

Machine Id

VOLVO L60H 622310 Component

Diesel Engine

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History
We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.	Sample Number		Client Info		VCP444389	VCP449201	
	Sample Date		Client Info		24 May 2024	03 Jan 2024	
	Machine Age	hrs	Client Info		7951	7628	
	Oil Age	hrs	Client Info		0	1000	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		N/A	Changed	
	Filter Changed		Client Info		N/A	Changed	
	Sample Status				SEVERE	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	14	25	
	Chromium	ppm	ASTM D5185m		1	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	<1	
	Titanium	ppm	ASTM D5185m	210	<1	<1	
	Silver	ppm	ASTM D5185m	>2	1	0	
	Aluminum	ppm	ASTM D5185m		5	12	
	Lead	ppm	ASTM D5185m		-3 <1	<1	
	Copper	ppm	ASTM D5185m		2	2	
	Tin	ppm	ASTM D5185m		1	<1	
	Vanadium	ppm	ASTM D5185m	210	- <1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Scalai	visuai	NONL		NONL	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	7	7	
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.	Potassium	ppm	ASTM D5185m	>20	2	2	
	Fuel	%	ASTM D3524	>6.0	1 21.8	<1.0	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.8	
	Nitration	Abs/cm	*ASTM D7624	>20	6.9	11.4	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	24.0	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	
	Sodium	ppm	ASTM D5185m		2	2	
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.	Boron	ppm	ASTM D5185m	2.5	29	11	
	Barium	ppm	ASTM D5185m		<1	10	
	Molybdenum	ppm	ASTM D5185m	0.7	37	65	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	256	458	929	
	Calcium	ppm	ASTM D5185m		1210	964	
	Phosphorus	ppm	ASTM D5185m		730	1051	
	7:			1000	077	4407	

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

1187

3748

21.7

6.9

13.1

877

2536

15.6

8.9

7.4

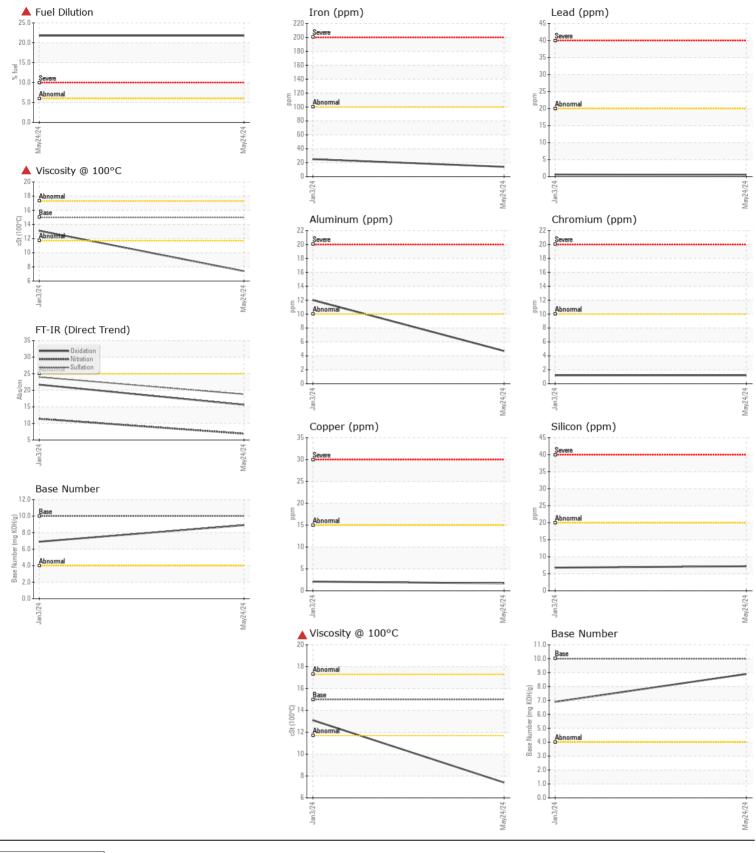
ppm ASTM D5185m 1223

ppm ASTM D5185m 4079

Abs/.1mm *ASTM D7414 >25

ASTM D445 15.0

Base Number (BN) mg KOH/g ASTM D2896 10



Contact/Location: KENNY HANEY - VOLVO0093