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#### Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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> Issued: March 22, 2011 Reply to: Dan Worcester Southwest Research Institute 6220 Culebra Rd. San Antonio, TX 78238 Phone: 210.522.2405 Fax: 210.684.7523 Email: dworcester@swri.org

The unapproved minutes of the 03.17.2011 Sequence VI Surveillance Panel Conference Call.

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The meeting was called to order at 1:03 PM by Chairman Charlie Leverett.

1.0 Agenda

The Agenda is the included as Attachment 1.

2.0 Roll Call

The Attendance list is Attachment 2.

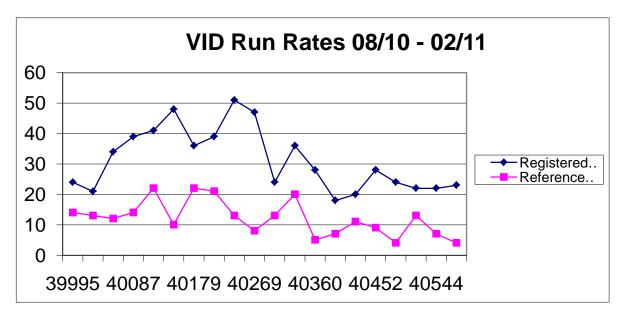
#### **Previous Minutes**

The minutes from the 02.10.2011 Conference Call were approved unanimously. One name was corrected due to a cut and paste by the Secretary.

#### 3.0) Action Item Review

3.1 OHT to report VID engine usage and expected depletion date at all Surveillance Panel meetings. Will be on-going. As-of 3/11/11 there are 57 engines in inventory at OHT. I will ask Rich to poll the Labs as to how many are in service and how many have not been put into service within the Labs.

Jason Bowden discussed usage. There are 2.72 engines per month being ordered for D engines. There are 17 engines on stands, and 16 in inventory, but some of those are earlier versions. The current estimation is the D version would be deleted by Q3 of 2012. See Attachment 3 for information on engines. A graph is included here:



#### 3.3 VID Engine Rebuild Task Force – Update

• Dan Worcester is the Task Force Chair and has begun an assembly manual using the GM cam gear replacement procedure as a baseline.

• This will be sent to lab engineers and any others interested in serving on this Task Force.

•First conference call held 01/11/11

**02/10/11** GM may be able to supply additional engines, Bruce is checking to see if the current model year in production will work for us. **We will have a further discussion in Old Business below.** 

#### 4.) Old Business

4.1) Review initial data from reference oil 1010 and determine:

- 4.1.1 Do we include the supplier data
- 4.1.2 How do we handle the targets

The decision was made to not update targets and review again at 20 tests on this oil.

## 4.2) Update on Engine Build Task Force

Bruce Matthews will supply one 2011 Malibu LY7 engine for test runs to ensure compatibly with the current VID engines. That will be a long block and the VID manifold, throttle body, MAF sensor, air cleaner and several other sensors will be installed on this block. SwRI will run this engine.

There was discussion of including the Mahle rings used on the D version, but this engine will not receive that change. They would be installed as part of the build at GM. Labs would still need to install cam gears prior to use.

# Action Item – Charlie Leverett and Rich Grundza will modify the current VID Assembly Manual and have it included as an Annex for ASTM VID procedure D-7589.

#### 5.) New Business

5.1) We never deleted the requirement to send final test reports to the TMC. Most labs have stopped sending final reports, in keeping with what has been done in other test types but we ought to get the procedure to reflect it.

Motion – Do not send final reports for invalid terminated tests to TMC.

# Rich Grundza / Ron Romano / Passed Unanimous

# Motion – Do send final reports for invalid full length tests to TMC.

# Rich Grundza / Ron Romano / Passed Unanimous

5.2) Reporting data for invalid tests run to completion. This was added to most PCMO methods, but the VI panel did not address it.

5.3) The ACC had a test that was invalidated for high baseline shift (BLB2 versus BLA). The ACC questioned the TMC as to the legitimacy of doing this. A review of reference data showed a number of instances of BLB2 vs BLA >0.6 and several very high ones were invalid for operational or hardware related issues. One reference result was deemed to be valid with a delta shift 1.48, which is about the same as the ACC reported result which was deemed invalid. I thought that tests were not to be invalidated for baseline shift alone, but neither the VID nor VIB tests address this.

# Action Item – SP chair will request the STAT group provide a recommendation. There will also be a request to use the much larger ACC registered test data.

5.4) From Dan - For the VID call, I would also like to have the following discussion – during the build workshops, a decision was made to JB Weld the tips of the cam position sensors. At one of the meetings I presented welded versions and made that recommendation. There is no procedure to do this. Are labs sealing that tip? Are all using JB Weld? Regardless, I would like to make the following change:

MOTION: Recommend to the Surveillance Panel that Section 9.4.10.1 be modified as follows:

9.4.10.1 Camshaft Position Sensors...engine supplier. As part of the installation of the cam gears on a new engine, use either JB Weld or Heliarc the oil passage at the end of the camshaft position sensors.

# Motion – Add a step to the VID Assembly Manual to plug the oil holes by welding with Heli-Arc.

# **Rich Grundza / Dan Worcester / Passed Unanimous**

5.5) Rich Grundza stated that the valves and plumbing were carried forward from the VIB procedure and did not match actual use with the VID procedure.

Motion – TMC will issue an Information Letter to correct the valve plumbing.

# **Rich Grundza / Dave Glaenzer / Passed Unanimous**

#### 6.) Next Meeting

At the call of the chairman.

#### 7.) Meeting Adjourned

The meeting adjourned at 1:47 PM.

# Sequence VI Surveillance Panel Conference Call 3/17/11 1:00 PM CST

# Agenda

# 1.0) Roll Call

# 2.0) Approval of minutes

2.1) Approve the minutes from the 02/10/011 Sequence VI Surveillance Panel Conference Call.

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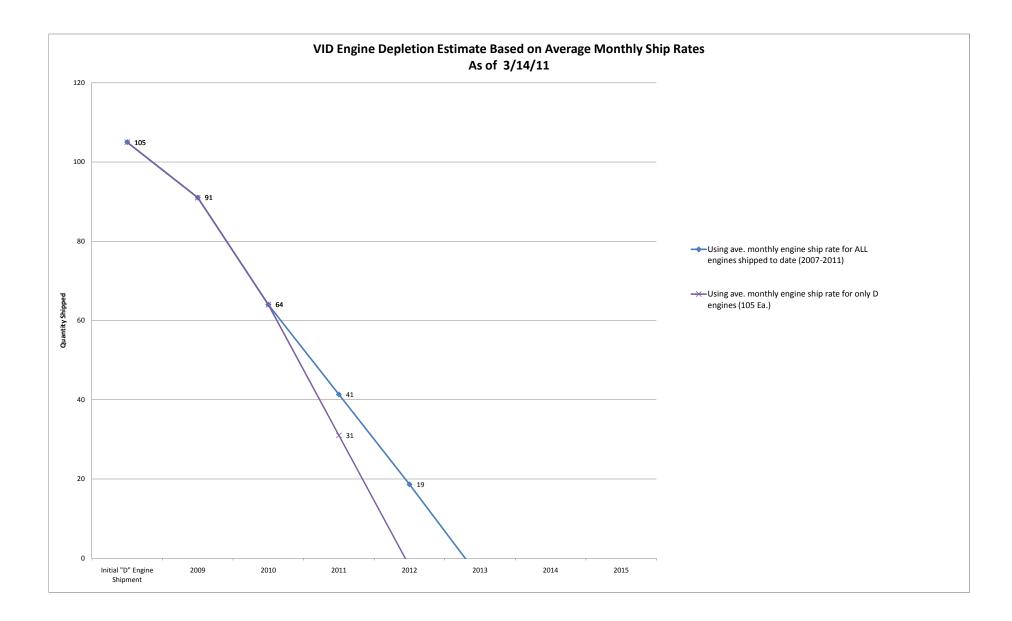
#### 7.) Meeting Adjourned

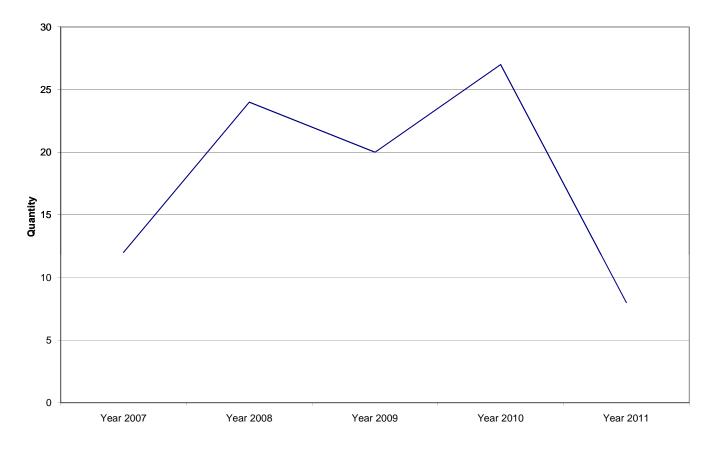
# **ASTM SEQUENCE VI SURVEILLANCE PANEL**

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	ASTM SEQUENCE VI SURVEILLANCE PANEL   Name Address Phone/Fax/Email At					
			Attendance			
	ot mooting					
Buest Present	at meeting					
ADAM, DWIG	SHIT, MATTHEW BOWDEN					
	SWORTH, MIKE MCMILLAN	, DOYLE BOESE	*******			
BILL BUSCHEI	2	, , , , , , , , , , , , , , , , , , ,				
ALUSON RAK						
JEFF CLARK						
MATTHEW SN	NIDOL		***************************************			
JIM LINDER			······································			
BOB OLREE						
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VID Engine Quantity Required for GF5 using Ave. Monthly Ship Rate for "D" Engines Only As of: 3/14/10 (Ship Dates from 8/9/09-3/14/11)	VID Engine Quantity Required for GF5 using Ave. Monthly Ship Rate for all Engine Shipped to Date As of: 3/14/11		Average Monthly Ship Rate Per Year	
Average = 49 engines / 18 months = $2.72$	Average= 1.89	Year	Ave. Shipped Per Month	
		2007	1.00	
Months left in GF-5 (3/01/11 thru 12/31/2015) (58)	Months left in GF-5 (3/01/11 - 12/31/2015) (58)	2008	2.00	
		2009	1.67	
58 months X 2.72 per month = 158	58 months X 1.89 per month = 109	2010	2.25	
		2011	2.67	
Current Engine Balance (56)	Current Engine Balance (56)	2012		
		2013		
Difference (158-56=102)	Difference (109-56=53)	2014		
Quantity Short	Quantity Short	2015		
102	53			





## VID Engine Shipments by Year