

WEARABNORMALCONTAMINATIONNORMALFLUID CONDITIONNORMAL

Area [SPM661332-10] Machine Id VOLVO SD115B 236970 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the	Sample Number		Client Info		VCP431847		
	Sample Date		Client Info		05 Feb 2024		
next service interval to monitor.	Machine Age	hrs	Client Info		678		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed	1110	Client Info		N/A		
	Filter Changed		Client Info		Changed		
	Sample Status		Ollent III0		ABNORMAL		
WEAR The aluminum level is abnormal. All other metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	89		
	Chromium	ppm	ASTM D5185m	>20	9		
	Nickel	ppm	ASTM D5185m	>2	<1		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m		▲ 78		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		29		
	Tin	ppm	ASTM D5185m		3		
	Vanadium			>15			
		ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	000	ASTM D5185m	. 05	21		
CONTAMINATION	Potassium	ppm	ASTM D5185m		21		
There is no indication of any contamination in the oil.	Fuel	ppm					
			WC Method		<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.3		
	Nitration	Abs/cm	*ASTM D7624	>20	7.5		
	Sulfation	Abs/.1mm	*ASTM D7415		21.0		
	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	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>216	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.	Boron	ppm	ASTM D5185m	250	26		
	Barium	ppm	ASTM D5185m		1		
	Molybdenum	ppm	ASTM D5185m	100	47		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m	450	489		
	Calcium	ppm	ASTM D5185m	3000	1651		
	Phosphorus	ppm	ASTM D5185m	1150	1002		
	Zinc	ppm	ASTM D5185m		1215		
	- -	P.P. 11					

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5

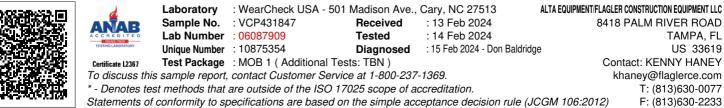
3138

17.7

9.2

12.6





Ē

Contact/Location: KENNY HANEY - VOLVO0093