

Machine Id
76104
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL 10W40 (--- GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083753	PC0082063	PC0078472
Sample Date		Client Info		19 Feb 2024	26 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info		21913	21527	20917
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	4	6	5
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

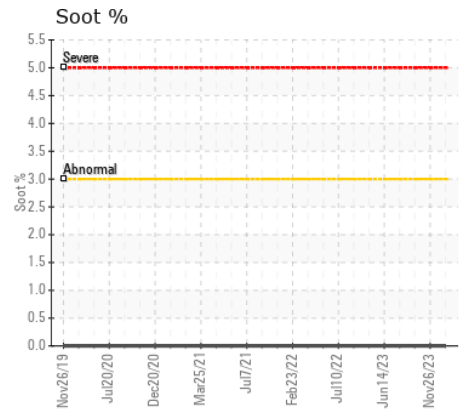
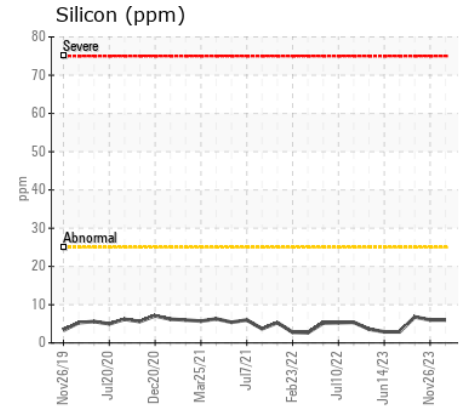
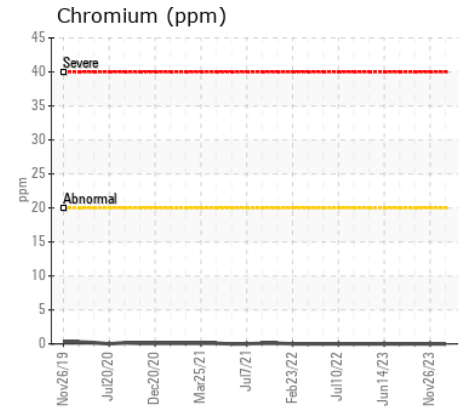
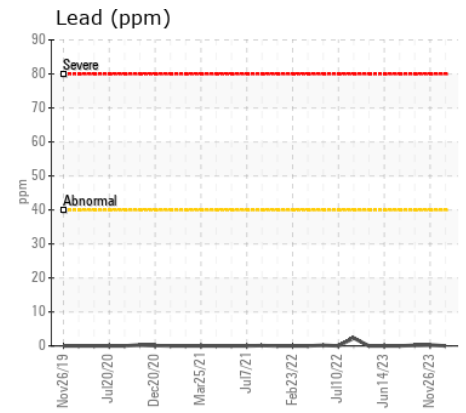
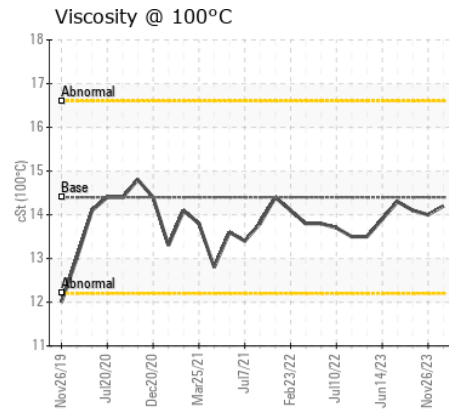
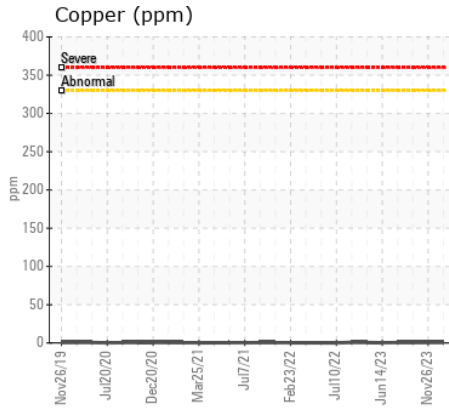
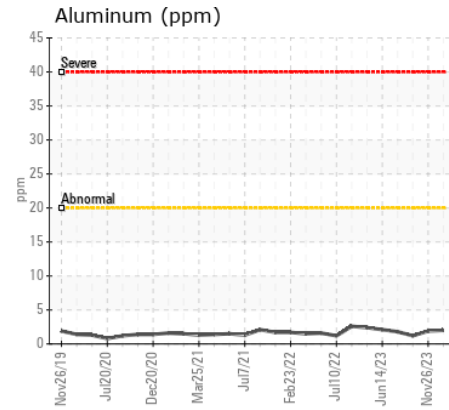
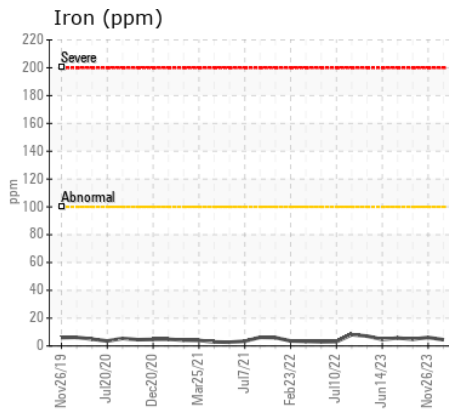
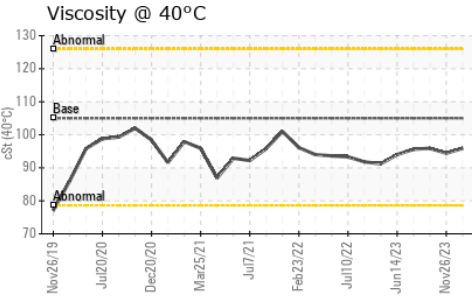
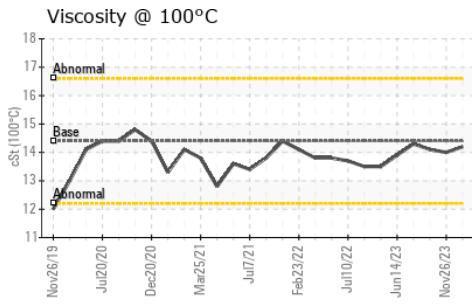
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	6	7
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	5.5	6.7	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.0	20.4	19.5
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
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)		<1	2	2
Boron	ppm	ASTM D5185(m)	250	1	2	2
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	58	60	62
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	450	955	989	1035
Calcium	ppm	ASTM D5185(m)	3000	1185	1240	1227
Phosphorus	ppm	ASTM D5185(m)	1150	1002	995	1022
Zinc	ppm	ASTM D5185(m)	1350	1179	1232	1287
Sulfur	ppm	ASTM D5185(m)	4250	2711	2480	2532
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.5	16.3	15.8
Visc @ 40°C	cSt	ASTM D7279(m)	105	95.9	94.4	95.9
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.2	14.0	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	126	152	151	150



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : PC0083753

Lab Number : 02616521

Unique Number : 5733631

Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 20 Feb 2024

Tested : 20 Feb 2024

Diagnosed : 20 Feb 2024 - Wes Davis

LES ENTREPRISES MICHAUVILLE INC.

270 RUE BRUNET

MONT ST-HILAIRE, QC

CA J3H 0M6

Contact: Martin Trudel

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T:

F:

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.