

## **OIL ANALYSIS REPORT**

Sample Rating Trend







FMC014

#### Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

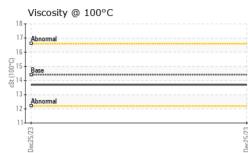
#### Fluid Condition

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

SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0883832		
Sample Date		Client Info		25 Dec 2023		
Machine Age	hrs	Client Info		5657		
Oil Age	hrs	Client Info		250		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel	<u> </u>	WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method	20.L	NEG		
-				-		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	23		
Chromium	ppm	ASTM D5185(m)	>20	1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	5		
Lead	ppm	ASTM D5185(m)	>40	3		
Copper	ppm	ASTM D5185(m)	>330	1		
Tin	ppm	ASTM D5185(m)	>15	<1		
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)	250	38		
Barium	ppm	ASTM D5185(m)	10	0		
Molybdenum	ppm	ASTM D5185(m)	100	41		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	450	514		
Calcium	ppm	ASTM D5185(m)	3000	1728		
Phosphorus	ppm	ASTM D5185(m)	1150	749		
Zinc	ppm	ASTM D5185(m)	1350	888		
Sulfur	ppm	ASTM D5185(m)	4250	2169		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	7		
Sodium	ppm	ASTM D5185(m)	>158	3		
Potassium	ppm	ASTM D5185(m)	>20	<1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.7		
Nitration	Abs/cm	ASTM D7624*	>20	8.1		
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.1		
		-				



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FLUID DEGRADATION >25 Oxidation ASTM D7414\* 22.0 Abs/.1mm VISUAL **Emulsified Water** Visual\* >0.2 NEG scalar NEG Free Water scalar Visual\* FLUID PROPERTIES Dec25/23 -Visc @ 100°C cSt 13.7 ASTM D7279(m) 14.4 GRAPHS Iron (ppm) Lead (ppm) 250 100 200 81 6 100 50 20 ٢ n Jec25/23 Aluminum (ppm) Chromium (ppm) 50 50 41 30 30 10 10 0 ٥. Dec25/23 Copper (ppm) Silicon (ppm) 400 8 Se 350 70 300 60 50 250 E 200 E 40 150 30 Ab 100 20 50 10 C Dec25/23 Viscosity @ 100°C Soot % 18 6.0 5.0 16 4.0 cSt (100°C) 15 ₩ 53.0 13 Abnormal 1.0 12 11 0.0 Dec25/23 Agnico Eagle Canada Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No. : WC0883832 Recieved : 04 Jan 2024 1350 Government Rd. W, MACASSA COMPLEX Lab Number : 02606501 : 05 Jan 2024 Kirkland Lake, ON Diagnosed Unique Number Diagnostician : Wes Davis CA P2N 3J1 : 5707587 Test Package : MOB 1 Contact: Mitch Lamontagne To discuss this sample report, contact Customer Service at 1-800-268-2131. AEM\_KL\_macassaoilsampleresults@agnicoeagle.com Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (705)567-5208 Validity of results and interpretation are based on the sample and information as supplied. F: (705)567-5221

CALA

ISO 17025:2017 Accredited

Laboratory

Contact/Location: Mitch Lamontagne - KIR370KIR

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