



Lubricant Analysis Report

North America: +1-877-808-3750

Latin America: +1-317-808-3750 / +502-3093-6466 (WhatsApp)

Europe: +1-317-808-3750

0	1	2	3	4
NORMAL		ABNORMAL		CRITICAL

Overall report severity based on comments.

Account Information		Component Information		Sample Information	
Account Number: 122750-0001-0000 Company Name: ARCH OIL COMMENTS Contact: Address: Phone Number:		Component ID: # 5902 Secondary ID: MINI (BMW) JOHN COOPER 1.6L Component Type: UNLEADED GASOLINE ENGINE Manufacturer: MINI-COOPER Model: 1.6L Application: AUTOMOTIVE Sump Capacity:		Tracking Number: 00009680430 Lab Number: Z-245290 Lab Location: Poznan Data Analyst: MPJ Sampled: 10-Mar-2022 Received: 28-Mar-2022 Completed: 29-Mar-2022	
Filter Information		Miscellaneous Information		Product Information	
Filter Type: Information Requested Micron Rating: 0				Product Manufacturer: MOTUL Product Name: 300V Viscosity Grade: SAE 15W50	
Comments	Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and fluid conditions. Potassium is at a MINOR LEVEL; Potassium sources: coolant (antifreeze), lube additive or supplement, solder flux, coating on new bearings, rust preventive coating, or environmental. MIXING of 2 different lubricants acknowledged. For this reason, additive and/or viscosity flags are removed. Continue to monitor changes with these areas. Your note was taken into consideration.				

	Wear Metals (ppm)										Contaminant			Multi-Source Metals (ppm)						Additive Metals (ppm)				
Sample #	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
BL	0	0	0	0	0	0	0	0	0	0	19	1	1	0	29	0	0	0	2	8	2413	0	1077	1223
1	2	0	3	0	1	0	0	0	0	0	10	3	2	0	497	1	0	0	88	1	2104	2	900	1045
2	15	1	2	0	7	4	0	0	0	0	8	4	32	0	455	1	0	0	70	22	2183	2	911	1075

Sample #	Sample Information							Contaminants			Fluid Properties					
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base No. D4739	Oxidation	Nitration
			km	km		gal					cSt	cSt	mg KOH / g	mg KOH / g	abs / cm	abs / 0.1mm
BL	N/A	26-Nov-2020	0	0	Unk	0	Unk			<.1 - FTIR	118	17.6	2.81		75	6
1	N/A	24-Sep-2021	0	0	Unk	0	Unk			<.1 - FTIR	89.1	14.4	2.80		52	8
2	10-Mar-2022	28-Mar-2022	5000	54000	Unk	0	Unk	1.2 - GC	<.1	<.1 - FTIR	85.8	14.2	2.48	6.67	48	11

Sample #	Particle Count (particles/mL)										Additional Testing		
	ISO Code	> 4	> 6	> 10	> 14	> 21	> 38	> 70	> 100	Test Method	Base No. D2896	Viscosity Index	
	Based On	particles /	particles /	particles /	particles /	particles /	particles /	particles /	particles /		mg KOH /	Index	
	4/6/14	mL	mL	mL	mL	mL	mL	mL	mL		g	Number	
BL	/ /										8.4	165	
1	/ /										8.2	166	
2	/ /											172	

Comments are advisory only and are based on the assumption that the sample and data submitted are valid. Results relate only to the items tested. Missing fluid or component information limits the evaluation. No warranty is expressed or implied. Measurement uncertainty available upon request.

Historical Comments	1	Data used for baseline reference only. Data indicates no abnormal findings. Resample at normal interval. MIXING of 2 different lubricants acknowledged. For this reason, additive and/or viscosity flags are removed. Continue to monitor changes with these areas. Your note was taken into consideration.
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