

Area
MICHAUDVILLE
Machine Id
5519
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend that you drain the oil from the component if this has not already been done. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

There is a moderate concentration of dirt present in the oil.

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

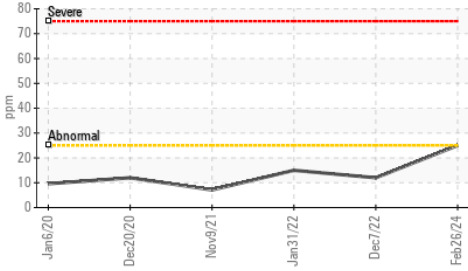
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084428	PC0065874	PC0053157
Sample Date		Client Info		26 Feb 2024	07 Dec 2022	31 Jan 2022
Machine Age	hrs	Client Info		9720	9345	8951
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	ABNORMAL

Iron	ppm	ASTM D5185(m)	>100	76	73	38
Chromium	ppm	ASTM D5185(m)	>20	4	4	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	5	6	2
Lead	ppm	ASTM D5185(m)	>40	12	19	2
Copper	ppm	ASTM D5185(m)	>330	9	3	53
Tin	ppm	ASTM D5185(m)	>15	5	1	2
Vanadium	ppm	ASTM D5185(m)		0	0	0

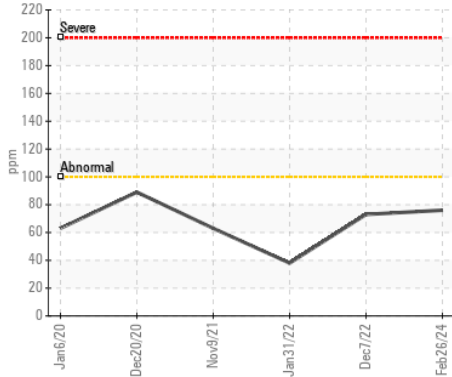
Silicon	ppm	ASTM D5185(m)	>25	▲ 25	12	15
Potassium	ppm	ASTM D5185(m)	>20	2	<1	8
Fuel		WC Method	>5	<1.0	<1.0	1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	8.6	9.8	3.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.5	23.2	21.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

Sodium	ppm	ASTM D5185(m)	>44	14	3	2
Boron	ppm	ASTM D5185(m)	250	3	2	16
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	65	65	35
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	1055	1092	523
Calcium	ppm	ASTM D5185(m)	3000	1373	1288	2000
Phosphorus	ppm	ASTM D5185(m)	1150	1094	1158	1020
Zinc	ppm	ASTM D5185(m)	1350	1320	1368	1177
Sulfur	ppm	ASTM D5185(m)	4250	2659	2659	3299
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.5	19.3	13.7
Visc @ 40°C	cSt	ASTM D7279(m)	91	93.5	103	▲ 56.5
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.7	14.7	▲ 9.3
Viscosity Index (VI)	Scale	ASTM D2270*	164	148	147	146

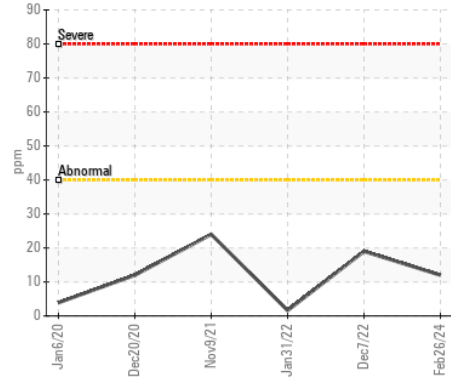
▲ Silicon (ppm)



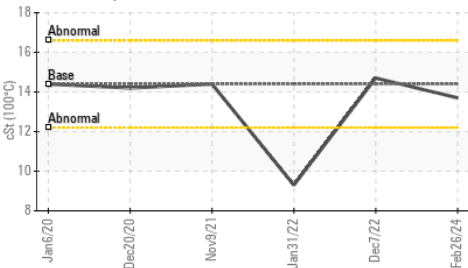
Iron (ppm)



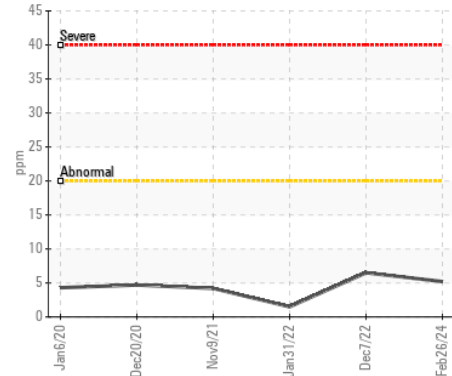
Lead (ppm)



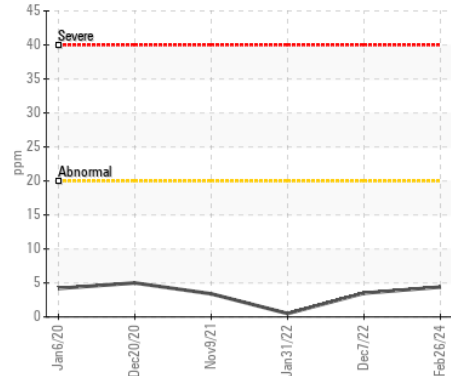
Viscosity @ 100°C



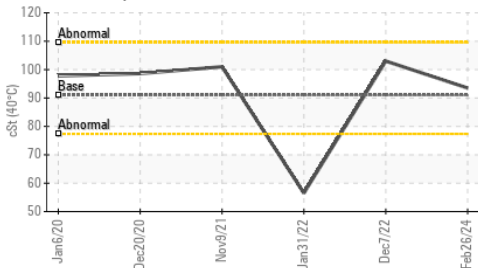
Aluminum (ppm)



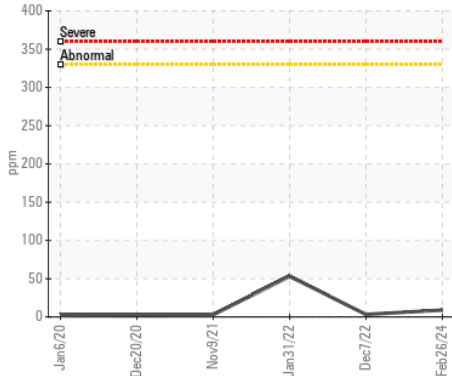
Chromium (ppm)



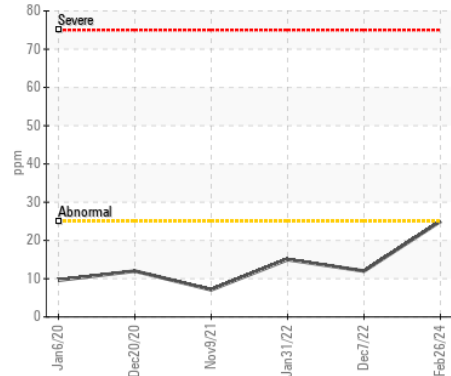
Viscosity @ 40°C



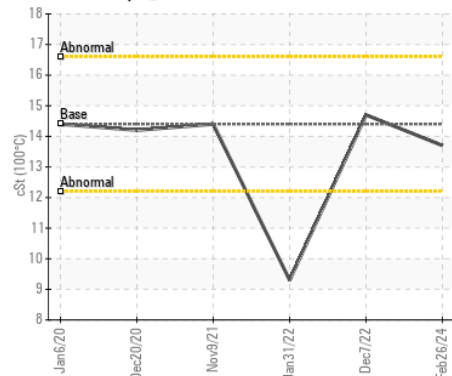
Copper (ppm)



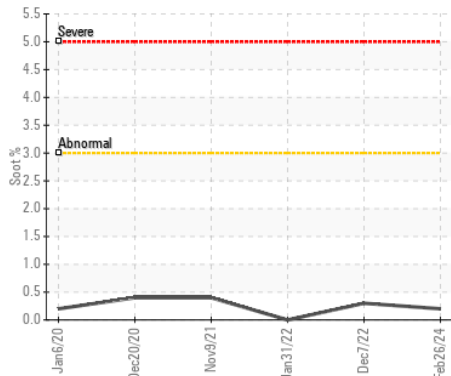
▲ Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017
Accredited
Laboratory

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

Sample No. : PC0084428

Lab Number : 02618281

Unique Number : 5735391

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

Received : 27 Feb 2024

Tested : 27 Feb 2024

Diagnosed : 27 Feb 2024 - Kevin Marson

LES ENTREPRISES MICHAUDVILLE INC.

270 RUE BRUNET

MONT ST-HILAIRE, QC

CA J3H 0M6

Contact: Martin Trudel

mtrudel@michaudville.com

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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F: