



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KOVATERA MC100 EMC011
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0883834	---	---
Sample Date	Client Info		04 Jan 2024	---	---
Machine Age	hrs	Client Info	1724	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	26	---	---
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	2	---	---
Lead	ppm	ASTM D5185(m) >40	0	---	---
Copper	ppm	ASTM D5185(m) >330	<1	---	---
Tin	ppm	ASTM D5185(m) >15	0	---	---
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	42	---	---
Barium	ppm	ASTM D5185(m) 10	0	---	---
Molybdenum	ppm	ASTM D5185(m) 100	35	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m) 450	439	---	---
Calcium	ppm	ASTM D5185(m) 3000	1772	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	810	---	---
Zinc	ppm	ASTM D5185(m) 1350	912	---	---
Sulfur	ppm	ASTM D5185(m) 4250	2335	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

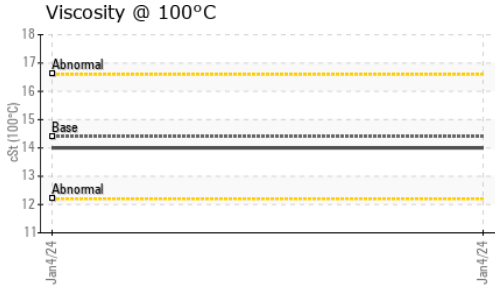
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	---	---
Sodium	ppm	ASTM D5185(m) >158	4	---	---
Potassium	ppm	ASTM D5185(m) >20	1	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	2	---	---
Nitration	Abs/cm	ASTM D7624* >20	11.3	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	25.1	---	---



OIL ANALYSIS REPORT



FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Abs./1mm	ASTM D7414*	>25	---	---
Oxidation		22.3		

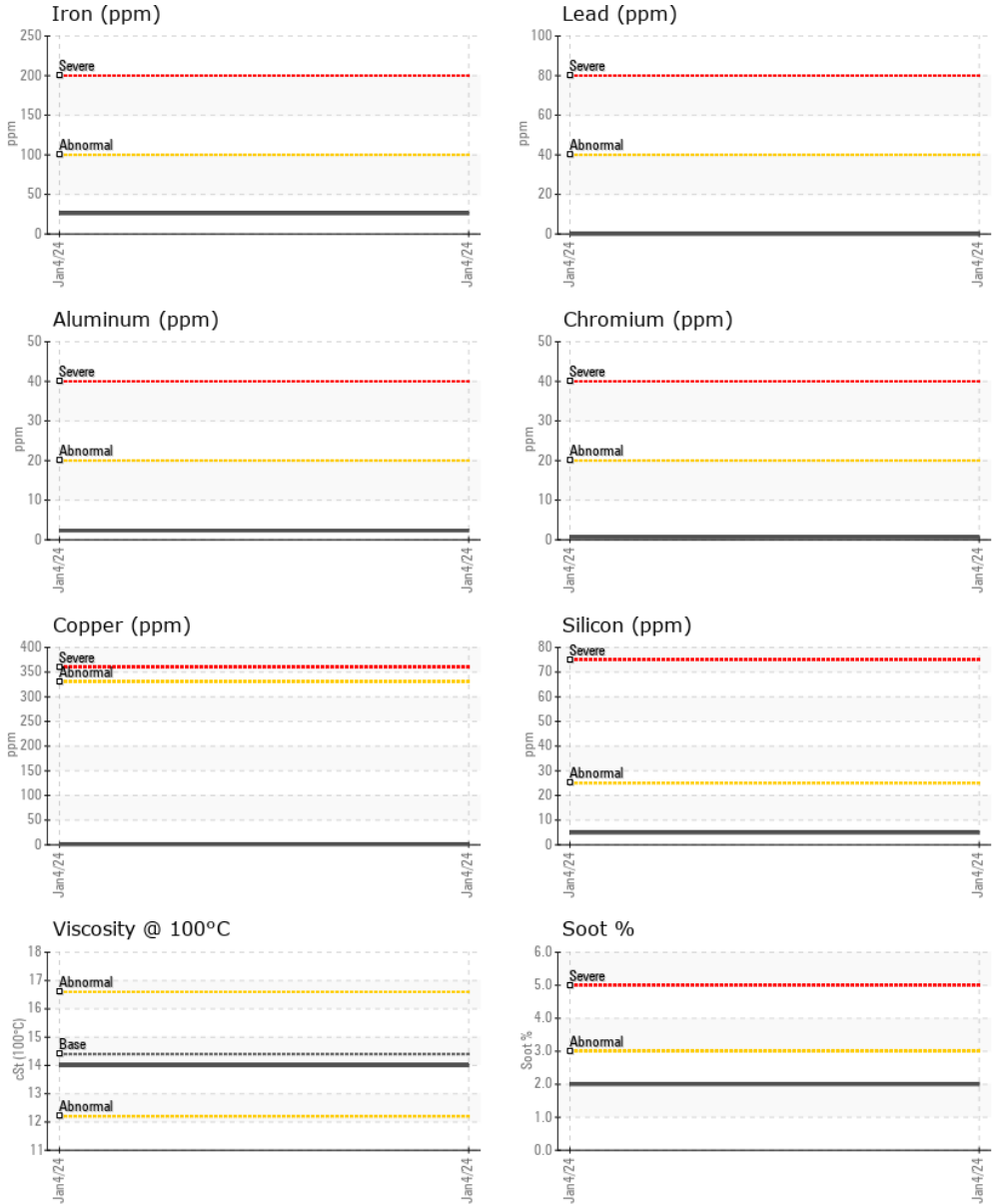
VISUAL

Method	Limit/Base	Current	History1	History2
scalar	Visual*	>0.2	---	---
Emulsified Water		NEG		
scalar	Visual*		---	---
Free Water		NEG		

FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
cSt	ASTM D7279(m)	14.4	---	---
Visc @ 100°C		14.0		

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0883834
Lab Number : 02609233
Unique Number : 5710319
Test Package : MOB 1

Agnico Eagle Canada
 1350 Government Rd. W, MACASSA COMPLEX
 Kirkland Lake, ON
 CA P2N 3J1
 Contact: Mitch Lamontagne
 AEM_KL_macassaoilsampleresults@agnicoeagle.com
 T: (705)567-5208
 F: (705)567-5221

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 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.