**WEAR CONTAMINATION FLUID CONDITION** 

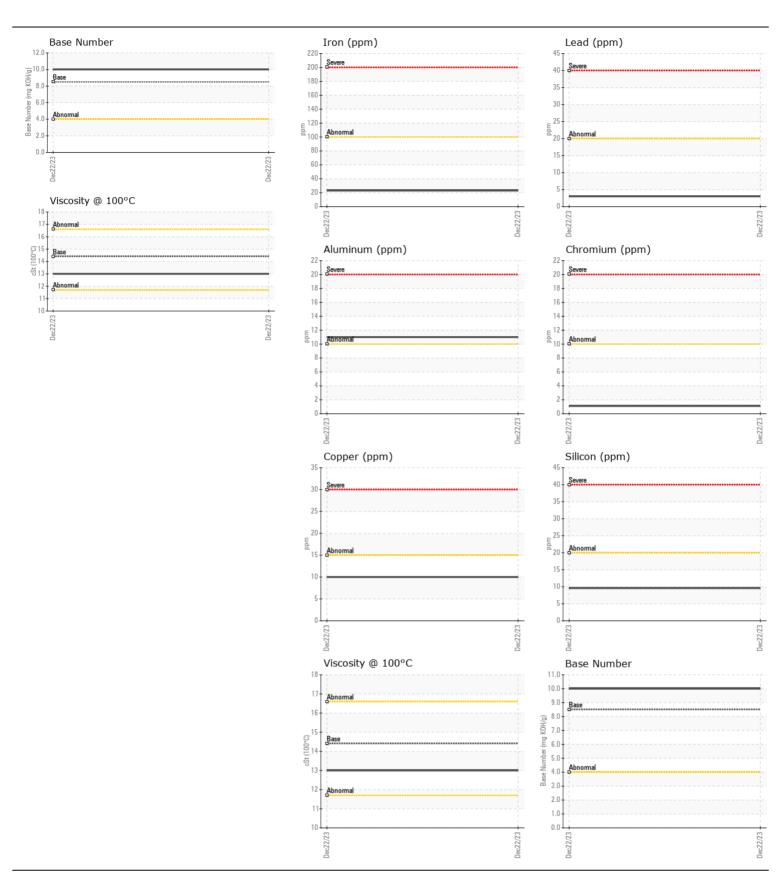
**NORMAL NORMAL** NORMAL



Area [SWA436324-10] VOLVO L110 632421

Component Diesel Engine

DIESEL ENGINE OIL SAE 40 (	GAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		VCP436257		
	Sample Date		Client Info		22 Dec 2023		
	Machine Age	hrs	Client Info		15171		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	23		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		1		
	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>2	<1		
	Aluminum	ppm	ASTM D5185m		11		
	Lead	ppm	ASTM D5185m		3		
	Copper	ppm	ASTM D5185m		10		
	Tin	ppm	ASTM D5185m		2		
	Vanadium	ppm	ASTM D5185m		- <1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon		ASTM D5185m	. 00	10		
CONTAMINATION	Potassium	ppm	ASTM D5185m		10 2		
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>6.0	<1.0		
	Water		WC Method		<1.0 NEG		
	Glycol		WC Method	>0.1	NEG		
	Soot %	%	*ASTM D7844	- 3	0.4		
	Nitration	Abs/cm	*ASTM D7624	>20	8.1		
	Sulfation	Abs/.1mm	*ASTM D7024		21.3		
	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		
ELLID CONDITION	· · · · · · · · · · · · · · · · · · ·		AOTM DEGOE	040			
FLUID CONDITION	Sodium	ppm	ASTM D5185m ASTM D5185m		2 35		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron Barium	ppm	ASTM D5185m		3		
	Molybdenum	ppm	ASTM D5185m		48		
	Manganese	ppm	ASTM D5185m	100	1		
	Magnesium	ppm	ASTM D5185m	450	562		
	Calcium	ppm	ASTM D5185m		1619		
	Phosphorus	ppm	ASTM D5185m		1019		
	Zinc	ppm	ASTM D5185m		1204		
	Sulfur	ppm	ASTM D5185m		3139		
	Oxidation	Abs/.1mm	*ASTM D7414		19.1		
	Base Number (BN)				10.0		
	Visc @ 100°C	cSt	ASTM D445		13.0		
					.3.0		







Laboratory Sample No.

Lab Number **Unique Number** 

: VCP436257 : 06075480 : 10857571

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 31 Jan 2024 : 01 Feb 2024 Diagnosed

Diagnostician : Don Baldridge

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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