

Area
MICHAUDVILLE
Machine Id
6546
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083708	PC0078409	PC0067592
Sample Date		Client Info		16 Jan 2024	13 Sep 2023	19 Jan 2023
Machine Age	hrs	Client Info		4271	4130	0
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	ABNORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	8	17	9
Chromium	ppm	ASTM D5185(m)	>20	0	<1	0
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	2
Lead	ppm	ASTM D5185(m)	>40	0	<1	0
Copper	ppm	ASTM D5185(m)	>330	6	3	4
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	VLITE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

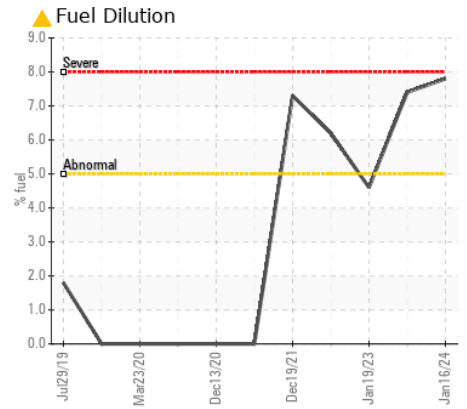
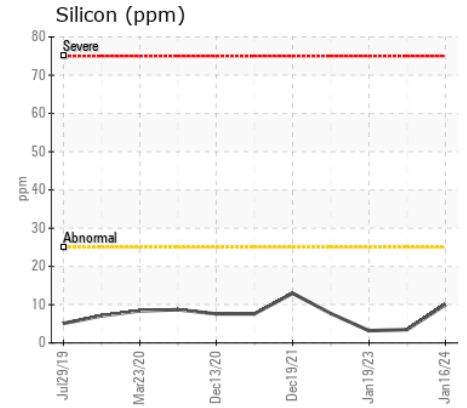
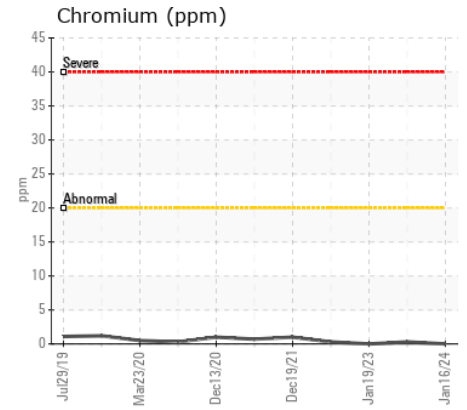
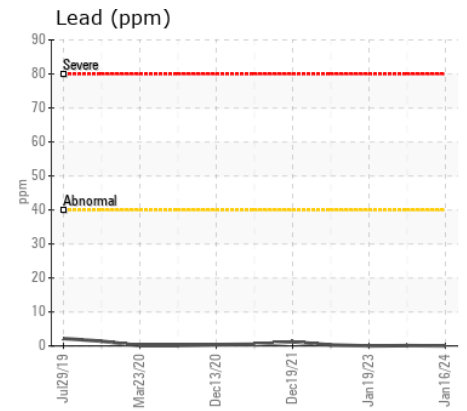
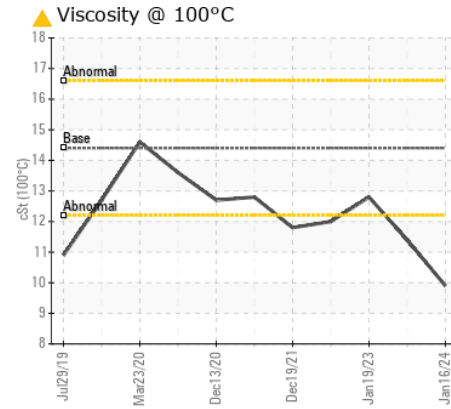
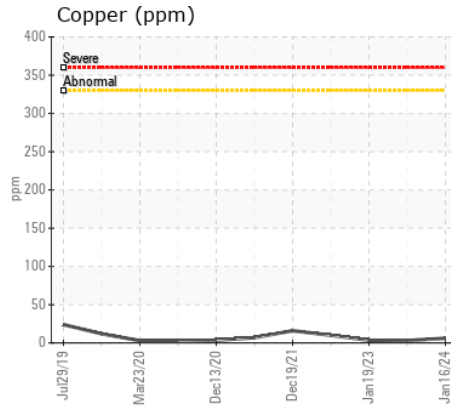
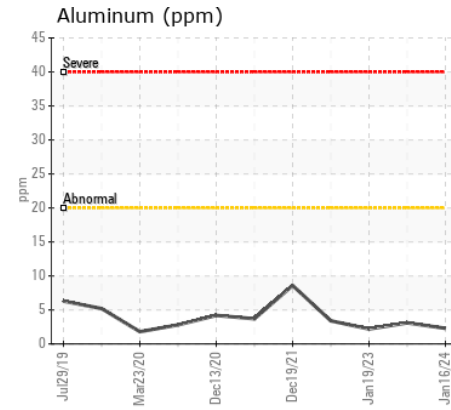
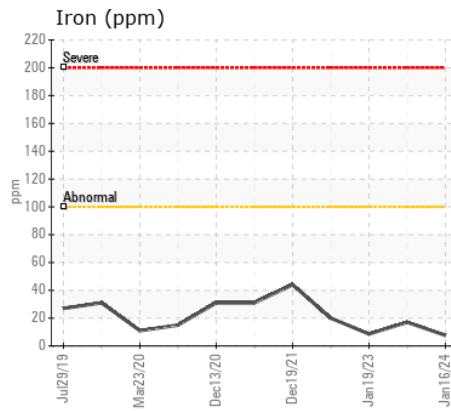
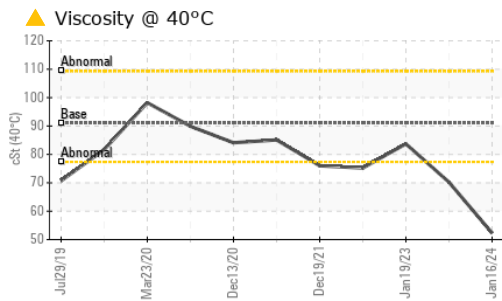
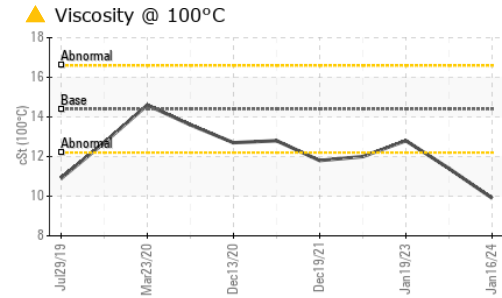
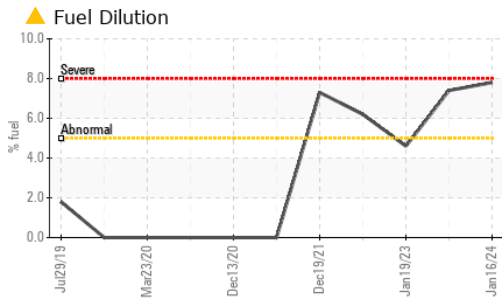
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185(m)	>25	10	4	3
Potassium	ppm	ASTM D5185(m)	>20	<1	0	0
Fuel	%	ASTM D7593*	>5	▲ 7.8	▲ 7.4	▲ 4.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	5.9	8.2	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	34.5	19.2	19.4
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)	>44	1	2	3
Boron	ppm	ASTM D5185(m)	250	2	3	2
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	19	53	54
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	309	891	878
Calcium	ppm	ASTM D5185(m)	3000	2125	1043	1090
Phosphorus	ppm	ASTM D5185(m)	1150	929	947	996
Zinc	ppm	ASTM D5185(m)	1350	1082	1091	1106
Sulfur	ppm	ASTM D5185(m)	4250	3069	2231	2492
Oxidation	Abs/.1mm	ASTM D7414*	>25	26.3	15.0	14.5
Visc @ 40°C	cSt	ASTM D7279(m)	91	▲ 52.3	▲ 70.2	83.7
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	▲ 9.9	▲ 11.4	12.8
Viscosity Index (VI)	Scale	ASTM D2270*	164	178	156	151



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 LES ENTREPRISES MICHAUVILLE INC.
Sample No. : PC0083708 **Received** : 17 Jan 2024
Lab Number : 02609246 **Diagnosed** : 18 Jan 2024
Unique Number : 5710332 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, PercentFuel, 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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