

## OIL REPORT

**LAB NUMBER:** Q41964 **REPORT DATE:** 11/16/2022

REPORT DATE: 11/16/20. CODE: 1/88

UNIT ID: 08 M3 SEDAN
CLIENT ID: 136093
PAYMENT: CC Online

LIN

MAKE/MODEL: BMW 4.0L (S65B40) V-8 2008-2011

FUEL TYPE: Gasoline (Unleaded)

ADDITIONAL INFO: E90

OIL TYPE & GRADE: Liqui Moly 10W/60

OIL USE INTERVAL: 4,054 Miles

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OMMENTS

RUBIN: We've got all your M3's samples in the same file now. Reports are all under your customer account number 136093. We want to see how metals are trending, and emerging trends are excellent for this BMW. Even with the increase, lead is still below what averages show as typical for these engines, so the bearings are getting along well. Other metals are virtually the same with little to no measurable change, and the oil was in good condition when you changed it. The viscosity is normal and the oil filter kept insolubles (solids) far below the 0.6% max. Nice BMW.

	MI/HR on Oil	4,054		3,024	3,503	3,880	6,500	3,000	
			UNIT /	·	·				UNIVERSAL
	MI/HR on Unit	57,742	LOCATION AVERAGES	53,688	50,473	46,980	43,100		
	Sample Date	10/30/2022		6/30/2022	4/17/2022	12/22/2021	6/24/2021	10/18/2020	AVERAGES
	Make Up Oil Added	0.5 qts		0.25 qts	0 qts	1 qt	0.75 qts	0 qts	
ON	ALUMINUM	4	4	3	3	3	5	4	4
Ĭ	CHROMIUM	0	0	0	0	0	0	0	0
MIL	IRON	4	5	3	4	6	10	6	6
2	COPPER	1	1	1	1	1	2	2	2
띪	LEAD	4	5	1	2	6	15	4	7
4	TIN	1	1	0	1	1	2	1	1
S	MOLYBDENUM	106	78	122	103	56	60	51	110
Ŗ	NICKEL	0	0	0	0	0	0	0	0
ΡA	MANGANESE	0	0	1	0	0	0	0	1
Z	SILVER	0	0	0	0	0	0	0	0
S	TITANIUM	0	0	0	0	1	2	0	13
Ĕ	POTASSIUM	0	0	0	0	0	1	0	1
EN	BORON	37	58	81	40	53	61	71	50
EM	SILICON	5	3	5	5	0	3	3	4
	SODIUM	2	4	4	3	3	5	5	7
ш	CALCIUM	3317	2848	3314	3438	2580	2598	2402	2617
	MAGNESIUM	10	21	22	17	19	31	31	62
	PHOSPHORUS	994	925	1023	1045	840	873	856	856
	ZINC	1124	1040	1168	1187	959	998	950	986
	BARIUM	0	0	0	0	0	0	0	0

Values

Should Be\*

SUS Viscosity @ 210°F	91.5	80-110	85.6	91.7	86.8	88.2	84.7
cSt Viscosity @ 100°C	18.33	15.5-22.9	16.92	18.38	17.20	17.55	16.68
Flashpoint in °F	430	>385	415	390	455	405	440
Fuel %	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	<0.5
Antifreeze %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insolubles %	0.1	<0.6	0.2	0.1	0.1	0.1	TR
TBN							
TAN							
ISO Code							

\* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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