



# OIL REPORT

LAB NUMBER:  
 REPORT DATE: 9/21/2015  
 CODE: 20/501

UNIT ID:  
 CLIENT ID:  
 PAYMENT:

<b>UNIT</b>	EQUIP. MAKE/MODEL: Harley Davidson Twin Cam 103	OIL TYPE & GRADE: Amsoil MCV 20W/50
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 4,632 Miles
	ADDITIONAL INFO:	

<b>CLIENT</b>	PHONE:
	FAX:
	ALT PHONE:
	EMAIL:

**COMMENTS** Sample "J1" from this engine looks good. Wear metals match up well next to universal averages, giving us no reason to suspect any poorly wearing parts in the engine. The viscosity was very thick for 20W/50, but we're not sure what caused that. Like we've mentioned, excess heat can do that, but that makes the oil oxidize rapidly also giving you high insolubles. They were at just a trace, less than we are able to quantify. The TBN of 6.3 is good and strong. Aside from the viscosity, this is an excellent first report for this engine.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	4,632	<b>UNIT / LOCATION AVERAGES</b>					<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	21,139						
	Sample Date	7/28/2015						
	Make Up Oil Added	0 qts						
ALUMINUM	3	4					4	
CHROMIUM	0	0					1	
IRON	10	10					13	
COPPER	17	10					15	
LEAD	0	0					2	
TIN	2	1					1	
MOLYBDENUM	56	58					131	
NICKEL	0	0					1	
MANGANESE	7	4					3	
SILVER	0	0					0	
TITANIUM	0	0					0	
POTASSIUM	1	2					3	
BORON	4	84					134	
SILICON	9	14					12	
SODIUM	5	5					21	
CALCIUM	3902	2997					2503	
MAGNESIUM	24	198					312	
PHOSPHORUS	1128	1084					1172	
ZINC	1566	1441					1493	
BARIUM	2	1					1	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°F	120.3	81-102				
	cSt Viscosity @ 100°C	25.04	15.8-21.1				
	Flashpoint in °F	425	>385				
	Fuel %	<0.5	<2.0				
	Antifreeze %	-	0.0				
	Water %	0.0	<0.1				
	Insolubles %	TR	<0.6				
	TBN	6.3	>1.0				
	TAN						
	ISO Code						

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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