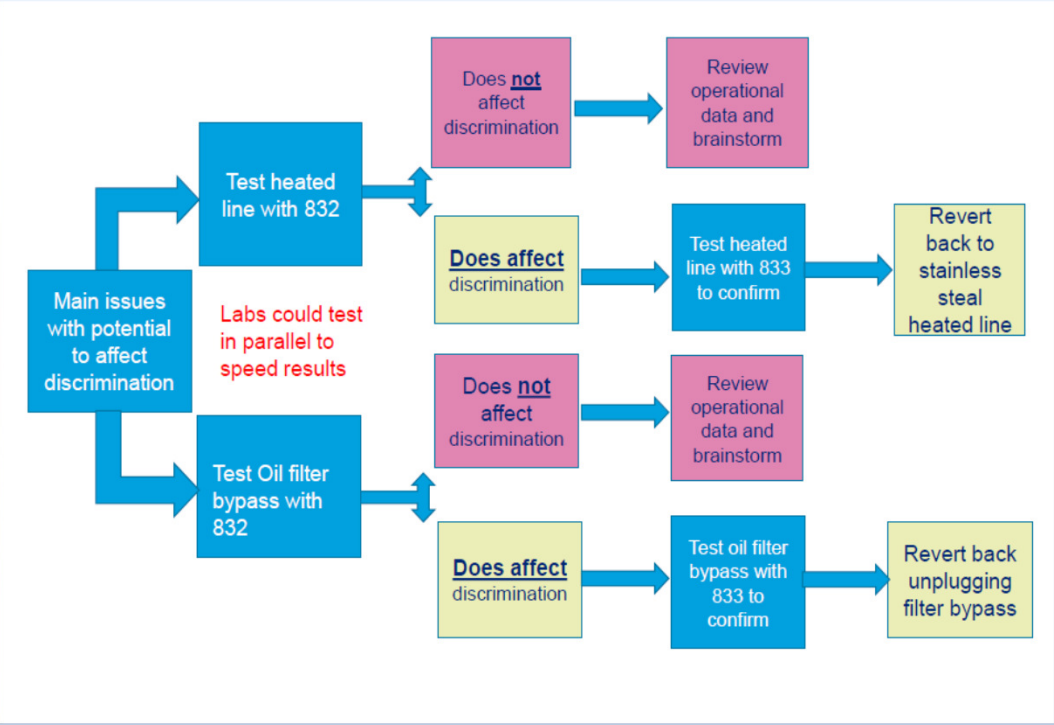
Current activities

- Weekly Caterpillar Aeration Test Subgroup meetings
- Scrutiny of test data
  - Deep dive into engine operational parameters
- Parts swap among labs: determine impact on aeration and differences among labs
- Systematic plan to test parameters one at a time.
  - Determined that some parameters have no impact (see heated line on the right)
  - Working on others



Plans

- ☑ Continue Caterpillar Aeration Test Subgroup meetings
- ☑ Continue in-depth root cause analysis to restore reference oil discrimination and bring engine test back online for candidate oil testing
- ☑ Updates will be shared with the Industry as progress is made



DAIMLER

ASTM 8074 - DD13 Scuffing Test
Suzanne Neal & Patrick Joyce
ASTM D02 – Phoenix, AZ
June 26th, 2018

Daimler Trucks

FREIGHTLINER
FUSO
WESTERN STAR
Thomas BUILT BUSES
BHARATBENZ

Daimler Surveillance Panel

Initiated	ASTM June 2016
Chairman	Patrick Joyce – Lubrizol Corporation
Secretary	Jose Starling – Southwest Research Institute
OEM Representative	Suzanne Neal – Daimler
TMC Representative	Sean Moyer
Next Meetings	TBD

Test Status & Parts Availability

- **Status of the Test**
  - Available
  - Surveillance Panel approved Batch C Liners – May 2018
    - Liner roughness limits were implemented
  - Editorial Changes to LTMS System – June 2018

- **Parts Availability**
  - Referencing new batch of top rings
    - ~ 2200
    - ~ 366 Engine Builds (6 Top Rings per engine)
  - Referencing new batch of Pistons
    - ~ 1600 Pistons
    - ~ 266 Engine Builds (6 Pistons per engine)
  - Referenced new batch of Liners
    - ~ Ordered 2000 Batched Liners
    - ~ 333 Engine Builds (6 Liners per engine)

Ford 6.7L VTW Test Update ASTM June 2018

Patrick Joyce (Lubrizol)

On behalf of

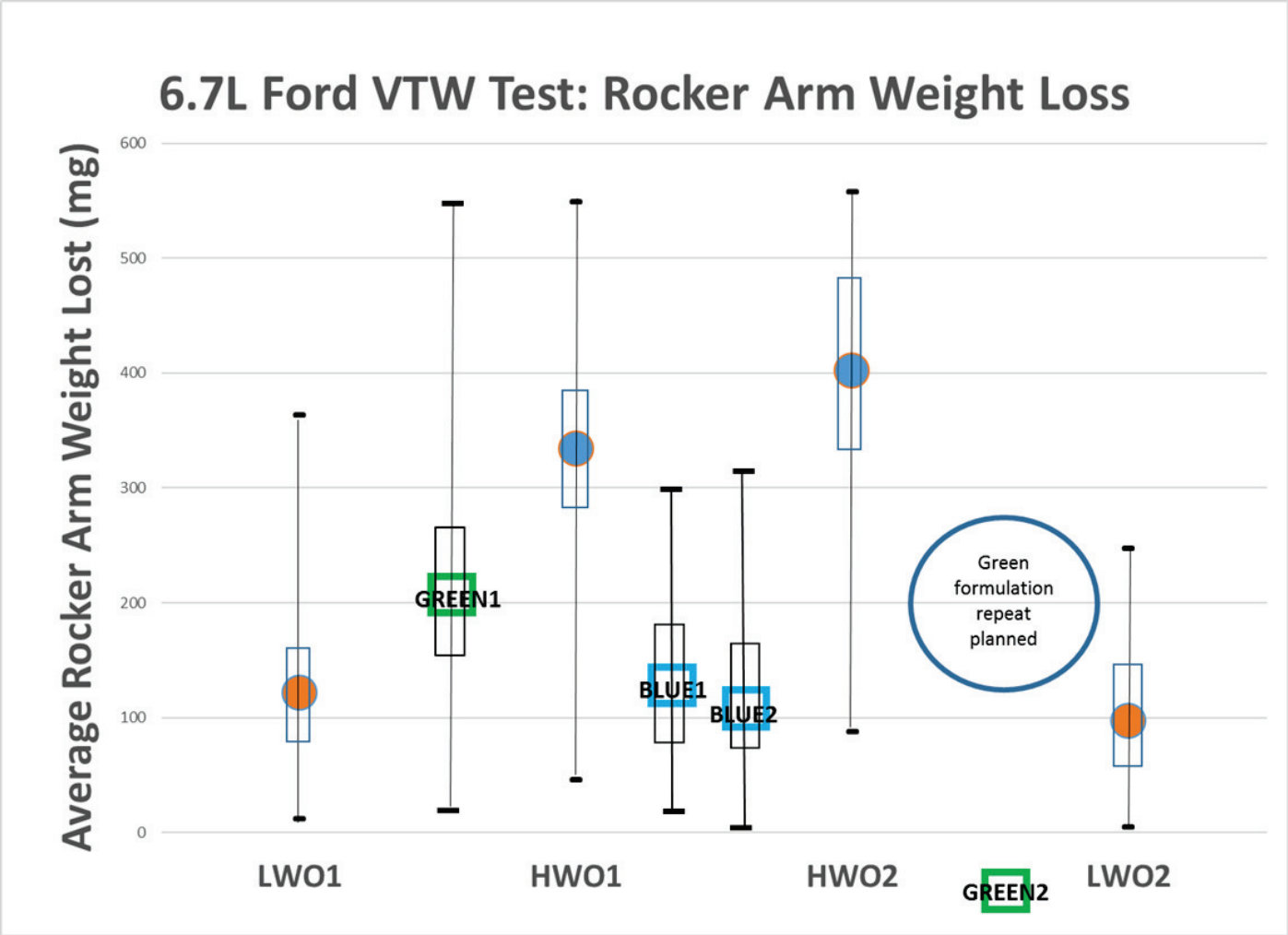
Ron Romano (Ford)

Test Development Progress

- Working on getting Southwest Research and Intertek running 210 hour test
  - Test is two phases: Soot Generation Phase and Wear Phase
- Work was completed to run Soot Generation Phase equivalent between all 3 labs
  - Soot Generation Phase length of fixed at 10 hours
- Still investigating soot generation during Wear Phase to achieve equivalency between the three labs
- Will be starting prove out testing at SwRI and Intertek within the next month
- 63-pg written test procedure 90% complete
  - First procedure review was completed by the three labs on 3 June 2018

Test Development Data

- HWO – “PC11B”
  - 3.0 HTHS150
  - 800 ppm phosphorus
- LWO – CJ-4 Factory Fill
  - 3.5 HTHS150
  - 1100 ppm phosphorus
- Blue – S/A CJ-4 Factory Fill w/Low HTHS150
  - 3.0 HTHS150
  - 1100 ppm phosphorus
- Green – S/A HWO w/High HTHS150
  - 3.5 HTHS150
  - 800 ppm phosphorus



A Program of ASTM International

Test Monitoring Center

@ Carnegie Mellon University
6555 Penn Avenue, Pittsburgh, PA 15206, USA
http://astmtmc.cmu.edu
412-365-1000

Sequence IIIH Information Letter 18-3
Sequence No. 8
June , 2018

ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: Sequence III Mailing List

SUBJECT: Addition of Interpolated 70 hour Percent Viscosity Increase Result

During a recent conference call, the Sequence III Surveillance Panel agreed to add an interpolated 70 hour Percent Viscosity Increase to the Test Method. Section12.4.8 has been added to describe the method for interpolating a 70 hour viscosity increase result.

The attached change to Test Method D8111-18 is effective with the issuance of this letter.

James Ryan
Head of Materials, Fasteners & Engrg Standards
FCA US LLC

Frank M. Farber
Director
ASTM Test Monitoring Center

Attachments

c: http://www.astmtmc.cmu.edu/ftp/docs/gas/ChryslerIIIH/procedure_and_ils/il18-3_IIIH.pdf

Distribution: Electronic Mail

Modifies Test Method D8111-18 as modified by Information Letters 18-001 and 18-002

12.4.8 *Interpolated 70 hour Percent Viscosity Increase*—Calculate a 70 hour Percent Viscosity Increase result using the following equation;

$$PVIS@70H = \left(\frac{\sqrt{PVIS@60H} + \sqrt{PVIS@80H}}{2}\right)^2$$

Where PVIS@60H = % Viscosity Increase at 60 Hours
and PVIS@80H = % Viscosity Increase at 80 Hours

Record the interpolated result on Form 4.

Report On
Sequence IIIH Evaluation
Version

Conducted For

	V = Valid
	I = Invalid
	N = Results cannot be interpreted as representative of oil performance (Non-reference oil) and shall not be used for multiple test acceptance

	NR = Non-reference oil test
	RO = Reference oil test

Test Number					
Test Stand		Runs Since Last Calibration		Total Runs on Stand	
Oil Code					
Formulation/Stand					
Alternate Codes					
EOT Date		EOT Time			

In my opinion this test been conducted in a valid manner in accordance with the Test Method, D8111, and appropriate amendments. The remarks included in the report describe the anomalies associated with this test.

Submitted By: _____
Testing Laboratory

_____
Signature

_____
Typed Name

_____
Title

Sequence IIIH
Form 2
Table of Contents

Sequence IIIH
Form 3
Summary of Test Method

The Sequence IIIH Test is a fired-engine, dynamometer lubricant test for evaluating automotive engine oils for certain high-temperature performance characteristics, including oil thickening, varnish deposition, and oil consumption. Such oils include both single viscosity grade and multi-viscosity grade oils that are used in spark-ignition, gasoline-fueled engines, as well as diesel engines. The Sequence IIIH Test utilizes a 2012 Chrysler Pentastar 3.6 Liter, water-cooled, 4 cycle, V-6 engine as the test apparatus. The Sequence IIIH test engine is an overhead valve design (OHV) and uses dual overhead camshafts operating both intake and exhaust valves. The engine uses two intake and two exhaust valve per cylinder. The test engine is overhauled prior to each test, during which critical engine dimensions are measured and rated or measured parts (pistons, rings, etc.) are replaced.

The Sequence IIIH Test consists 90 hours of engine operation at moderately high speed, load, and temperature conditions. The 90-hour segment is broken down into four 20-hour test segments and one 10-hour segment. Following each 20-hour segment, the 10 hour segment, and the 10-minute operational check, oil samples are drawn from the engine. The kinematic viscosities of the 20-hour segment samples and 10 hour segment samples are compared to the viscosity of the initial sample to determine the viscosity increase of the test oil.

The Sequence IIIH Test is operated at the following test states during the 90-hour portion of the test:

Parameter	Set Point
Engine Speed	3900 r/min
Engine Load	250 N·m
Oil Temperature, Block	151°C
Coolant Outlet Temperature	115°C
Fuel Temperature	30 °C
Intake Air Temperature	35 °C
Intake Air Pressure	0.05 kPa
Intake Air Dew Point	16.1 °C
Exhaust Back Pressure	4.5 kPa
Engine Coolant Flow	170 L/min
Coolant Pressure	200 kPa

Sequence IIIH
Form 4

Test Result Summary

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Date Started		Engine No.	
Time Started		Fuel Batch	
Date Completed		SAE Viscosity	
Time Completed		Reference Oil [A]	
Test Length			

Pass/Fail Results				
	Viscosity Increase (%)	**Average Weighted Piston Deposits (merits)**	**Phosphorus Retention %**	**Mini Rotary Viscometer Viscosity, D 4684**
Original Units				
Transformed Results[B]				
Industry Correction Factor				
Corrected Transformed				
Severity Adjustment				
Final Transformed Result				
Final Original Unit Result				

Additional Results

Oil Consumption Hours, h [B]		Oil Consumption, L	
Average Oil Ring Plugging, %		Number of Cold-Stuck Rings	
Number of Hot-Stuck Ring		Average Piston Varnish,	
Interpolated 70 Hour Result			

[A] *Reference Oil Tests Only*

[B] *Test Hours at which Oil Consumption was calculated*

Cold Crank Simulator Results, D 5293

Specified Temperature, °C	
Cold-Crank Simulator Viscosity at Specified Temperature, mPa·s	
MRV Temperature, ºC	
Yield Stress, Pa	

Sequence IIIH
Form 5
Operational Summary

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

	Parameter	Units	QI Threshold	EOT QI	Target	Average	Standard Deviation	Number of Samples	Number of BQD
Controlled Parameters	Speed	r/min	0.000		3900				
	Load	N·m	0.000		250				
	Oil, Block	°C	0.000		151				
	Coolant Out	°C	0.000		115				
	Coolant System	kPa			200				
	Intake Air	°C	0.000		35				
	Intake Air	kPa	0.000		0.05				
	Dew Point	°C	0.000		16.1				
	EBP Rt.	kPa	0.000		4.5				
	EBP Lt.	kPa	0.000		4.5				
	Fuel @ Rail	°C	0.000		30				
	Fuel @ Rail	kPa			420				
	Coolant Flow	L/min	0.000		170				

	Parameter	Units	Average	Standard Deviation	Number of Samples	Number of BQD
Non-controlled Parameters	Oil Sump	°C				
	Oil Pump	°C				
	Oil Cooler (Optional)	°C				
	Coolant In	°C				
	Oil Gallery	kPa				
	Oil Pump	kPa				
	Manifold Absolute Pressure	kPaA				
	Right Exhaust Temperature	°C				
	Left Exhaust Temperature	°C				
	Fuel Flow	kg/H				
	Crankcase	kPa				
	Right NOx	mg/kg				
	Left NOx	mg/kg				
	AFR, Rt.					
	AFR, Lt.					

Sequence IIIH
Form 6
Oil Consumption Data Plot

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Oil Consumption Data

Hours					**EOT**
Level low (mL)					
Total Oil Consumed (L)					

Oil Consumption Plot

Sequence IIIH

Form 7

Used Oil Analysis Results

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Viscosity Increase Data (mm^2/s @40 °C)			
Hours	**Viscosity** [A]	**Change**	**Percent**
New Oil			
Initial [B]			
EOT			

[A] *8000 cSt is maximum allowable viscosity*

[B] *Initial = At end of leveling run*

Highest Detergent Metal and Phosphorus Results by ICP (D 5185 Modified)			
Test Hour	**Detergent Metal**	**Phosphorus (P)**	**Phosphorus Retention** [C]
	mg/kg	mg/kg	Percent (%)
Initial[B]			
EOT			
Detergent Metal used for this test			

[C] *Phosphorus results analyzed by IIIGB Method.*

Sequence IIIH
Form 7a
Used Oil Analysis Results

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Oxidation & Nitration Results						
Parameter	**Method**	**20 hours**	**40 hours**	**60 hours**	**80 hours**	**EOT**
DIR Oxidation	E168 IIIG Area					
DIR Nitration	E168 IIIG Area					

Total Acid Number						
Parameter	**Method**	**20 hours**	**40 hours**	**60 hours**	**80 hours**	**EOT**
TAN	D664					
TBN	D4739					

Metals Element Analysis – ICP Method D5185							
Element	**New Oil**	**Initial[A]**	**20 hours**	**40 hours**	**60 hours**	**80 hours**	**EOT**
Aluminum (Al)							
Boron (B)							
Calcium (Ca)							
Copper (Cu)							
Iron (Fe)							
Potassium (K)							
Magnesium (Mg)							
Manganese (Mn)							
Molybdenum (Mo)							
Sodium (Na)							
Phosphorus (P)							
Lead (Pb)							
Silicon (Si)							
Tin (Sn)							
Zinc (Zn)							

[A] *Initial = At end of leveling run*

Sequence IIIH
Form 8

Summary of Ring Sticking

Lab		Oil Code			
Stand		Test No.			
Laboratory Oil Code					
Formulation Stand Code					
Rater			Rating Date		

Piston	% Oil Ring Plugging	Ring Sticking[A]	
		Hot-Stuck Rings	Cold-Stuck Rings
1			
2			
3			
4			
5			
6			
Total			
Average			

[A] Possible values
T = top compression ring
B = bottom compression ring
O = oil ring
N = none

Sequence IIIH
Form 9
Summary of Piston Deposits

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			
Rater		Rating Date	

Un-weighted Piston Deposits, merits										Weighted Piston Deposits	
	Grooves			Lands		Undercrown	Piston Boss Varnish				
	1	2	3	2	3		Front	Rear	Average		Merits
Piston 1										Piston 1	
Piston 2										Piston 2	
Piston 3										Piston 3	
Piston 4										Piston 4	
Piston 5										Piston 5	
Piston 6										Piston 6	
WF	0.05	0.10	0.20	0.15	0.30	0.10			0.10	Average	

Sequence IIIH
Form 10
Blowby Values & Plot

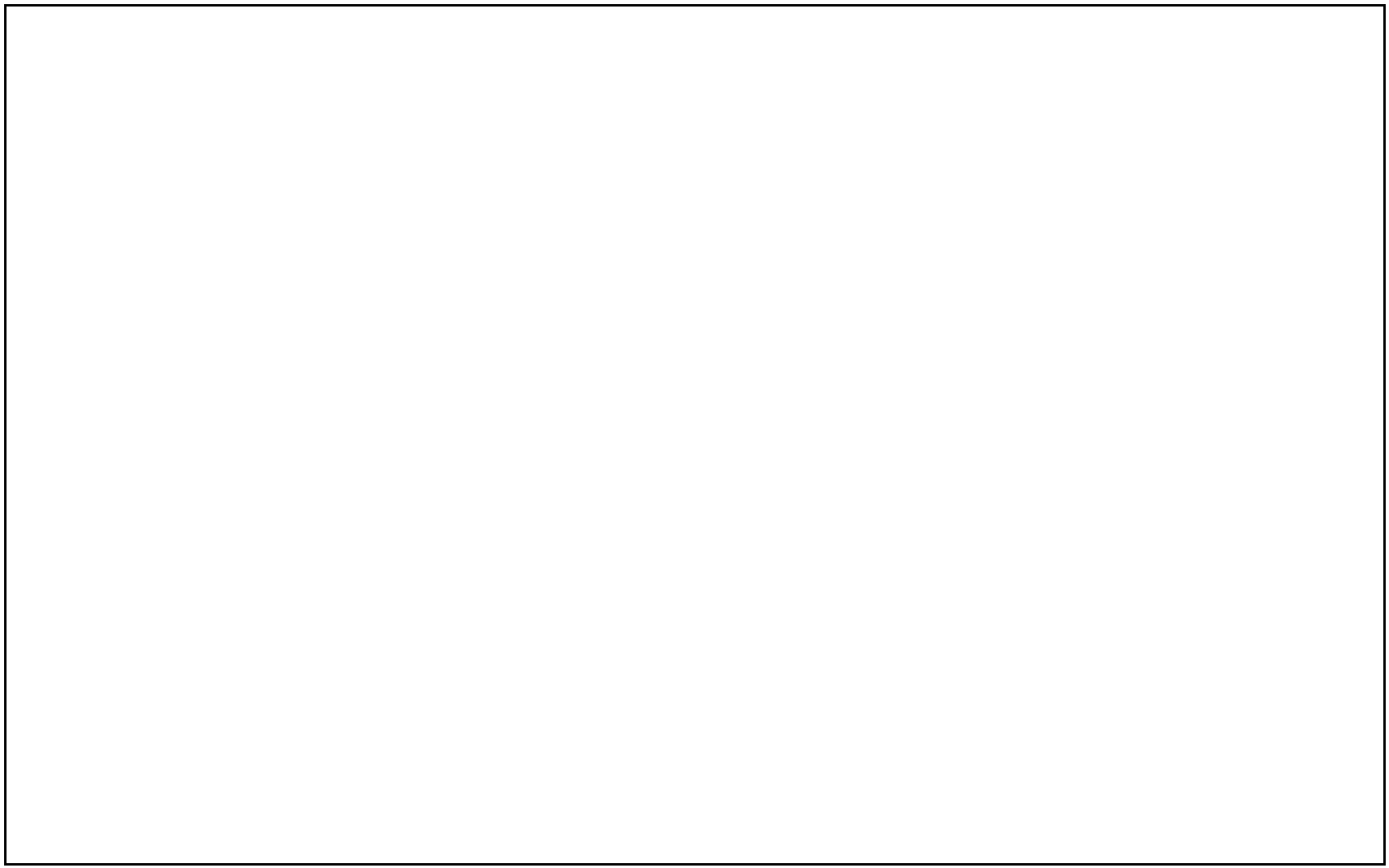
Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Blowby Plot

Test Hours	Blowby, L/min	Test Hours	Blowby, L/min	Test Hours	Blowby, L/min
				Average	

Sequence IIIH
Form 11
Viscosity Increase Plot

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			



Sequence IIIH
Form 12
Hardware Information

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Hardware Information	
Engine Build Date	
Block Serial Number	
Ring Batch Code	
Oil Control (OC) Ring Batch Code	
Expander Ring (EXP) Batch Code	
Cylinder Head Serial Number, Left	
Cylinder Head Serial Number, Right	
Lab Block Number	
Piston Batch Code	

Cylinder Bore Measurements								
Cylinder	Transverse				Longitudinal			
	Top	Middle	Bottom	Taper	Top	Middle	Bottom	Taper
2								
4								
6								
1								
3								
5								

Cylinder Surface Finish Measurements					
Cylinder	**Rk**	**Rpk**	**Rvk**	**Rz**	**Mr2**
2					
4					
6					
1					
3					
5					

Piston Ring End Gap (inches)						
	2	**4**	**6**	**1**	**3**	**5**
Top Ring Pre-Test						
2nd Ring Pre-Test						

Sequence IIIH
Form 13
Downtime Summary

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Number of Downtime Occurrences				
Test Hours	**Date**	**Downtime**	**Reasons**	
			Total Downtime (hours) – Maximum allowable downtime: 24 hours	

Sequence IIIH
Form 14
Test Comments

Lab		Oil Code	
Stand		Test No.	
Laboratory Oil Code			
Formulation Stand Code			

Number of Comment Lines		

Sequence IIIH

Form 15
American Chemistry Council Code of Practice
Test Laboratory Conformance Statement

Test Laboratory					
Test Sponsor					
Formulation / Stand Code					
Test Number					
Start Date		Start Time		Time Zone	

Declarations

No. 1 All requirements of the ACC Code of Practice for which the test laboratory is responsible were met in the conduct of this test. Yes _____ No_____ *

No. 2 The laboratory ran this test for the full duration following all procedural requirements; and all operational validity requirements of the latest version of the applicable test procedure (ASTM or other), including all updates issued by the organization responsible for the test, were met. Yes _____ No_____*

If the response to this Declaration is "No", does the test engineer consider the deviations from operational validity requirements that occurred to be beyond the control of the laboratory? Yes _____* No_____

No 3. A deviation occurred for one of the test parameters identified by the organization responsible for the test as being a special case. Yes _____* No_____ (This currently applies only to specific deviations identified in the ASTM Information Letter System)

	Operational review of this test indicates that the results should be included in the Multiple Test Acceptance Criteria calculations.
	*Operational review of this test indicates that the results should not be included in the Multiple Test Acceptance Criteria calculations.

Note: Supporting comments are required for all responses identified with an asterisk.

Comments

_____ _____
Signature Date

_____ _____
Typed Name Title