

LAB REPORT

Unit ID **Utility vehicle**
Component **Diesel engine**
Lab number **1700865**



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Example report
Analysis scope: Analysis-Kit 2

Machine type: **LKW**
Manufacturer: **Mercedes**
Oil brand name: **SAE 5W-40**
Oil quantity in system: **32 l**

Diagnosis for the current laboratory values

Wear metals are only present in negligible concentrations. Hardly any abrasive or corrosive wear is therefore visible. If no oil change has happened yet, it is possible to continue using the oil under similar operating conditions and under continuation of the usual maintenance schedule. According to the information you provided, the oil has already been changed. I recommend that you send the next sample at the next service interval or at your regular inspection for trend analysis.

Carsten Heine

Sample Rating



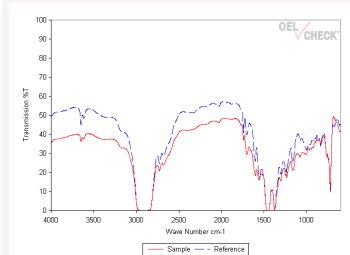
normal

ANALYSIS RESULTS			Current sample	Previous samples	
LAB NUMBER			1700865	1700866	
SAMPLE RATING					
Date tested			12.12.2023	26.10.2023	
Date of sample taken			22.11.2023	18.10.2023	
Date of last oil change			22.11.2023	18.10.2023	
Top-up since change	l		0	0	
Operating time since change	km		26000	32662	
Total operating time	km		58586	32662	
Oil changed			yes	yes	
WEAR					
Iron	Fe	mg/kg	10	37	
Chrome	Cr	mg/kg	0	0	
Tin	Sn	mg/kg	0	0	
Aluminum	Al	mg/kg	5	15	
Nickel	Ni	mg/kg	0	0	
Copper	Cu	mg/kg	4	3	
Lead	Pb	mg/kg	1	1	
PQ index	-		< 25	< 25	
CONTAMINATION					
Silicon	Si	mg/kg	4	3	
Potassium	K	mg/kg	14	6	
Sodium	Na	mg/kg	0	4	
Water	%		< 0.10	< 0.10	
IR Glycol	-		negative	negative	
Diesel fuel	%		< 0.3	0.3	
Biodiesel	%		< 0.3	< 0.3	
Soot content	%		0.2	< 0.1	
OIL CONDITION					
Viscosity at 40°C	mm²/s		92.76	92.32	
Viscosity at 100°C	mm²/s		13.11	14.18	
Viscosity index	-		140	158	
Oxidation	A/cm		14	12	
Nitration	A/cm		8	6	
Sulfation	A/cm		0	0	
IR index	-		96.08	98.83	
Dispersancy	%		89	97	
ADDITIVES					
Calcium	Ca	mg/kg	2674	3893	
Magnesium	Mg	mg/kg	369	10	
Boron	B	mg/kg	270	108	
Zinc	Zn	mg/kg	958	1245	
Phosphorus	P	mg/kg	839	1115	
Barium	Ba	mg/kg	0	0	
Molybdenum	Mo	mg/kg	19	120	
Sulphur	S	mg/kg	5565	6761	
ADDITIONAL TESTS					
BN	mgKOH/g		15.45	14.63	

Bottle and cap



Infrared Spectrum



CCD oil spot

