



# OIL REPORT

LAB NUMBER: M87458

UNIT ID: 05 M3

REPORT DATE: 11/25/2020

CLIENT ID: 171796

CODE: 170/68

PAYMENT: CC: MC

UNIT

MAKE/MODEL: BMW 3.2L (S54B32) I-6  
FUEL TYPE: Gasoline (Unleaded)  
ADDITIONAL INFO:

OIL TYPE & GRADE: Liqui Moly 10W/60  
OIL USE INTERVAL: 2,459 Miles

CLIENT

COMMENTS

SHAUN: Your M3 is starting its oil analysis program on the right foot. Wear metals in this sample line up nicely with universal averages, which show typical wear levels for the S54 engine after about 4,500 miles of oil use. You didn't go quite that long on this oil and wear metals are okay after 2,459 miles of oil use. Copper is above average and it might show a little extra brass/bronze wear, but 12 ppm isn't enough to cause concern. It's just something to watch as trends develop. The viscosity is fine for 10W/60 oil and no harmful contamination showed up. Nice first report!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	2,459	UNIT / LOCATION AVERAGES						UNIVERSAL AVERAGES
	MI/HR on Unit	102,390							
	Sample Date	11/8/2020							
	Make Up Oil Added	0 qts							
	ALUMINUM	5	5						4
	CHROMIUM	0	0						0
	IRON	6	6						9
	COPPER	12	12						8
	LEAD	2	2						6
	TIN	0	0						0
	MOLYBDENUM	181	181						96
	NICKEL	0	0						0
	MANGANESE	1	1						1
	SILVER	0	0						0
	TITANIUM	0	0						12
	POTASSIUM	0	0						1
	BORON	39	39						58
	SILICON	6	6						5
	SODIUM	4	4						7
	CALCIUM	2619	2619						2360
	MAGNESIUM	12	12						158
	PHOSPHORUS	898	898						851
	ZINC	1003	1003						993
	BARIUM	0	0						0

Values  
Should Be\*

PROPERTIES	SUS Viscosity @ 210°F	86.7	80-110					
	cSt Viscosity @ 100°C	17.18	15.5-22.9					
	Flashpoint in °F	410	>385					
	Fuel %	<0.5	<2.0					
	Antifreeze %	0.0	0.0					
	Water %	0.0	0.0					
	Insolubles %	0.3	<0.6					
	TBN							
	TAN							
	ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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