

## [716675 ALTA RENTS] WOLVO L70H 624454 Component Diesel Engine

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

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP449921	VCP435639	VCP419341
Resample at the next service interval to monitor.	Sample Date		Client Info		20 May 2024	20 Dec 2023	23 May 2023
	Machine Age	hrs	Client Info		4170	3446	2683
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>200	9	12	15
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	1	1
	Nickel	ppm	ASTM D5185m		<1	0	<1
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m		7	11	18
	Lead	ppm	ASTM D5185m		<1	<1	<1
	Copper	ppm	ASTM D5185m		<1	1	3
	Tin	ppm	ASTM D5185m		1	2	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>~20</u>	6	6	6
CONTRIMINATION	Potassium	ppm	ASTM D5185m		<1	0	<1
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	/ 0.1	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.3	0.4	0.3
	Nitration	Abs/cm	*ASTM D7624		7.3	7.5	7.5
	Sulfation	Abs/.1mm	*ASTM D7415		21.2	21.8	22.4
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	2	<1
	Boron	ppm	ASTM D5185m	2.5	37	26	32
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	2
	Molybdenum	ppm	ASTM D5185m	0.7	44	45	50
	Manganese	ppm	ASTM D5185m	0.0	<1	<1	<1
	Magnesium	ppm	ASTM D5185m		570	581	490
	Calcium	ppm	ASTM D5185m		1714	1809	1654
	Phosphorus	ppm	ASTM D5185m		944	1026	904
	Zinc	ppm	ASTM D5185m		1187	1225	1085
	Sulfur	ppm	ASTM D5185m		3417	3239	3059
	Oxidation	Abs/.1mm	*ASTM D7414		19.6	20.4	20.6
	Base Number (BN)				10.0	10.3	10.4
		0	AOTADAS	45.0		10.1	10.0

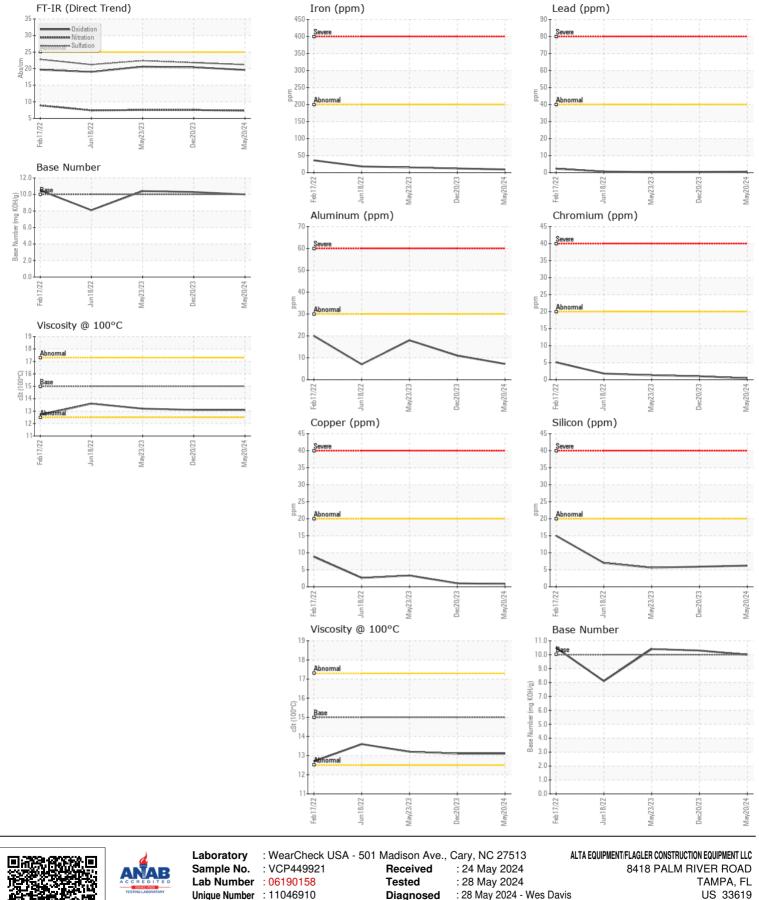
Visc @ 100°C cSt

ASTM D445 15.0

13.1

13.2

13.1



Certificate L2367

Test Package : MOB 1 (Additional Tests: TBN) To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: KENNY HANEY - VOLVO0093

Contact: KENNY HANEY

khaney@flaglerce.com

T: (813)630-0077

F: (813)630-2233