

Current

KL0014601

History1

History2

[CONHER] MERCDES BENZ UM - SAC #162 Ac. Motor **Diesel Engine** CHEVRON DELO 400 SDE SAE 15W40 (16 LTR)

RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor. (Customer Sample Comment: Oil with 5 months)

WEAR

All component wear rates are normal.

CONTAMINATION

There is a moderate amount of fuel present in the oil. The amount and size of particulates present in the system are acceptable.

Sample Number		Client Info		KL0014601	
Sample Date		Client Info		26 Jun 2024	
Machine Age	kms	Client Info		95045	
Oil Age	kms	Client Info		21925	
Filter Age	kms	Client Info		21925	
Oil Changed		Client Info		Not Changd	
Filter Changed		Client Info		Not Changd	
Sample Status				ABNORMAL	
Sample Status					
Iron	nnm	ASTM D5185m	>100	14	
-	ppm	ASTM D5185m	>20	0	
Chromium	ppm			-	
Nickel	ppm	ASTM D5185m	>50	<1	
Titanium	ppm		>2	0	
Silver	ppm	ASTM D5185m	>2	0	
Aluminum	ppm		>50	2	
Lead	ppm	ASTM D5185m	>40	0	
Copper	ppm	ASTM D5185m	>330	0	
Tin	ppm	ASTM D5185m	>15	<1	
Vanadium	ppm	ASTM D5185m		0	
White Metal	scalar	*Visual	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	
Silicon	ppm	ASTM D5185m	>25	6	
Potassium	ppm	ASTM D5185m	>20	2	
Fuel	%	ASTM D3524	>5	7.7	
Water		WC Method	>0.2	NEG	
Glycol		WC Method		NEG	
Soot %	%	*ASTM D7844	>3	0.8	
Nitration	Abs/cm	*ASTM D7624	>20	5.3	
Sulfation		*ASTM D7415	>30	19.1	
Particles >4µm	7 4007.111111	ASTM D7647	200	3201	
Particles >6µm		ASTM D7647	>5000	1744	
Particles >14µm		ASTM D7647	>640	297	
Particles >21µm			>160	100	
Particles >38µm		ASTM D7647	>40	15	
Particles >71µm		ASTM D7647	>10	2	
Oil Cleanliness		ISO 4406 (c)	>19/16	18/15	
Silt	scalar	*Visual	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	
Sand/Dirt		*Visual	NONE	NONE	
	scalar scalar		NORML	NORML	
Appearance		*Visual	NORML	-	
Odor	scalar	*Visual		NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	
Sodium	nnm	ASTM D5185m		2	
Boron	ppm ppm	ASTM D5185m		325	
Barium		ASTM D5185m		0	
Molybdenum	ppm	ASTM D5185m		76	
Manganese	ppm	ASTM D5185m		<1	
•	ppm			349	
Magnesium	ppm	ASTM D5185m ASTM D5185m		349 1264	
Calcium	ppm		760	-	
Phosphorus	ppm		760	973	
Zinc	ppm	ASTM D5185m	800	1123	
Sulfur	ppm	ASTM D5185m	3000	3484	
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.6	
Base Number (BN)		ASTM D2896	10	7.54	
Visc @ 100°C	cSt	ASTM D445	14.6	11.1	

UOM

Test

Sample Number

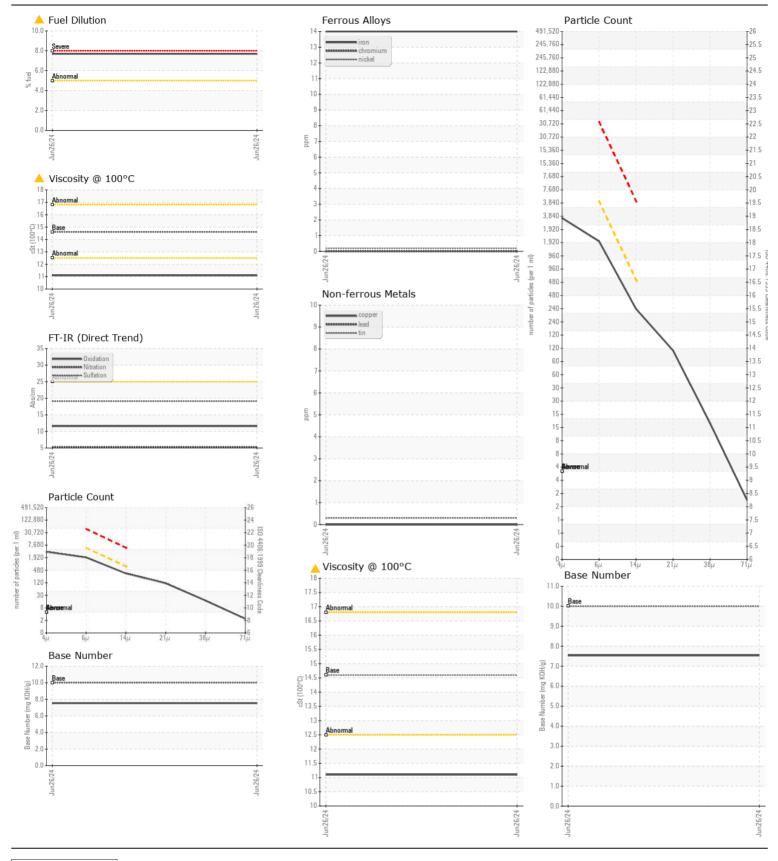
Method

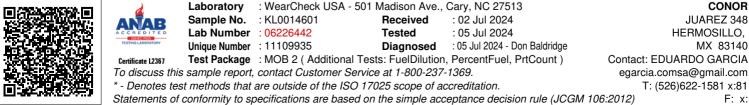
Client Info

Limit/Abn

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.





Submitted By: EDUARDO GARCIA Page 2 of 2