

## **Lubricant Analysis Report**

North America: +1-877-808-3750

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

Europe: +1-317-808-3750



Overall report severity based on comments.

Account Information	Component Information	Sample Information							
Account Number: 122750-0001-0000	Component ID: #7132-2   BMW 318D F30 B47	Tracking Number: 00009723897							
Company Name: ARCH OIL COMMENTS	Secondary ID:	Lab Number: Z-294296							
Contact:	Component Type: DIESEL ENGINE	Lab Location: Poznan							
Address:	Manufacturer: BMW	Data Analyst: AC							
	Model: 318D	Sampled: 24-Aug-2022							
Phone Number:	Application: AUTOMOTIVE	Received: 21-Dec-2022							
	Sump Capacity:	Completed: 21-Dec-2022							
Filter Information	Miscellaneous Information	Product Information							
Filter Type: FULLFLOW	Wildcard 1: +10% RL EYRO S. 5W30	Product Manufacturer: SHELL							
Micron Rating: 0		Product Name: HELIX ULTRA ECT C2/C3							
		Viscosity Grade: SAE 0W30							
Comments Flagged data does not indicate an	Comments Flagged data does not indicate an immediate need for maintenance action. Continue to observe the trend and monitor equipment and								
fluid conditions. OXIDATION is at a MINOR level, which may be due to extended drain interval or high operating temperature.									

	Wear Metals (ppm)										Contaminant Metals (ppm) 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
1	39	2	3	8	5	0	0	0	0	0	8	31	6	2	69	1	1	0	104	51	1697	0	708	809

		Sample	e Infori	mation					Contaminants	Fluid Properties						
nple#	te Sampled	te Received	Lube Time	Unit Time	be Change	Lube Added	ter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	a Acid Number	Base No. D4739	/ sde Oxidation	od Nitration
Sar	Da	Dat	km	km	Ľ	gal	Filt	%	%	%	cSt	cSt	KOH / g	KOH / g	cm	0.1mm
1	24-Aug-2022	21-Dec-2022	8669	144261	Unk	0	Unk	<2 - Estimate	0.3 - E2412	<.1 - FTIR		11.5		5.00	21	9

	•				Partio	cle Count	Additional Testing					
-					- I al tit	tic court	Additional resting					
	Sample #	opo OSI Based On 4/6/14	Particles /	ပ ^ /particles / mL	0 ^ particles / mL	mL ^ particles / 7	/particles / mL	ω κ Λ particles / mL	02 ^ particles / mL	00 ^ particles / mL	Test Method	
	1	//										

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.