**WEAR** CONTAMINATION **FLUID CONDITION**  **ABNORMAL NORMAL ATTENTION** 

## [717710 MOSAIC] VOLVO A45G 752275 Component Diesel Engine



RECOMMENDATION  Oil and filter sharper at the time of assembles have been noted. No	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP443571		
Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.	Sample Date		Client Info		04 Jun 2024		
	Machine Age	hrs	Client Info		584		
	Oil Age	hrs	Client Info		584		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
WEAD	luan		ACTM DE105	100	40		
WEAR	Iron	ppm	ASTM D5185m		19		
The copper level has decreased, but is still abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>2	1		
	Titanium	ppm	ASTM D5185m	0	0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		4		
	Copper	ppm	ASTM D5185m		<u>476</u>		
	Tin	ppm	ASTM D5185m	>15	3		
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	27		
SSITAMINATION	Potassium	ppm	ASTM D5185m		2		
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.3		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.3		
	Nitration	Abs/cm	*ASTM D7624		9.8		
	Sulfation	Abs/.1mm	*ASTM D7415		18.7		
	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		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		4		
The oil viscosity is lower than normal. The BN result indicates that	Boron	ppm	ASTM D5185m	2.5	40		
there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		85		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		27		
	Calcium	ppm	ASTM D5185m		2306		
	Phosphorus	ppm	ASTM D5185m		1025		
	Zinc	ppm	ASTM D5185m		1154		
	Sulfur	ppm	ASTM D5185m		4392		
	Oxidation	Abs/.1mm	*ASTM D7414	- 25	14.0		

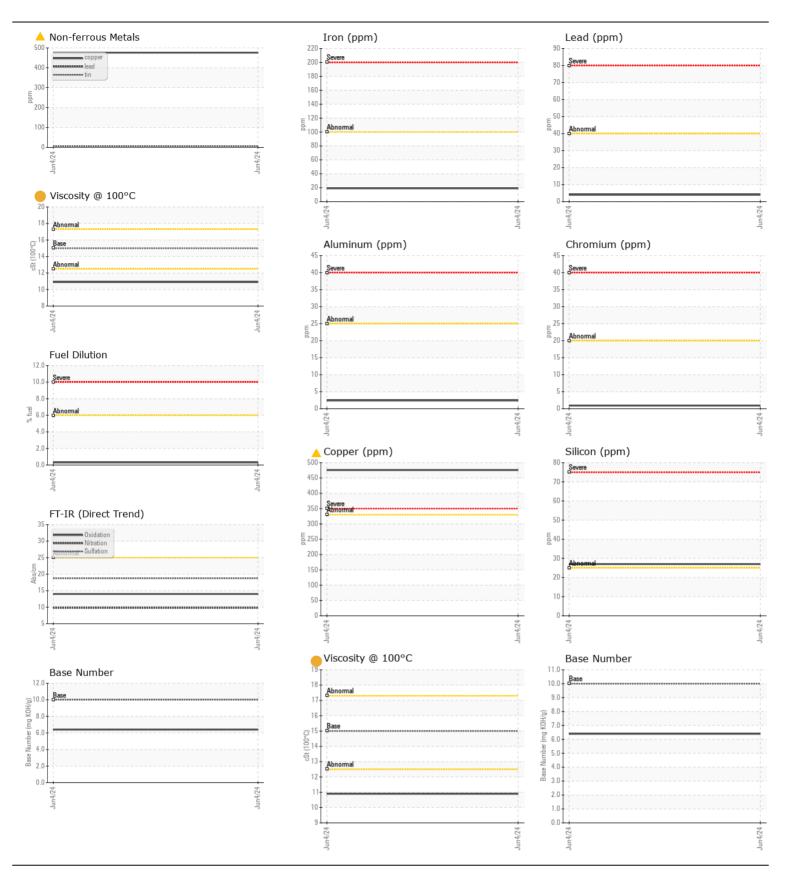
6.4

10.9

Base Number (BN) mg KOH/g ASTM D2896 10

Visc @ 100°C cSt

ASTM D445 15.0





Certificate L2367

Report Id: VOLVO0093 [WUSCAR] 06237491 (Generated: 07/18/2024 09:20:44) Rev: 1

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: VCP443571

: 06237491 Unique Number : 11126325

Received **Tested** Diagnosed

Test Package: MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

: 18 Jul 2024 : 18 Jul 2024 - Sean Felton

: 16 Jul 2024

8418 PALM RIVER ROAD TAMPA, FL US 33619 Contact: JOHN FARDELLA

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC

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.

john.fardella@altg.com T: (813)630-0077 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (813)630-2233