



# OIL REPORT

LAB NUMBER:  
 REPORT DATE: 4/16/2019  
 CODE: 20/32

UNIT ID: 08 M3  
 CLIENT ID:  
 PAYMENT: CC: AmEx

<b>UNIT</b>	MAKE/MODEL: BMW 4.0L (S65B40) V-8 2008-2011	OIL TYPE & GRADE: Castrol TWS 10W/60
	FUEL TYPE: Gasoline (Unleaded)	OIL USE INTERVAL: 4,000 Miles
	ADDITIONAL INFO:	

<b>CLIENT</b>	
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**COMMENTS** Both lead and silicon were on elevated in your first sample, and of the two, lead is more troublesome. If you have run any leaded fuel or octane boosters in the past, then lead might not be a problem. If you've used 100% pump gas, then lead shows rod/main bearing wear and is high enough to show a lot of excess wear in that area. All other wear looks fine and matches up nicely to our averages, which show typical wear levels from the 4.0L S65 V-8 after ~5,400 miles oil use. Check your air filter due to silicon (possibly dirt) and resample in 3,000 miles to watch lead.

<b>ELEMENTS IN PARTS PER MILLION</b>	MI/HR on Oil	4,000	<b>UNIT / LOCATION AVERAGES</b>					<b>UNIVERSAL AVERAGES</b>
	MI/HR on Unit	87,000						
	Sample Date	4/1/2019						
	Make Up Oil Added	0 qts						
ALUMINUM	5	5					4	
CHROMIUM	0	0					0	
IRON	8	8					7	
COPPER	3	3					2	
LEAD	<b>38</b>	<b>38</b>					<b>8</b>	
TIN	1	1					1	
MOLYBDENUM	37	37					111	
NICKEL	0	0					0	
MANGANESE	0	0					1	
SILVER	0	0					0	
TITANIUM	1	1					15	
POTASSIUM	2	2					2	
BORON	12	12					51	
SILICON	<b>30</b>	<b>30</b>					<b>4</b>	
SODIUM	16	16					7	
CALCIUM	2167	2167					2543	
MAGNESIUM	14	14					76	
PHOSPHORUS	836	836					847	
ZINC	985	985					982	
BARIUM	0	0					0	

Values Should Be\*

<b>PROPERTIES</b>	SUS Viscosity @ 210°	93.7	80-100				
	cSt Viscosity @ 100°C	18.87	15.5-20.6				
	Flashpoint in °F	385	>375				
	Fuel %	<0.5	<2.0				
	Antifreeze %	0.0	0.0				
	Water %	0.0	0.0				
	Insolubles %	0.1	<0.6				
	TBN						
	TAN						
	ISO Code						

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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