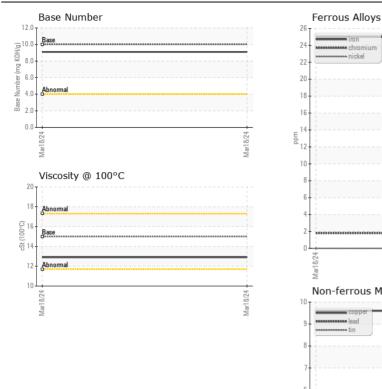
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**

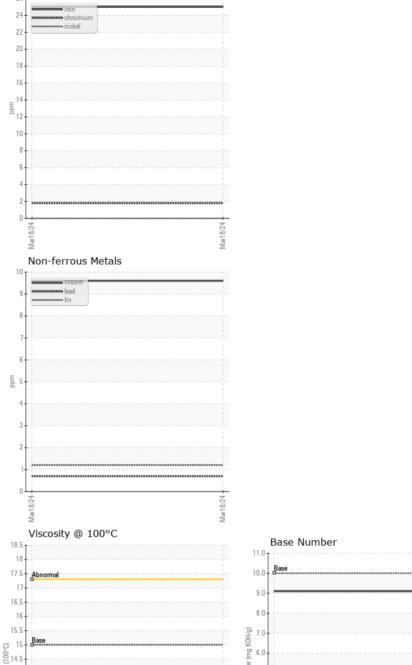
Area {UNASSIGNED} [W/O 10494] **VOLVO L110H 632747**



VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (5 GAL)

VOLVO ULTRA DIESEL ENGINI	- OIL 15W4	O ADS	5-3 (5 G/	4L)			
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		ML0000009		
	Sample Date		Client Info		18 Mar 2024		
	Machine Age	hrs	Client Info		870		
	Oil Age	hrs	Client Info		870		
	Filter Age	hrs	Client Info		870		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
INC. A.D.							
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		25		
	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>10	0		
	Titanium	ppm	ASTM D5185m	_	<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		24		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		10		
	Tin	ppm	ASTM D5185m	>10	1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	10		
CONTAMINATION	Potassium	ppm	ASTM D5185m		<1		
There is no indication of any contamination in the oil.	Fuel	ррпп	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	<i>></i> 0.1	NEG		
	Soot %	%	*ASTM D7844	~3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	6.8		
	Sulfation	Abs/.1mm	*ASTM D7415		21.0		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	2.5	48		
	Barium	ppm	ASTM D5185m	0.0	10		
	Molybdenum	ppm	ASTM D5185m	0.7	43		
	Manganese	ppm	ASTM D5185m	0.0	2		
	Magnesium	ppm	ASTM D5185m		670		
	Calcium	ppm	ASTM D5185m	2057	1463		
	Phosphorus	ppm	ASTM D5185m		962		
	Zinc	ppm	ASTM D5185m		1147		
	Sulfur	ppm	ASTM D5185m		3995		
	Oxidation	Abs/.1mm	*ASTM D7414		17.7		
	Base Number (BN)				9.1		
	Visc @ 100°C	cSt	ASTM D445	15.0	12.9		







Laboratory Sample No.

: ML0000009 Lab Number : 06122947 Unique Number : 10937098

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 19 Mar 2024 **Tested**

: 20 Mar 2024 : 21 Mar 2024 - Don Baldridge Diagnosed Test Package : CONST (Additional Tests: TBN)

4601 WASHINGTON BOULEVARD $\mathsf{BALTIMORE},\,\mathsf{MD}$

US 21227 Contact: MARK CIULLA mciulla@mcclung-logan.com

T: (410)242-6500

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.

₹ 14 13.5

> 12.5 12 11.5

10.5

F: (410)242-7835 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

MCCLUNG-LOGAN EQUIPMENT CO - BALTIMORE