

OIL ANALYSIS REPORT

Sample Rating Trend



Area [69268] VOLVO 4715

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) 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. Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within SAE 5W30 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	1ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0948222		
Sample Date		Client Info		21 Jun 2024		
Machine Age	kms	Client Info		84274		
Oil Age	kms	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATION	١	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	51		
Chromium	ppm	ASTM D5185(m)	>20	1		
Nickel	ppm	ASTM D5185(m)	>2	3		
Titanium	ppm	ASTM D5185(m)		<1		
Silver	ppm	ASTM D5185(m)	>2	3		
Aluminum	ppm	ASTM D5185(m)	>25	27		
Lead	ppm	ASTM D5185(m)	>40	0		
Copper	ppm	ASTM D5185(m)	>330	15		
Tin	ppm	ASTM D5185(m)	>15	4		
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)		28		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		101		
Manganese	ppm	ASTM D5185(m)		3		
Magnesium	ppm	ASTM D5185(m)		602		
Calcium	ppm	ASTM D5185(m)		1549		
Phosphorus	ppm	ASTM D5185(m)		669		
Zinc	ppm	ASTM D5185(m)		830		
Sulfur	ppm	ASTM D5185(m)		1871		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	39		
Sodium	ppm	ASTM D5185(m)		4		
Potassium	ppm	ASTM D5185(m)	>20	72		
Fuel	%	ASTM D7593*	>6.0	0.0		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.3		
Nitration	Abs/cm	ASTM D7624*	>20	12.0		
Sulfation	Abs/.1mm	ASTM D7415*	>30	25.7		



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12.0 т	Fuel Dilution	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
10.0-	Severe	Oxidation	Abs/.1mm	ASTM D7414*	>25	25.8		
- 0.8	Abnormal	VISUAL		method	limit/base	current	history1	history2
= 34 €.0 84.0 =	Abnormal	White Metal	scalar	Visual*	NONE	VLITE		
2.0		Yellow Metal	scalar	Visual*	NONE	NONE		
0.0		Precipitate	scalar	Visual*	NONE	NONE		
	Jun 21/24 Jun 21/24	Silt Debris	scalar	Visual* Visual*	NONE NONE	NONE		
		Sand/Dirt		Visual*	NONE	NONE		
40 T	FT-IR (Direct Trend)	Appearance	scalar	Visual*	NORML	NORML		
35 -	Oxidation Nitration	Odor	scalar	Visual*	NORML	NORML		
_ 30 -	Sulfation	Emulsified Water Free Water	scalar	Visual* Visual*	>0.2	NEG NEG		
Hps/cm	Abnormal		scalar			_		
20-		FLUID PROPERT	IES	method	limit/base	current	history1	history2
15- 10-		Visc @ 40°C	cSt	ASTM D7279(m)		60.4		
	Jun21/24 Jun21/24	Visc @ 100°C Viscosity Index (VI)	cSt Scale	ASTM D7279(m) ASTM D2270*		9.8 146		
	hun	GRAPHS	Scale	ASTIM DZZTU		140		
140 .	Viscosity @ 40°C Abnormal	Iron (ppm)				Lead (ppm)		
120	0	³⁰⁰			100			
		200 - Severe			틆 50	-		
- 100 -C) St (+0-C) 80 -	Abnormal	and the second s			d 30	Abnormal		
	-	24 - 0 24 - 0				5		
60-		Jun21/Z			Jun21/24	Jun 21/24		Jun21/24
40	Jun21/24 +	~ Aluminum (ppm)			7	Chromium (pp	m)	7
-	Jun21/2 /unL	⁶⁰ T			60			
	Viscosity @ 40°C	40 - Severe			40 Ed	Severe		
140	Abnormal	20-			20	Abnormal		
120-		04			0	24		24
- 001 °C) - 08 °St - 08		Jun21/24			Jun21/24	Jun 21/24		Jun21/24
경 80-	Abnormal	Copper (ppm)				Silicon (ppm)		
60-		400 300			60	Severe		1
40 L	- + 24 - +	툴 200			틆 40	-		
	L	100 -			20	Abnormal		
		1/24 0			0	1/24		/24 -
		Jun21			Jun21/24	Jun21/24		Jun21/24
		Viscosity @ 100°C			6.0	Soot %		
		Abnormal				Severe		1
		3015 Abnormal ぎ 10			_ک و 4.0 تح 2.0	Abnormal		1
		11/24			0.0	1/24		1/24
		Jun21.			Jun21/24	Jun21/24		Jun21/24
	Laboratory Lab Number Laboratory Laboratory Lab Number Test Package To discuss this sample report, Test denoted (*) outside scope	: 5801631 : MOB 1 (Additional Te contact Customer Serve	Recei Teste Diagr sts: Fuel ce at 1-8 ethod mo	ved : 26 d : 27 iosed : 27 Dilution, KV4 00-268-213 odified, (e) te	5 Jun 2024 7 Jun 2024 Jun 2024 - Kevi 40, PercentFu 1. sted at exterr	n Marson iel, VI, Visual) etobs nal lab.	ET	ANS AVENUE DBICOKE, ON CA M8W 0B3 ontact: Service

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Contact/Location: Service ? - PER415ETO