

5307 ponent **Diesel Engine**

Machine Id

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

			5-5 (0				
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP392494	VCP298111	
	Sample Date		Client Info		02 Apr 2024	28 Aug 2021	
	Machine Age	hrs	Client Info		13796	10039	
	Oil Age	hrs	Client Info		500	500	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185(m)	>200	7	6	
All component wear rates are normal.	Chromium	ppm	ASTM D5185(m)	>20	0	<1	
	Nickel	ppm	ASTM D5185(m)	>5	<1	<1	
	Titanium	ppm	ASTM D5185(m)		0	<1	
	Silver	ppm	ASTM D5185(m)	>2	0	<1	
	Aluminum	ppm	ASTM D5185(m)	>30	2	2	
	Lead	ppm	ASTM D5185(m)	>40	<1	<1	
	Copper	ppm	ASTM D5185(m)	>20	3	<1	
	Tin	ppm	ASTM D5185(m)	>20	0	<1	
	Vanadium	ppm	ASTM D5185(m)		0	0	
CONTAMINATION	Silicon	ppm	ASTM D5185(m)	>20	6	6	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185(m)	>20	<1	1	
	Fuel		WC Method	>6.0	<1.0	2.8	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	ASTM D7844*	>3	0.1	0	
	Nitration	Abs/cm	ASTM D7624*	>20	7.6	7.4	
	Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7	22.7	
	Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185(m)		2	2	
The condition of the oil is acceptable for the time in service.	Boron	ppm	ASTM D5185(m)	2.5	41	26	
	Barium	ppm	ASTM D5185(m)	0.0	0	0	
	Molybdenum	ppm	ASTM D5185(m)	0.7	39	32	
	Manganese	ppm	ASTM D5185(m)	0.0	<1	<1	
	Magnesium	ppm	ASTM D5185(m)	256	488	541	
	Calcium	ppm	ASTM D5185(m)	2057	1650	1520	
	Phosphorus	ppm	ASTM D5185(m)	935	871	922	
	Zinc	ppm	ASTM D5185(m)	1223	1043	1058	
	Sulfur	ppm	ASTM D5185(m)	4079	2323	2303	
	Oxidation		ASTM D7414*		20.8	19.9	
	Vian @ 100%C	- C+		15.0	10.0	107	

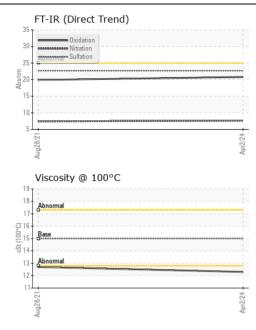
Visc @ 100°C cSt

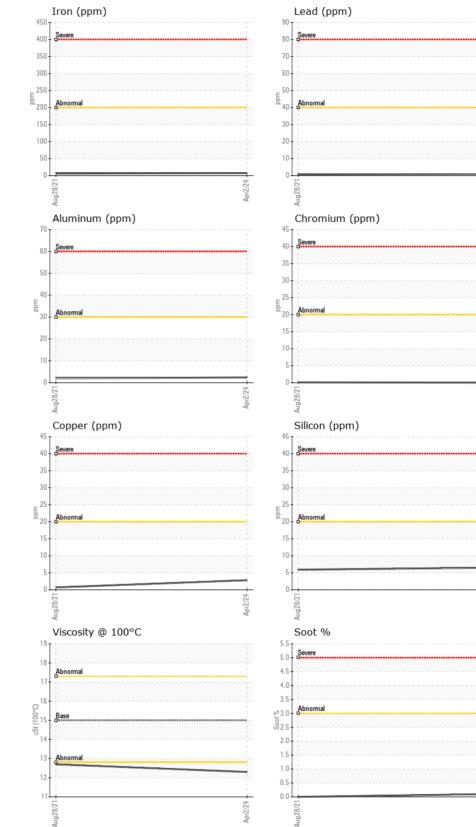
ASTM D7279(m) 15.0

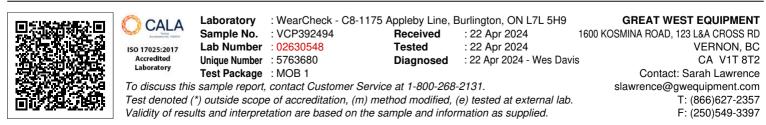
Contact/Location: Sarah Lawrence - MARVER

12.7

12.3







Contact/Location: Sarah Lawrence - MARVER Page 2 of 2

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