



Machine Id
CATERPILLAR 202-2040
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084913	PC0065454	PC0071042
Sample Date		Client Info		20 Feb 2024	15 Jan 2023	09 Jan 2023
Machine Age	hrs	Client Info		2386	0	1876
Oil Age	hrs	Client Info		0	0	612
Filter Age	hrs	Client Info		0	0	612
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	15	15	8
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	2	2	2
Lead	ppm	ASTM D5185(m)	>40	<1	1	<1
Copper	ppm	ASTM D5185(m)	>330	10	41	17
Tin	ppm	ASTM D5185(m)	>15	0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

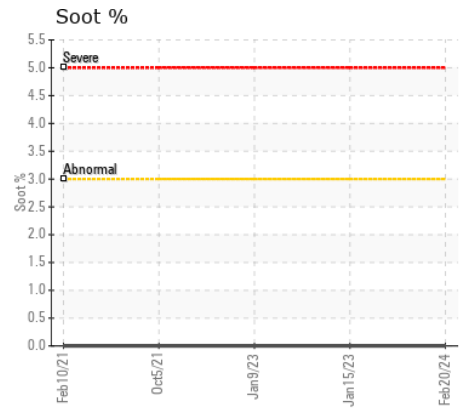
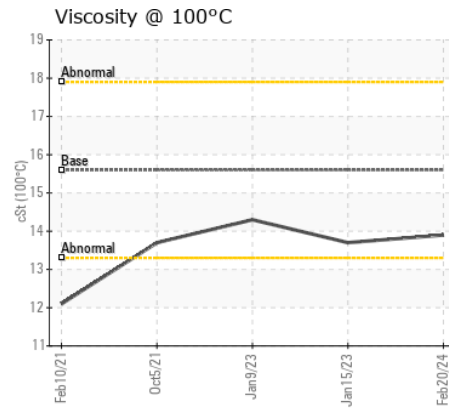
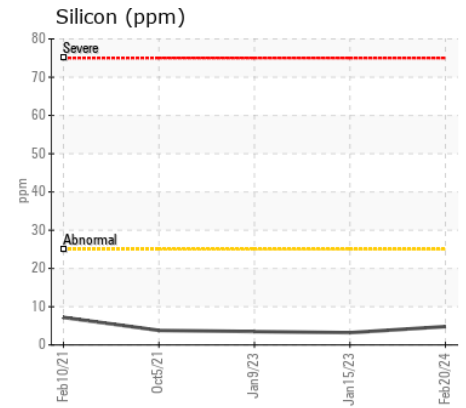
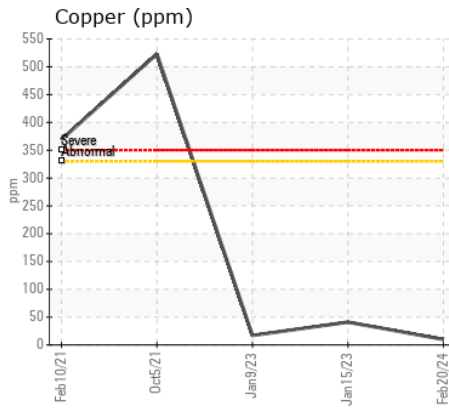
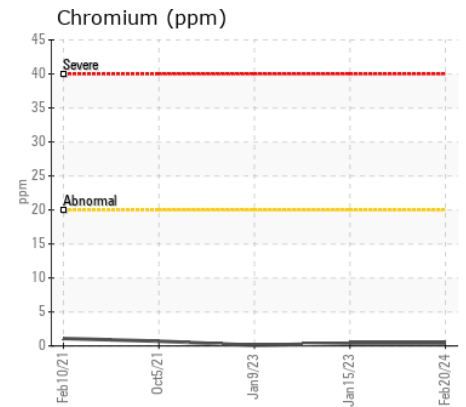
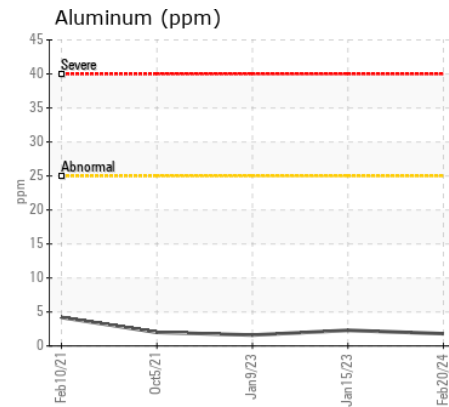
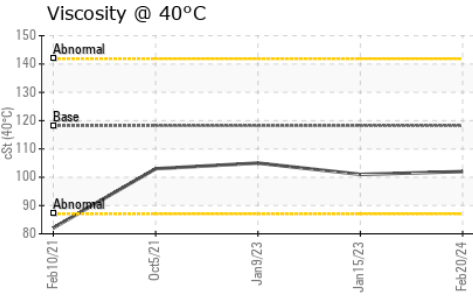
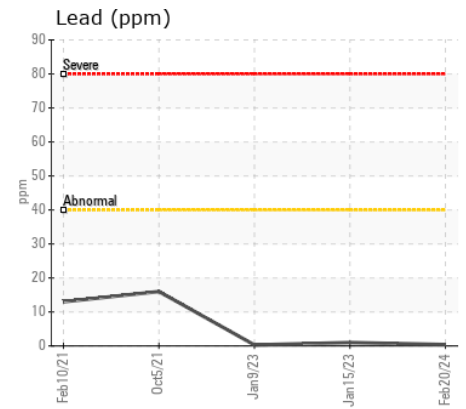
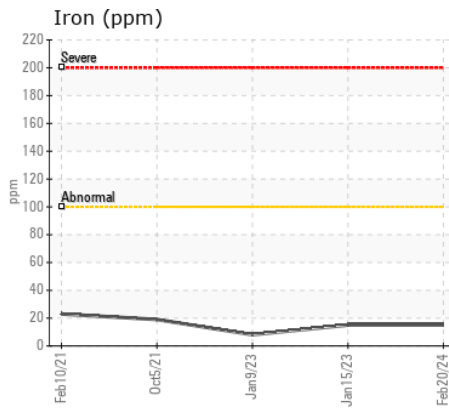
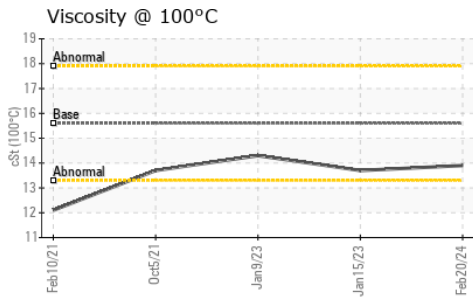
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	5	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	8.4	8.9	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	20.4	19.9
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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)		2	2	1
Boron	ppm	ASTM D5185(m)	0	2	2	6
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	61	60	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	986	990	961
Calcium	ppm	ASTM D5185(m)	1070	1105	1114	1075
Phosphorus	ppm	ASTM D5185(m)	1150	1050	1062	1059
Zinc	ppm	ASTM D5185(m)	1270	1228	1245	1180
Sulfur	ppm	ASTM D5185(m)	2060	2663	2396	2531
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.7	16.8	15.2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	102	101	105
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.9	13.7	14.3
Viscosity Index (VI)	Scale	ASTM D2270*	139	137	136	139



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084913 **Received** : 04 Mar 2024
Lab Number : 02619509 **Tested** : 04 Mar 2024
Unique Number : 5736619 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

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.

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