

OIL ANALYSIS REPORT

Sample Rating Trend





Machine Id VOLVO A30G HDTR823 Component Diesel Engine

MOBIL 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

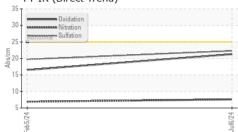
The condition of the oil is acceptable for the time in service.

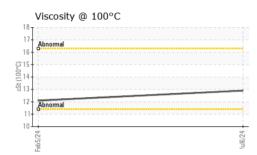
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0952400	WC0904222	
Sample Date		Client Info		06 Jul 2024	05 Feb 2024	
Machine Age	hrs	Client Info		21867	21390	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	<1.0	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	6	5	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	
Aluminum	ppm	ASTM D5185(m)	>25	2	1	
Lead	ppm	ASTM D5185(m)	>40	0	0	
Copper	ppm	ASTM D5185(m)		<1	<1	
Tin	ppm	ASTM D5185(m)	>15	<1	0	
Antimony	ppm	ASTM D5185(m)	210	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	nom	ASTM D5185(m)		43	37	
Barium	ppm ppm	ASTM D5185(m)		43	0	
		1		-	35	
Molybdenum	ppm	ASTM D5185(m) ASTM D5185(m)		38 <1	0	
Manganese Magnesium	ppm	ASTM D5185(m)		499	564	
Calcium	ppm ppm	ASTM D5185(m)		1688	1626	
Phosphorus		ASTM D5185(m)		728	867	
Zinc	ppm	ASTM D5185(m)		865	989	
Sulfur	ppm	ASTM D5185(m)		2124	2506	
Lithium	ppm ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon		ASTM D5185(m)			8	
	ppm		>25	12		
Sodium Potassium	ppm	ASTM D5185(m) ASTM D5185(m)		3	3 <1	
	ppm	. ,	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.1	0	
Nitration	Abs/cm	ASTM D7624*	>20	7.6	6.9	
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.3	19.7	



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FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	21.3	16.5	
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Precipitate	scalar	Visual*	NONE	NONE	NONE	
Silt	scalar	Visual*	NONE	NONE	NONE	
Debris	scalar	Visual*	NONE	NONE	NONE	
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
Appearance	scalar	Visual*	NORML	NORML	NORML	
Odor	scalar	Visual*	NORML	NORML	NORML	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	
Free Water	scalar	Visual*		NEG	NEG	
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		12.9	12.1	
GRAPHS						
Iron (ppm)			100	Lead (ppm)		
50 Severe			80	Severe		
50 - Abnormal			톱 ⁶⁰ 봅 40	Abnormal		
50-			20			
24 10			0	24		- 24
Feb5/24			Jul6/24	Feb5/24		Jul6/24
Aluminum (ppm)			50	Chromium (p	pm)	
40 Severe			40	Severe		
30 Abnormal			======================================			
				Abnormal		
10-			10			
Feb5/24			Jul6/24	Feb 5/24		Jul6/24 -
-B-F			Ju	Feb		Ju
Copper (ppm)			80	Silicon (ppm)		
000				Q		
			60 E 40			
00-				Abnormal		
00			20			
01 1			0	724		- 124 -
Feb 5/24			Jul6/24	Feb5/24		Jul6/24
Viscosity @ 100°C				Soot %		
Abnormal			6.0	Severe		
16 -			₆ و4.0	Abnormal		
14			2.0			
12 - Abnormal			2.0			
10			0.0	Ц		
24			24	24		22
Feb 5/24			Jul6/24	Feb5/24		Jul6/24

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Agnico Eagle Canada CALA Sample No. : WC0952400 Received : 11 Jul 2024 1350 Government Rd. W, MACASSA COMPLEX Lab Number : 02647286 Tested : 11 Jul 2024 Kirkland Lake, ON ISO 17025:2017 Accredited Laboratory Unique Number : 5812838 CA P2N 3J1 Diagnosed : 11 Jul 2024 - Wes Davis Test Package : MOB 1 (Additional Tests: Visual) Contact: Mitch Lamontagne To discuss this sample report, contact Customer Service at 1-800-268-2131. AEM_KL_macassaoilsampleresults@agnicoeagle.com T: (705)567-5208 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied. F: (705)567-5221

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Contact/Location: Mitch Lamontagne - KIR370KIR