

[26042] Machine Id VOLVO L90 626664 Component Diesel Engine

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

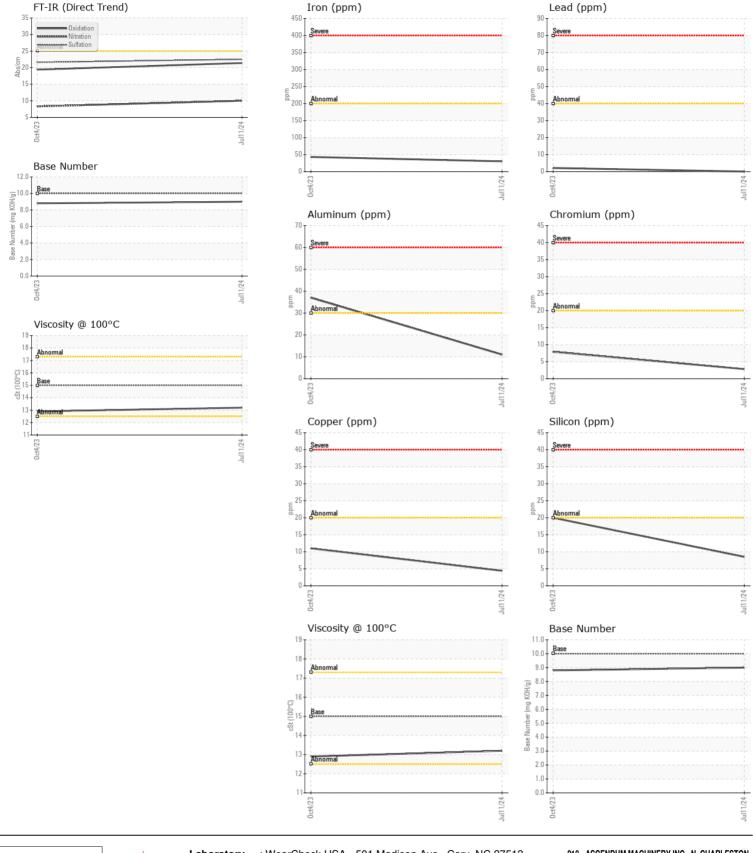
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP436657	VCP435066	
	Sample Date		Client Info		11 Jul 2024	04 Oct 2023	
	Machine Age	hrs	Client Info		2675	1061	
	Oil Age	hrs	Client Info		0	1000	
	Filter Age	hrs	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
WEAR	Iron	ppm	ASTM D5185m		30	43	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		3	8	
	Nickel	ppm	ASTM D5185m	>5	0	0	
	Titanium	ppm	ASTM D5185m		0	0	
	Silver	ppm	ASTM D5185m		0	0	
	Aluminum	ppm	ASTM D5185m		11	<b>4</b> 37	
	Lead	ppm	ASTM D5185m		0	2	
	Copper	ppm	ASTM D5185m		4	11	
	Tin	ppm	ASTM D5185m	>20	<1	3	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	8	<b>A</b> 20	
CONTAMINATION	Potassium	ppm	ASTM D5185m		<1	0	
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.7	0.5	
	Nitration	Abs/cm	*ASTM D7624	>20	10.0	8.3	
	Sulfation	Abs/.1mm	*ASTM D7415		22.5	21.6	
	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	>0.2	NEG	NEG	
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.							
	Sodium	ppm	ASTM D5185m		4	4	
	Boron	ppm	ASTM D5185m		21	32	
	Barium	ppm	ASTM D5185m		<1	0	
	Molybdenum	ppm	ASTM D5185m		42	41	
	Manganese	ppm	ASTM D5185m		1	5	
	Magnesium	ppm	ASTM D5185m		534	622	
	Calcium	ppm	ASTM D5185m		1791	1547	
	Phosphorus	ppm	ASTM D5185m		979	959	
	Zinc	ppm	ASTM D5185m		1124	1210	
	Sulfur	ppm	ASTM D5185m		3277	3448	
	Oxidation	Abs/.1mm	*ASTM D7414		21.4	19.4	
	Base Number (BN)	mg KOH/g	ASTM D2896		9.0	8.8	
	Vice @ 100%	~C+	ACTN D445	15 0	100	100	

Visc @ 100°C cSt

ASTM D445 15.0

12.9

13.2



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 218 - ASCENDUM MACHINERY INC - N. CHARLESTON Sample No. : VCP436657 Received 7235 CROSS COUNTRY RD. : 16 Jul 2024 Lab Number : 06237510 Tested NORTH CHARLESTON, SC : 17 Jul 2024 Unique Number : 11126344 Diagnosed : 17 Jul 2024 - Wes Davis US 29418 Test Package : MOB 1 (Additional Tests: TBN) Contact: MATT MITCHAM Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. matt.mitcham@ascendummachinery.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (843)414-1129

Contact/Location: MATT MITCHAM - VOLVO3387