WEAR CONTAMINATION FLUID CONDITION **ABNORMAL ABNORMAL NORMAL**

[G08814]

VOLVO EC300 316568

Diesel Engine							
{not provided} (GAL)							
RECOMMENDATION	Toot	LIOM	Mathad	Limit/Alan	Current	Lliatomid	Lliatom
RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		VCP453535		
	Sample Date	laua	Client Info		22 May 2024		
	Machine Age	hrs	Client Info		296		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				ABNORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	15		
The copper level is abnormal. All other component wear rates are normal.	Chromium	ppm	ASTM D5185m	>10	1		
	Nickel	ppm	ASTM D5185m	>10	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>2	2		
	Aluminum	ppm	ASTM D5185m	>10	10		
	Lead	ppm	ASTM D5185m	>20	1		
	Copper	ppm	ASTM D5185m	>15	4 70		
	Tin	ppm	ASTM D5185m	>10	<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
OONT A BUNGATION							
CONTAMINATION	Silicon	ppm	ASTM D5185m		21		
Sodium and/or potassium levels are high. Fuel content negligible. Test for glycol is negative.	Potassium	ppm	ASTM D5185m		<u>48</u>		
	Fuel	%	ASTM D3524		0.3		
	Water	0/	WC Method	>0.1	NEG		
	Glycol	%	*ASTM D2982	0	NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	8.5		
	Sulfation	Abs/.1mm	*ASTM D7415		18.0		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor Emulsified Water	scalar	*Visual	NORML >0.1	NORML NEG		
			*Visual				
					_		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		6		
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m ASTM D5185m		6 80		
The oil viscosity is lower than normal. The BN result indicates that							
	Boron	ppm	ASTM D5185m		80		
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium	ppm	ASTM D5185m ASTM D5185m		80 0		
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		80 0 84	 	
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		80 0 84 2	 	
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		80 0 84 2 73	 	
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		80 0 84 2 73 2104	 	
The oil viscosity is lower than normal. The BN result indicates that	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		80 0 84 2 73 2104 1013	 	

Oxidation

Visc @ 100°C cSt

Abs/.1mm *ASTM D7414 >25

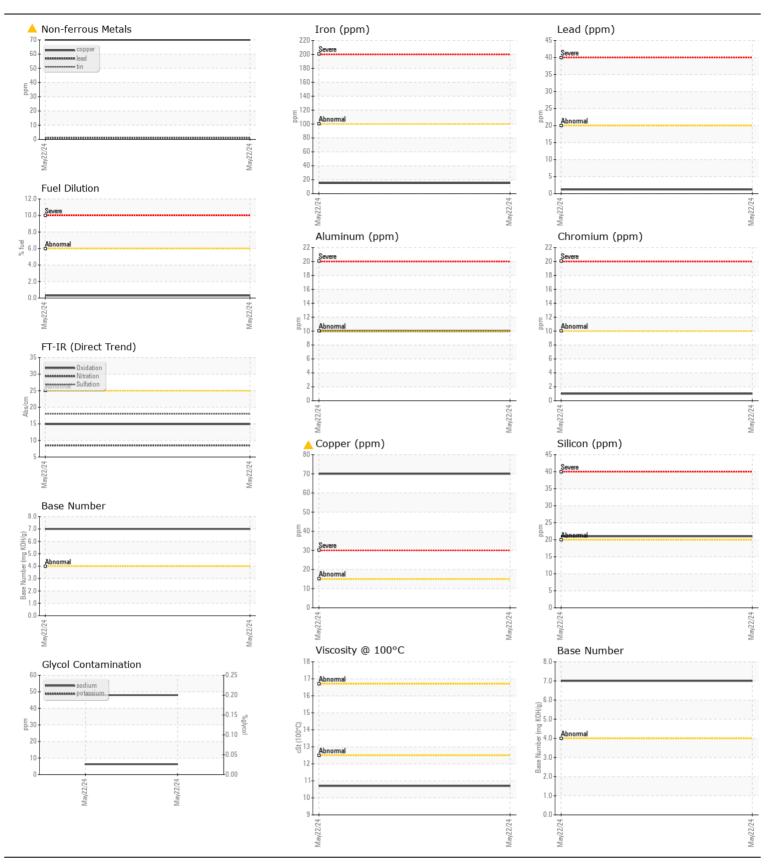
ASTM D445

Base Number (BN) mg KOH/g ASTM D2896

14.9

7.0

10.7





Laboratory

Sample No. Lab Number : 06193669 Unique Number : 11050421

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : VCP453535

Received **Tested** Diagnosed

: 29 May 2024 : 31 May 2024

: 31 May 2024 - Jonathan Hester

377 PORT CUMBERLAND ROAD DRAWER E PORT ELIZABETH, NJ US 08348

Test Package : MOB 1 (Additional Tests: FuelDilution, Glycol, PercentFuel, TBN) Certificate L2367 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.

Contact: JOHN HUGHES jhughes@whibco.com T: (856)305-6602

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: (856)825-4743 Contact/Location: JOHN HUGHES - WHIBRI

WHIBCO INC