

[HERC]



VOLVO ECR145 315945

Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

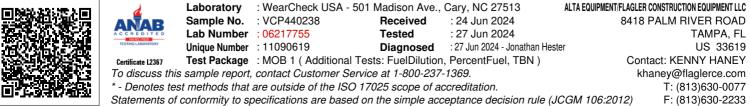
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		VCP440238		
	Sample Date		Client Info		17 Jun 2024		
	Machine Age	hrs	Client Info		839		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m	>100	8		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m	>10	<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>10	4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		6		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	<1		
	Fuel	%	ASTM D3524	>6.0	0.2		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844		0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.6		
	Sulfation	Abs/.1mm	*ASTM D7415		17.6		
	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	>158	<1		
	Boron	ppm	ASTM D5185m	250	96		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m	10	0		
	Molybdenum	ppm	ASTM D5185m	100	28		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	450	681		
	Calcium	ppm	ASTM D5185m		1412		
	Phosphorus	ppm	ASTM D5185m	1150	766		
	Zinc	ppm	ASTM D5185m	1350	882		
	Sulfur	ppm	ASTM D5185m	4250	3396		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	12.3		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6		
	Vier C 10000	- 01	AOTA DAAS	444	• • • • •		

Visc @ 100°C cSt

ASTM D445 14.4

11.2





Contact/Location: KENNY HANEY - VOLVO0093 Page 2 of 2