WEAR
CONTAMINATION
FLUID CONDITION

NORMAL NORMAL



[687011]

## **VOLVO EC200EL 314968**

Diesel Engine

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

VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP438347		
Resample at the next service interval to monitor.	Sample Date		Client Info		07 Mar 2024		
	Machine Age	hrs	Client Info		554		
	Oil Age	hrs	Client Info		554		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAD							
WEAR  Metal levels are typical for a components first oil change.	Iron	ppm	ASTM D5185m		36		
	Chromium	ppm	ASTM D5185m		3		
	Nickel	ppm	ASTM D5185m	>10	1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		14		
	Lead	ppm	ASTM D5185m		2		
	Copper	ppm	ASTM D5185m		13		
	Tin	ppm	ASTM D5185m	>10	3		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	22		
33117411117411314	Potassium	ppm	ASTM D5185m		2		
There is no indication of any contamination in the oil.	Fuel	le le	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	7.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9		
	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	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	0.5	2		
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		0		
	Barium	ppm	ASTM D5185m		<1		
	Molybdenum	ppm	ASTM D5185m		2		
	Manganese	ppm	ASTM D5185m		4		
	Magnesium	ppm	ASTM D5185m		86		
	Calcium	ppm	ASTM D5185m		2475		
	Phosphorus	ppm	ASTM D5185m		963		
	Zinc	ppm		1223	1161		
	Sulfur	ppm	ASTM D5185m		4579		
	Oxidation	Abs/.1mm	*ASTM D7414		11.5		
	Base Number (BN)	0 0	ASTM D2896		5.8		
	Visc @ 100°C	cSt	ASTM D445	15.0	12.6		





Certificate L2367

Laboratory Sample No.

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

Lab Number : 06145692 Unique Number : 10970500

: VCP438347

Received **Tested** Test Package : MOB 1 ( Additional Tests: TBN )

: 11 Apr 2024 : 12 Apr 2024 Diagnosed

: 12 Apr 2024 - Wes Davis

US 33619 Contact: ROBERT TURNER rturner@ripatampa.com T:

10149 FISHER AVENUE

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)

F:

TAMPA, FL