

WEAR ABNORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



[SPM659959-10] Machine Id VOLVO EC350EL 314579

Component Diesel Engine

{not provided} (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

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The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

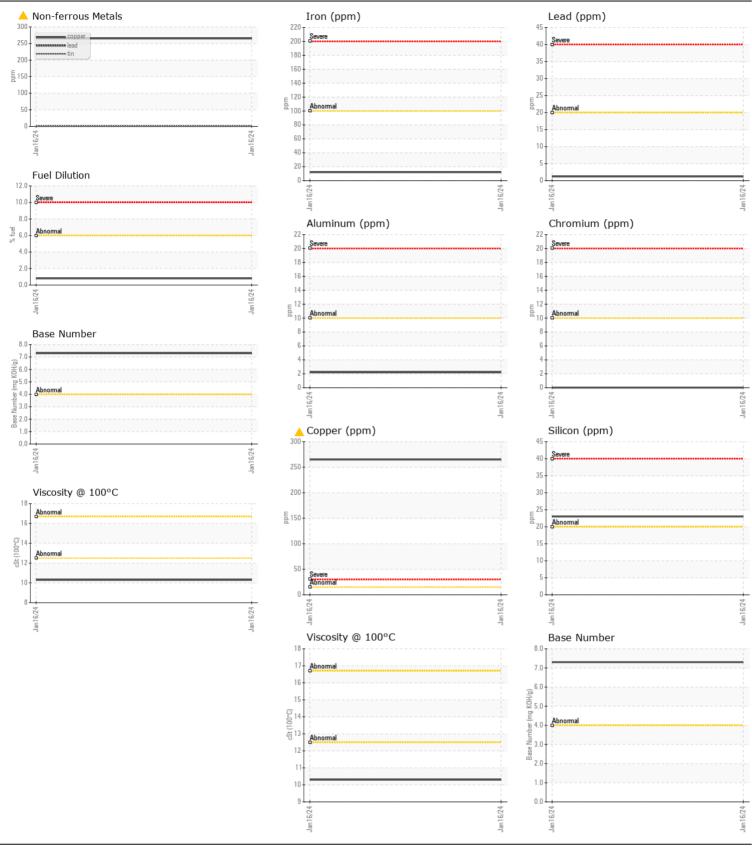
CONTAMINATION

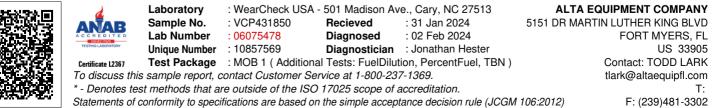
FLUID CONDITION

Fuel content negligible. There is no indication of any contamination in the oil.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		VCP431850		
	Sample Date		Client Info		16 Jan 2024		
d	Machine Age	hrs	Client Info		608		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		Changed		
	Sample Status				ABNORMAL		
	Iron	ppm	ASTM D5185m	>100	12		
	Chromium	ppm	ASTM D5185m	>10	0		
	Nickel	ppm	ASTM D5185m	>10	<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>10	2		
	Lead	ppm	ASTM D5185m	>20	1		
	Copper	ppm	ASTM D5185m	>15	🔺 265		
	Tin	ppm	ASTM D5185m	>10	2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Silicon	ppm	ASTM D5185m	>20	23		
	Potassium	ppm	ASTM D5185m	>20	5		
	Fuel	%	ASTM D3524	>6.0	0.8		
	Water		WC Method	>0.1	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4		
	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		
	Codium				0		
	Sodium	ppm	ASTM D5185m		2		
•	Boron	ppm	ASTM D5185m		75		
	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		62		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m		408		
	Calcium	ppm	ASTM D5185m		1657		
	Phosphorus	ppm	ASTM D5185m		1090		
	Zinc	ppm	ASTM D5185m		1259		
	Sulfur	ppm	ASTM D5185m	05	3510		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1		
	Base Number (BN)	mg KOH/g	ASTM D2896		7.3		
	Visc @ 100°C	cSt	ASTM D445		10.3		

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.





Contact/Location: TODD LARK - VOLVO0090