

Area
MICHAUDVILLE
Machine Id
1210
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0084330	PC0082278	PC0057178
Sample Date		Client Info		17 Jun 2024	31 Oct 2023	24 Apr 2023
Machine Age	kms	Client Info		470672	18459	17790
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	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	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	17	63	27
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		<1	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	5	10	3
Lead	ppm	ASTM D5185(m)	>40	8	13	19
Copper	ppm	ASTM D5185(m)	>330	4	10	2
Tin	ppm	ASTM D5185(m)	>15	4	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	LIGHT	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

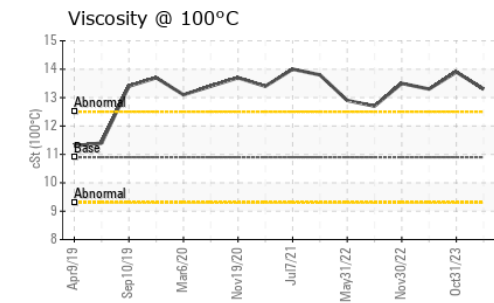
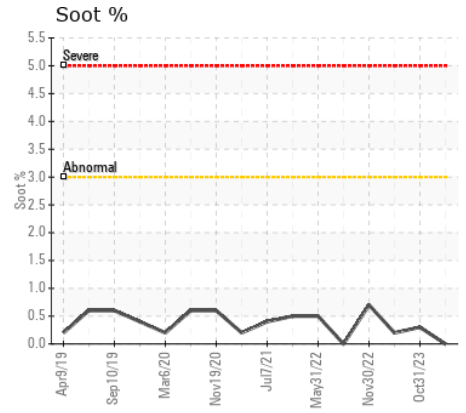
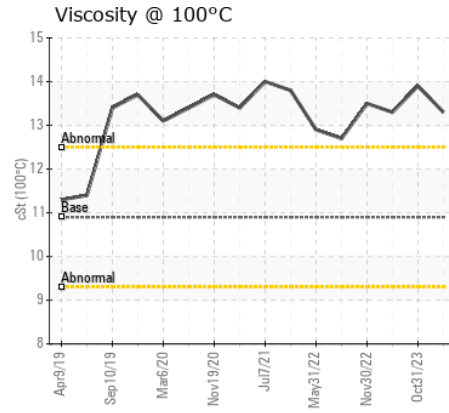
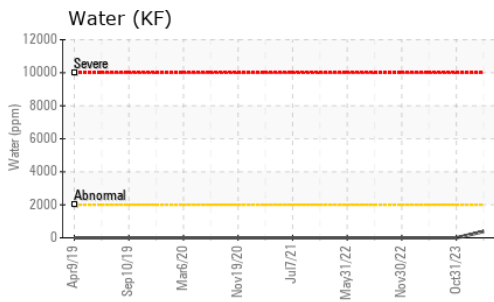
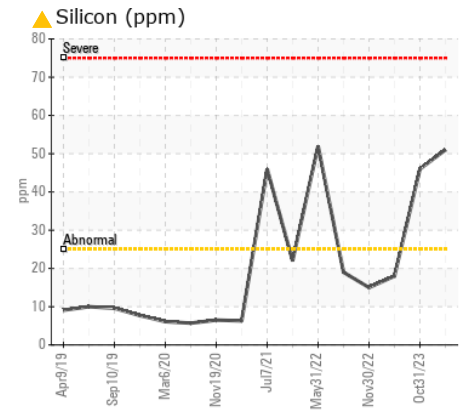
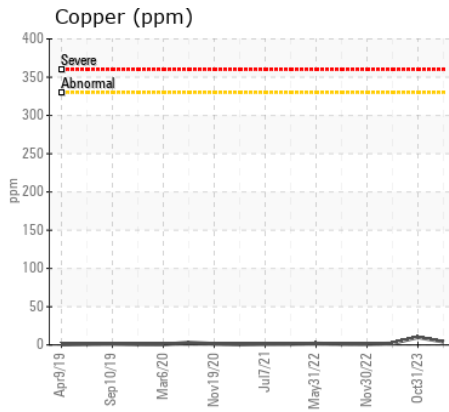
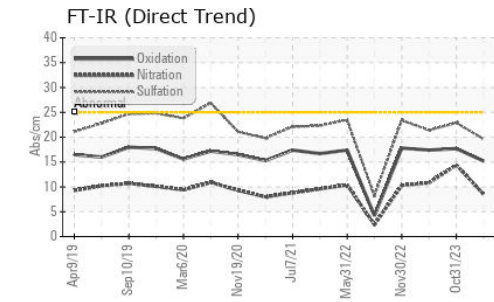
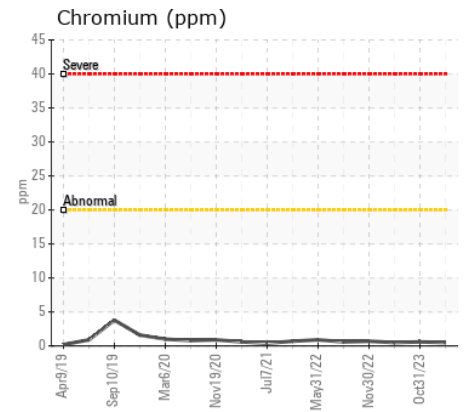
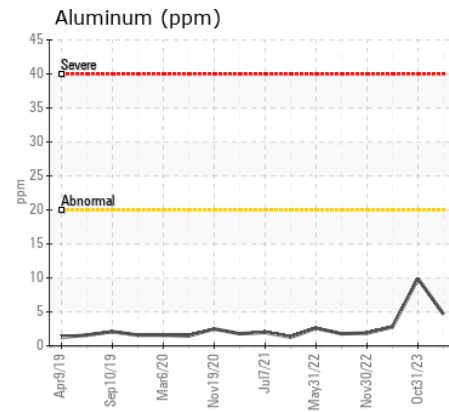
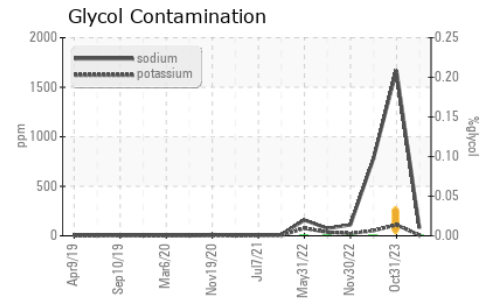
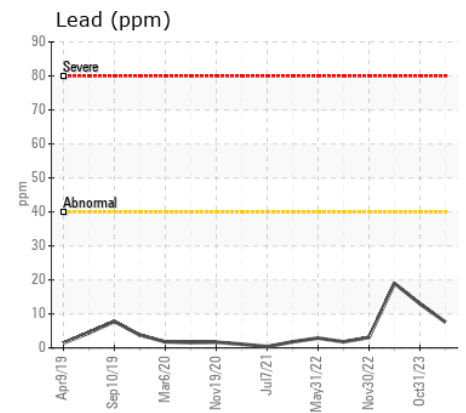
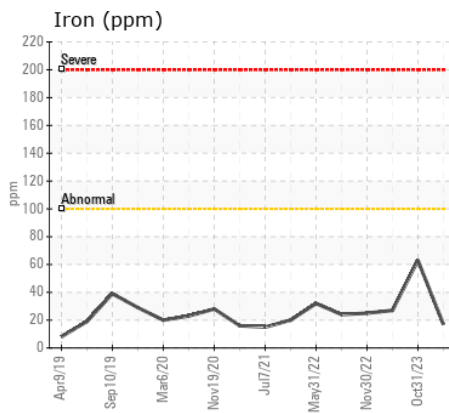
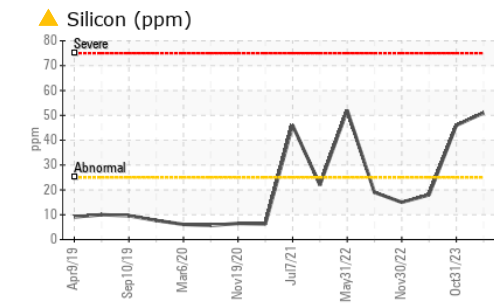
There is a moderate concentration of dirt present in the oil. Test for glycol is negative. The water content is negligible.

Silicon	ppm	ASTM D5185(m)	>25	▲ 51	46	18
Potassium	ppm	ASTM D5185(m)	>20	5	▲ 111	▲ 53
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water	%	ASTM D6304*	>0.2	0.038	---	---
ppm Water	ppm	ASTM D6304*	>2000	383	---	---
Glycol	%	ASTM D7922*		0.0	▲ 0.036	0.0
Soot %	%	ASTM D7844*	>3	0	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	8.5	14.4	10.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.6	22.9	21.4
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	.2%	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		76	● 1670	● 781
Boron	ppm	ASTM D5185(m)	250	39	11	8
Barium	ppm	ASTM D5185(m)	10	2	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	80	185	108
Manganese	ppm	ASTM D5185(m)		2	0	<1
Magnesium	ppm	ASTM D5185(m)	450	238	926	997
Calcium	ppm	ASTM D5185(m)	3000	1998	1059	1177
Phosphorus	ppm	ASTM D5185(m)	1150	987	1037	1124
Zinc	ppm	ASTM D5185(m)	1350	1194	1168	1242
Sulfur	ppm	ASTM D5185(m)	4250	2929	2652	2706
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.2	17.7	17.4
Visc @ 40°C	cSt	ASTM D7279(m)	73	93.9	94.8	92.9
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	13.3	13.9	13.3
Viscosity Index (VI)	Scale	ASTM D2270*	138	141	149	143



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0084330
Lab Number : 02642491
Unique Number : 5800030
Test Package : MOB 1 (Additional Tests: Glycol, KF, KV40, VI, Visual)

LES ENTREPRISES MICHAUVILLE INC.
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 Contact: Martin Trudel
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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: