

Machine Id

VOLVO A45G 752335

Diesel Engine

VÕLVO 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	Sample Number		Client Info		VCP451395	VCP437736	
	Sample Date		Client Info		24 Jun 2024	06 Feb 2024	
at the next service interval to monitor.	Machine Age	hrs	Client Info		800	56	
	Oil Age	hrs	Client Info		0	0	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	N/A	
	Filter Changed		Client Info		Changed	N/A	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	13	<1	
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		<1	0	
	Nickel	ppm	ASTM D5185m		3	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m	>2	0	0	
	Aluminum	ppm	ASTM D5185m		2	2	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>330	4	2	
	Tin	ppm	ASTM D5185m		2	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm		>25	9	4	
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		1	1	
	Fuel	%	ASTM D3524		<1.0	0.4	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844		0.4	0	
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	3.9	
	Sulfation	Abs/.1mm	*ASTM D7415		21.7	19.3	
	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	NORML	
	Odor Emulsified Water	scalar	*Visual	NORML >0.2	NEG	NORML NEG	
		scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	<1	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185m	2.5	50	306	
	Barium	ppm	ASTM D5185m	0.0	0	<1	
	Molybdenum	ppm	ASTM D5185m	0.7	46	65	
	Manganese	ppm	ASTM D5185m	0.0	0	<1	
	Magnesium	ppm	ASTM D5185m		465	271	
	Calcium	ppm	ASTM D5185m		1566	1072	
	Phosphorus	ppm	ASTM D5185m		881	874	
	Zinc	ppm	ASTM D5185m		1144	1006	
	Sulfur	ppm	ASTM D5185m		2963	2841	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	12.7	

6.4

12.2

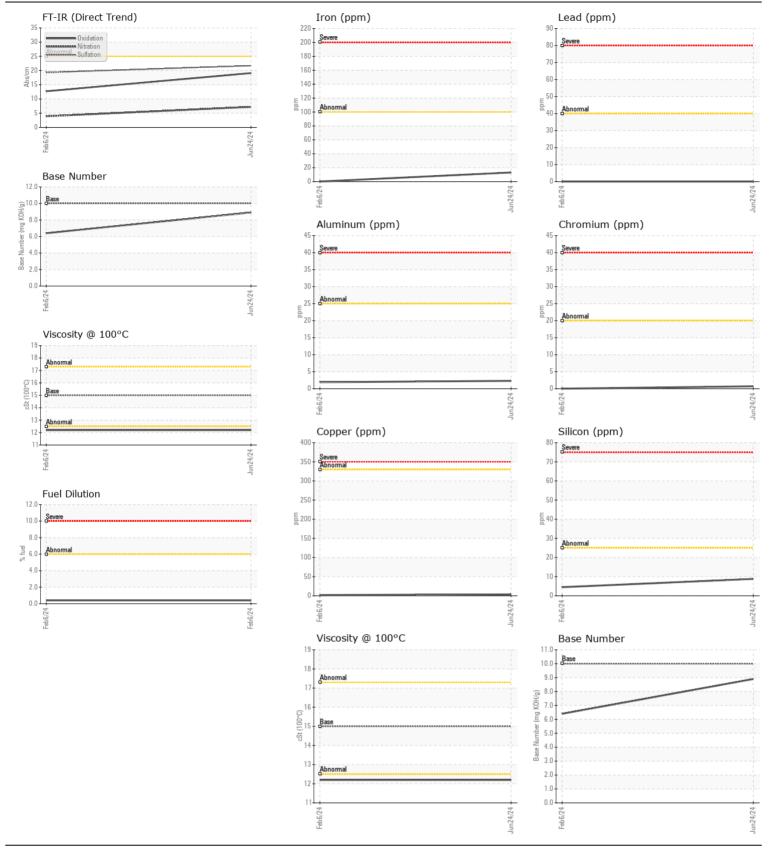
8.9

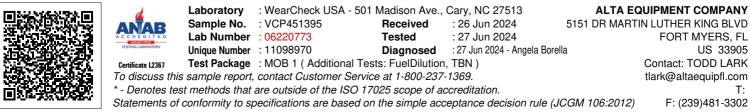
12.2

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

ASTM D445 15.0

Visc @ 100°C cSt





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