

**D 6894 - Engine Oil Aeration Test**

**Report Packet Version No.**

**Method:**

**Conducted For:**

	<b>V = Valid</b>	<b>The Reference Oil/Non-Reference Oil was Evaluated In Accordance With The Test Procedure.</b>
	<b>I = Invalid</b>	<b>The Reference Oil/Non-Reference Was Not Evaluated in Accordance With The Test Procedure.</b>

	<b>NR = Non-Reference Oil Test</b>
	<b>RO = Reference Oil Test</b>

<b>Stand:</b>	<b>Stand Run:</b>	<b>Engine:</b>	<b>Engine Run:</b>
<b>End Of Test Date:</b>		<b>End Of Test Time:</b>	
<b>Oil Code:</b>			
<b>Formulation/Stand Code:</b>			
<b>Altcode:</b>	<b>Altcode:</b>	<b>Altcode:</b>	

**In my opinion the test \_\_\_\_\_ been conducted in a valid manner in accordance with the Test Method D6894 and the appropriate amendments through the information letter system. The remarks included in the report describe the anomalies associated with this test.**

**Submitted By:** \_\_\_\_\_

\_\_\_\_\_ **Testing Laboratory**

\_\_\_\_\_ **Signature**

\_\_\_\_\_ **Typed Name**

\_\_\_\_\_ **Title**

**D 6894 - Engine Oil Aeration Test  
Form 2  
Test Results Summary**

<b>Laboratory:</b>	<b>EOT Date:</b>	<b>EOT Time:</b>
<b>Test Number:</b>		
<b>Oil Code:</b>		
<b>Formulation/Stand Code:</b>		

**Test Results**

<b>Date Test Started</b>	
<b>Start Time</b>	
<b>Test Length</b>	
<b>TMC Oil Code<sup>A</sup></b>	
<b>Laboratory Oil Code</b>	
<b>SAE Viscosity</b>	
<b>Oil Aeration (%)</b>	
<b>Original Result</b>	
<b>Correction Factor</b>	
<b>Severity Adjustment</b>	
<b>Final Original Unit Result</b>	

<sup>A</sup> Reference Oil Tests Only

**Last Stand Reference Results**

<b>Test Number</b>	
<b>Oil Code</b>	
<b>Test Length</b>	
<b>TMC Oil Code</b>	
<b>EOT Date</b>	
<b>EOT Time</b>	
<b>Calibration Expiration Date</b>	
<b>Oil Aeration (%)</b>	
<b>Original Result</b>	
<b>Correction Factor</b>	
<b>Final Original Unit Result</b>	

**D 6894 - Engine Oil Aeration Test  
Form 3  
Operational Summary**

<b>Laboratory:</b>	<b>EOT Date:</b>	<b>EOT Time:</b>
<b>Test Number:</b>		
<b>Oil Code:</b>		
<b>Formulation/Stand Code:</b>		

Parameter	Specification	Average	Std. Dev.	Minimum	Maximum
Engine Speed, r/min	3000 ± 10				
Torque, N-m	Report				
Power, Kw	~ 153 - 160				
Fuel Flow, kg/h	Report				
<b>Temperatures</b>					
Coolant Out, °C	99 - 102				
Coolant In, °C	85 - 91				
Oil, °C	121 Maximum				
Intake Air	29 ± 3				
Fuel, °C	66 ± 6				
Intake Manifold, °C	163 Maximum				
Ambient, °C	Report				
<b>Pressures</b>					
Oil Gallery, kPa	~ 345				
Intake Manifold, kPa	Report				
Tailpipe, kPa	Report				
Exhaust Man. (L), kPa	~ 118				
Exhaust Man. (R), kPa	~ 118				
Crankcase, kPa	Report				
In. Air Restriction, kPa	2.5 - 5.0				

**Operational Summary**

**D 6894 - Engine Oil Aeration Test  
Form 4  
Aeration Data Summary and Oil Analysis**

<b>Laboratory:</b>	<b>EOT Date:</b>	<b>EOT Time:</b>
<b>Test Number:</b>		
<b>Oil Code:</b>		
<b>Formulation/Stand Code:</b>		

Test Hours	Graduated Cylinder No.	Initial Volume, mL	Initial Temp., °F	Vol. Reduct. Factor	Initial Vol. at 60°F, mL	Final Volume, mL	Final Temp., °F	Vol. Reduct. Factor	Final Vol. at 60°F, mL	Oil Aeration, %
	1									
	2									
	3									
	1									
	2									
	3									
	1									
	2									
	3									

Test Hours	Oil Aeration, %	
	Average	Std. Deviation

Test Hours	Parts per Million (ppm)							
	Cr	Al	Ag	Cu	Fe	Pb	Si	Sn

**D 6894 - Engine Oil Aeration Test**

**Form 5**

**Test Fuel Analysis**

<b>Laboratory:</b>	<b>EOT Date:</b>	<b>EOT Time:</b>
<b>Test Number:</b>		
<b>Oil Code:</b>		
<b>Formulation/Stand Code:</b>		
<b>Fuel Supplier:</b>	<b>Batch Identifier:</b>	

<b>Measurement</b>	<b>Specification</b>	<b>Analysis</b>	<b>Method</b>
<b>Total Sulfur, % wt</b>	<b>0.03 - 0.05</b>		<b>D 2622</b>
<b>Gravity, °API</b>	<b>32 - 36</b>		<b>D 287 or D 4052</b>
<b>Hydrocarbon Composition</b>			
<b>Aromatics, % vol</b>	<b>28 - 35</b>		<b>D 1319</b>
<b>Olefins, % vol</b>	<b>Report</b>		<b>D 1319</b>
<b>Saturates, % vol</b>	<b>Report</b>		<b>D 1319</b>
<b>Cetane Index</b>	<b>Report</b>		<b>D 4737</b>
<b>Cetane Number</b>	<b>42 - 48</b>		<b>D 613</b>
<b>Copper Strip Corrosion</b>	<b>3 Maximum</b>		<b>D 130</b>
<b>Flash Point, °C</b>	<b>54 Maximum</b>		<b>D 93</b>
<b>Cloud Point, °C</b>	<b>-12 Maximum</b>		<b>D 2500</b>
<b>Pour Point, °C</b>	<b>-18 Maximum</b>		<b>D 97</b>
<b>Carbon Residue on 10% Residium, %</b>	<b>0.35 Maximum</b>		<b>D 524 (10% Bottoms)</b>
<b>Water &amp; Sediment, % vol</b>	<b>0.05 Maximum</b>		<b>D 2709</b>
<b>Ash, % wt</b>	<b>0.01 Maximum</b>		<b>D 482</b>
<b>Viscosity, cSt @ 40°C</b>	<b>2.0 - 3.2</b>		<b>D 445</b>
<b>Distillation, °C</b>			
<b>IBP</b>	<b>177 - 199</b>		<b>D 86</b>
<b>10%</b>	<b>210 - 232</b>		<b>D 86</b>
<b>50%</b>	<b>249 - 277</b>		<b>D 86</b>
<b>90%</b>	<b>299 - 327</b>		<b>D 86</b>
<b>EP</b>	<b>327 - 360</b>		<b>D 86</b>



**D 6894 - Engine Oil Aeration Test**

**Form 6A**

**Unscheduled Downtime & Maintenance Summary**

<b>Laboratory:</b>	<b>EOT Date:</b>	<b>EOT Time:</b>
<b>Test Number:</b>		
<b>Oil Code:</b>		
<b>Formulation/Stand Code:</b>		

Number of Downtime Occurrences			
Test Hours	Date	Downtime	Reasons
			<b>Total Downtime</b>

<b>Other Comments</b>		
<b>Number of Comment Lines</b>		

