

Machine Id VOLV Component Diesel

VOLVO EC480 314824

Diesel Engine

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

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		VCP437301	VCP378456	
	Sample Date		Client Info		18 Apr 2024	06 Aug 2022	
	Machine Age	hrs	Client Info		3094	653	
	Oil Age	hrs	Client Info		0	1500	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				MARGINAL	ABNORMAL	
				100	•	10	
WEAR	Iron	ppm	ASTM D5185m		9	13	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	
	Nickel	ppm	ASTM D5185m	>10	3	<1	
	Titanium	ppm	ASTM D5185m	0	0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		1	2	
	Lead	ppm	ASTM D5185m		0	1	
	Copper	ppm	ASTM D5185m		2	▲ 189 0	
	Tin	ppm		>10	1	3	
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	19	26	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	0	3	
	Fuel	%	ASTM D3524	>6.0	<1.0	0.5	
	Water		WC Method	>0.1	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	8.7	10.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	23.0	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		5	3	
	Boron	ppm	ASTM D5185m	2.5	17	12	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.	Barium	ppm	ASTM D5185m		0	0	
	Molybdenum	ppm	ASTM D5185m	0.7	50	80	
	Manganese	ppm	ASTM D5185m		<1	4	
	Magnesium	ppm	ASTM D5185m	256	628	81	
	Calcium	ppm		2057	1565	2138	
	Phosphorus	ppm	ASTM D5185m	935	965	941	
	Zinc	ppm	ASTM D5185m		1118	1189	
	Sulfur	ppm	ASTM D5185m		3129	3320	
	Oxidation	Abs/.1mm	*ASTM D7414		19.7	18.2	
	Base Number (BN)				8.1	6.2	
	\/' O 10000	- 04		45.0		10.4	

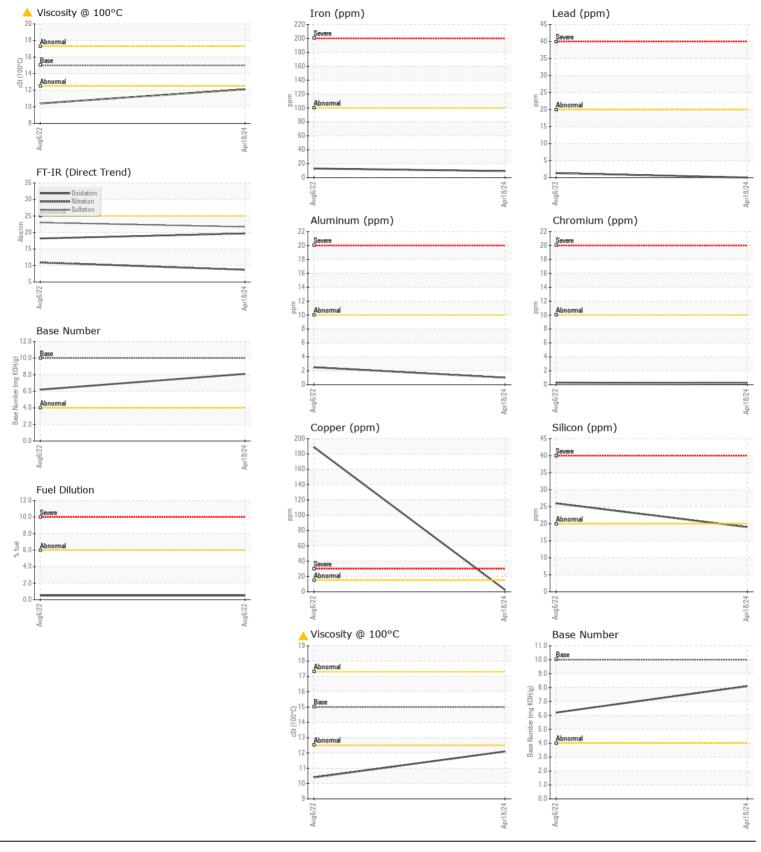
Visc @ 100°C cSt

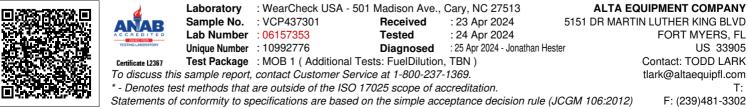
ASTM D445 15.0

10.4

12.1

Δ.





Contact/Location: TODD LARK - VOLVO0090 Page 2 of 2