

OIL ANALYSIS REPORT

Sample Rating Trend



Area [64688] Machine Id VOLVO VNL 4652 Component

Diesel Engine Fluid {not provided} (--- GAL)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. Please specify the brand, type, and viscosity of the oil on your next sample.

🔺 Wear

Nickel ppm levels are abnormal. Exhaust valve wear is indicated.

Contamination

Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0853702		
Sample Date		Client Info		28 Dec 2023		
Machine Age	kms	Client Info		110077		
Oil Age	kms	Client Info		110077		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATION	J	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	125		
Chromium	ppm	ASTM D5185(m)	>20	2		
Nickel	ppm	ASTM D5185(m)	>2	<u> </u>		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm	ASTM D5185(m)	>25	24		
Lead	ppm	ASTM D5185(m)	>40	8		
Copper	ppm	ASTM D5185(m)	>330	130		
Tin	ppm	ASTM D5185(m)	>15	7		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		17		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		103		
Manganese	ppm	ASTM D5185(m)		6		
Magnesium	ppm	ASTM D5185(m)		666		
Calcium	ppm	ASTM D5185(m)		1572		
Phosphorus	ppm	ASTM D5185(m)		682		
Zinc	ppm	ASTM D5185(m)		791		
Sulfur	ppm	ASTM D5185(m)		1843		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	37		
Sodium	ppm	ASTM D5185(m)		5		
Potassium	ppm	ASTM D5185(m)	>20	44		
Fuel	%	ASTM D7593*	>6.0	1		
INFRA-RED		method	limit/base	current	history1	history2
			. 0	0.8		
Soot %	%	ASTM D7844*	>3	0.0		
Soot % Nitration	% Abs/cm	ASTM D7844* ASTM D7624*		14.3		



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