



OIL REPORT

LAB NUMBER: J64930

UNIT ID: 07 Z4M

REPORT DATE: 9/29/2017

CLIENT ID: 109974

CODE: 63/32

PAYMENT: CC: Visa

UNIT

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

OIL TYPE & GRADE: Liqui Moly Race Tech GT1 10W/60
OIL USE INTERVAL: 2,881 Miles

CLIENT

PHONE:
FAX:
ALT PHC
EMAIL:

COMMENTS

I : This Z4M has been doing great under your ownership. Wear metals are staying steady and low in spite of a good thrashing at the track. Low wear results like this show that the engine doesn't mind the hard use, and that also shows an engine that's in good mechanical health. There's no fuel dilution or other contamination in the sample, and the viscosity tested in the 10W/60 range, which is what you've been using in the past. Hopefully you can get some more track days in before the cold weather sets in. Keep up the good work!

ELEMENTS IN PARTS PER MILLION	MI/HR on Oil	2,881	UNIT / LOCATION AVERAGES	2,600	2,145	5,000			UNIVERSAL AVERAGES
	MI/HR on Unit	37,761		34,600	30,692	24,100			
	Sample Date	9/26/2017		5/21/2017	6/2/2016	10/2/2013			
	Make Up Oil Added			5.5 liters	0 qts	0 qts			
	ALUMINUM	3		3	2	3	4		
	CHROMIUM	0		0	0	0	0		
	IRON	6		7	6	6	9		
	COPPER	1		2	1	2	4		
	LEAD	0		3	0	0	12		
	TIN	0	0	0	0	0	0		1
	MOLYBDENUM	75	72	23	190	1			79
	NICKEL	0	0	0	0	0			1
	MANGANESE	1	1	0	1	2			1
	SILVER	0	0	0	0	0			0
	TITANIUM	1	11	2	40	0			11
	POTASSIUM	2	2	2	1	2			2
	BORON	42	60	65	49	86			66
	SILICON	4	4	4	4	3			5
	SODIUM	7	5	5	5	4			7
	CALCIUM	2788	2345	2197	2880	1515			2137
	MAGNESIUM	28	192	53	64	623			259
	PHOSPHORUS	906	836	807	812	819			833
	ZINC	1058	981	897	1037	930			990
	BARIUM	0	0	0	0	0			0

Values
Should Be*

PROPERTIES	SUS Viscosity @ 210°F	84.9	80-100	81.3	92.4	86.7		
	cSt Viscosity @ 100°C	16.73	15.5-20.6	15.86	18.56	17.18		
	Flashpoint in °F	420	>370	385	415	350		
	Fuel %	<0.5	<2.0	<0.5	<0.5	2.3		
	Antifreeze %	0.0	0.0	0.0	0.0	0.0		
	Water %	0.0	<0.1	0.0	0.0	0.0		
	Insolubles %	TR	<0.6	0.1	TR	0.2		
	TBN							
	TAN							
	ISO Code							

* THIS COLUMN APPLIES ONLY TO THE CURRENT SAMPLE

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