

## Machine Id VOLVO ECR58 47817 (S/N 11236)

## **Diesel Engine**

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

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		ASC0004798		
	Sample Date		Client Info		12 Apr 2024		
	Machine Age	hrs	Client Info		1017		
	Oil Age	hrs	Client Info		500		
	Filter Age	hrs	Client Info		500		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	5		
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1		
	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m		2		
	Lead	ppm	ASTM D5185m		- <1		
	Copper	ppm	ASTM D5185m		1		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
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CONTAMINATION	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		8		
There is no indication of any contamination in the oil.	Fuel	ppm					
			WC Method	>5	<1.0		
	Water		WC Method WC Method	>0.2	NEG		
	Glycol	0/		0	NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.8		
	Sulfation	Abs/.1mm	*ASTM D7415		20.8		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual *Visual	NONE	NONE		
	Sand/Dirt	scalar		NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor Emulsified Water	scalar scalar	*Visual *Visual	NORML >0.2	NORML NEG		
		Scalai	visuai	>0.2			
FLUID CONDITION The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium	ppm	ASTM D5185m		4		
	Boron	ppm	ASTM D5185m	2.5	104		
	Barium	ppm	ASTM D5185m	0.0	0		
	Molybdenum	ppm	ASTM D5185m	0.7	24		
	Manganese	ppm	ASTM D5185m	0.0	<1		
	Magnesium	ppm	ASTM D5185m	256	339		
	Calcium	ppm	ASTM D5185m	2057	1730		
	Phosphorus	ppm	ASTM D5185m	935	919		
	Zinc	ppm	ASTM D5185m	1223	1096		
	Sulfur	ppm	ASTM D5185m	4079	3120		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5		
	Base Number (BN)	mg KOH/g	ASTM D2896	10	9.1		
		oSt	ASTM D445	15.0	12.0		

Visc @ 100°C cSt

ASTM D445 15.0

13.8



