MOB	VOLVO
I	OIL ANALYSIS REPORT



VOLVO EC220EL 315387 Component Diesel Engine

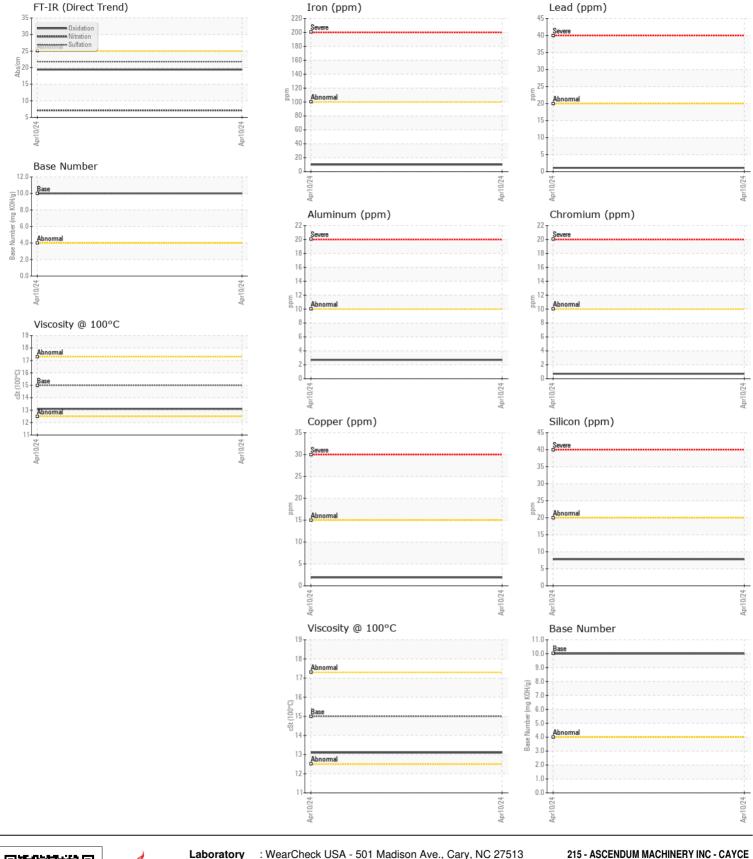
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP444902		
Resample at the next service interval to monitor.	Sample Date		Client Info		10 Apr 2024		
	Machine Age	hrs	Client Info		1016		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		10		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>10	2		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		1		
	Copper	ppm	ASTM D5185m		2		
	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	8		
OUTAMINATION	Potassium	ppm	ASTM D5185m		1		
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.1	NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.1		
	Sulfation	Abs/.1mm	*ASTM D7415		21.8		
	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	scalar	*Visual	>0.1	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m	2.5	34		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	0.0	<1		
	Molybdenum	ppm	ASTM D5185m	0.7	40		
	Manganese	ppm	ASTM D5185m	0.0	1		
	Magnesium	ppm	ASTM D5185m	256	548		
	Calcium	ppm	ASTM D5185m	2057	2023		
	Phosphorus	ppm	ASTM D5185m	935	1036		
	Zinc	ppm	ASTM D5185m	1223	1296		
	Sulfur	ppm	ASTM D5185m	4079	3776		
	Oxidation	Abs/.1mm	*ASTM D7414		19.4		
	Base Number (BN)	mg KOH/g	ASTM D2896	10	10.0		

Visc @ 100°C cSt

ASTM D445 15.0

13.1



215 - ASCENDUM MACHINERY INC - CAYCE Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : VCP444902 Received 2303 AIRPORT BLVD : 11 Apr 2024 Lab Number : 06145703 Tested CAYCE, SC : 12 Apr 2024 Unique Number : 10970511 Diagnosed : 12 Apr 2024 - Wes Davis US 29033 Test Package : MOB 1 (Additional Tests: TBN) Contact: TAMI BROWDER 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. T: (803)923-2138 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (803)791-9920

Contact/Location: TAMI BROWDER - VOLVO0013 Page 2 of 2