



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR R1600H SCP222
Component
Diesel Engine
Fluid
SHELL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886138	WC0883808	WC0750477
Sample Date		Client Info		11 Jan 2024	07 Dec 2023	11 Oct 2023
Machine Age	hrs	Client Info		700	0	260
Oil Age	hrs	Client Info		150	250	260
Filter Age	hrs	Client Info		150	250	260
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	13	24	25
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	2	2	2
Lead	ppm	ASTM D5185(m)	>40	16	28	25
Copper	ppm	ASTM D5185(m)	>330	485	▲ 742	617
Tin	ppm	ASTM D5185(m)	>15	6	11	10
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

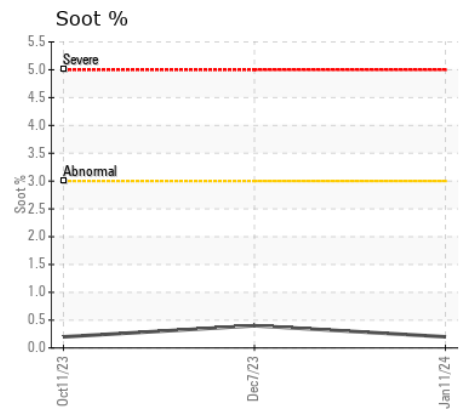
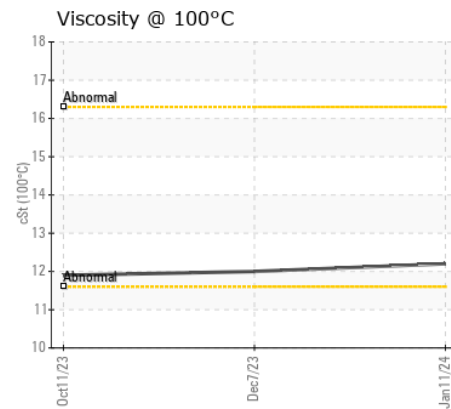
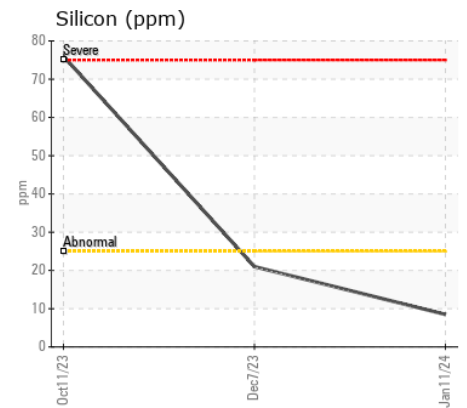
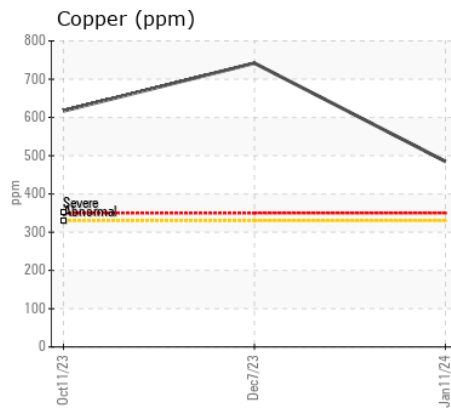
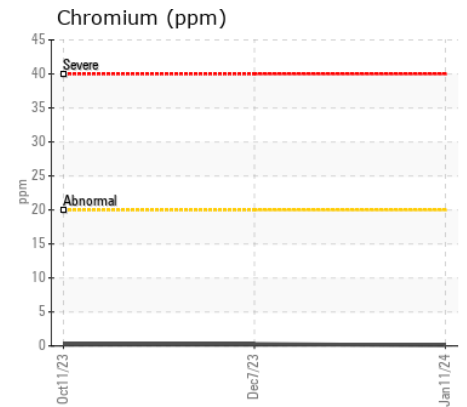
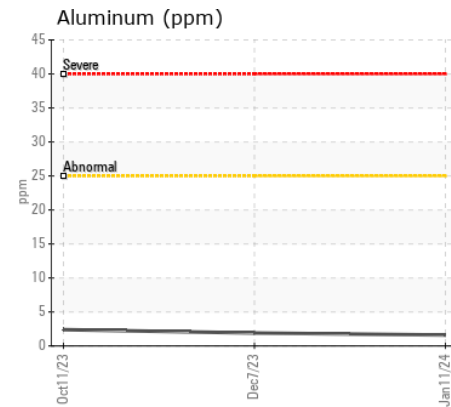
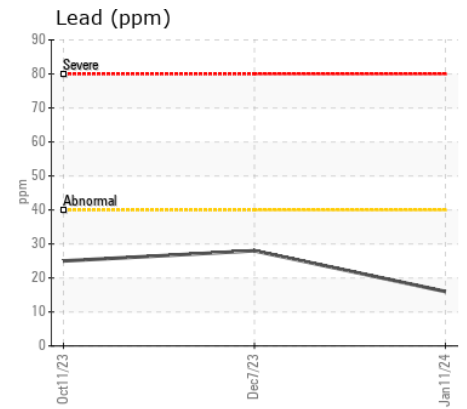
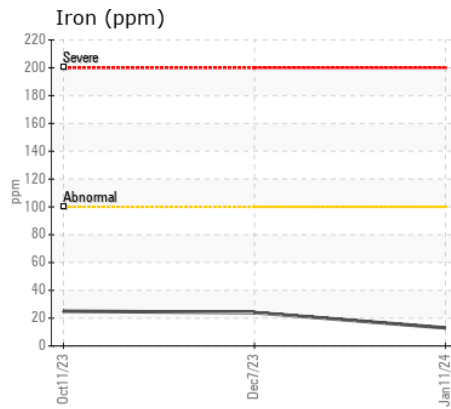
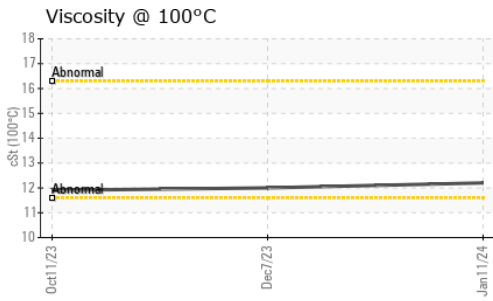
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	21	76
Potassium	ppm	ASTM D5185(m)	>20	<1	0	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.4	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.4	9.3	8.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.3	25.4	25.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>150	2	4	4
Boron	ppm	ASTM D5185(m)		41	38	48
Barium	ppm	ASTM D5185(m)		0	<1	2
Molybdenum	ppm	ASTM D5185(m)		38	39	40
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)		489	492	466
Calcium	ppm	ASTM D5185(m)		1629	1659	1662
Phosphorus	ppm	ASTM D5185(m)		730	744	859
Zinc	ppm	ASTM D5185(m)		819	880	1021
Sulfur	ppm	ASTM D5185(m)		2036	1928	2369
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.8	25.3	24.5
Visc @ 100°C	cSt	ASTM D7279(m)		12.2	12.0	11.9



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0886138 **Received** : 17 Jan 2024
Lab Number : 02609219 **Diagnosed** : 17 Jan 2024
Unique Number : 5710305 **Diagnostician** : Wes Davis
Test Package : MOB 1

Agnico Eagle Canada
 1350 Government Rd. W, MACASSA COMPLEX
 Kirkland Lake, ON
 CA P2N 3J1
 Contact: Mike Campbell
 mike.campbell@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.