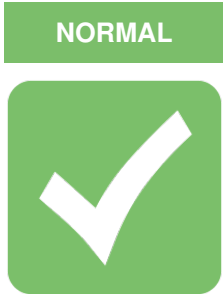
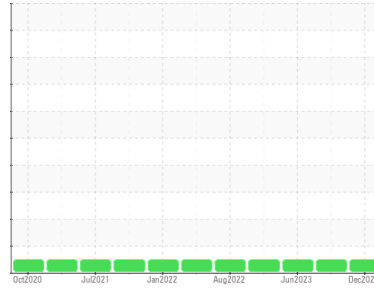


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
1225
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
All component wear rates are normal.

Contamination
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			PC0076044	PC0078351	PC0075802
Sample Date	Client Info			17 Dec 2023	30 Aug 2023	07 Jun 2023
Machine Age	hrs Client Info			5733	5234	4779
Oil Age	hrs Client Info			0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

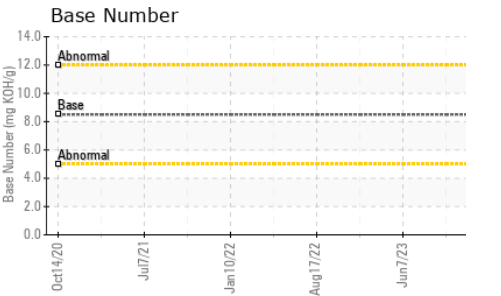
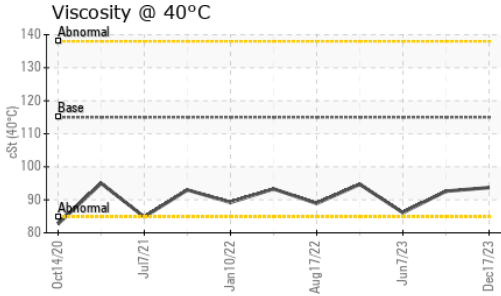
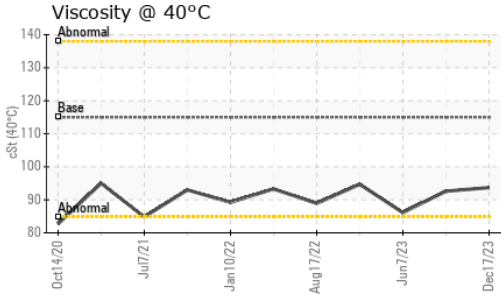
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	8	7	9
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	10	8	6
Lead	ppm	ASTM D5185(m)	>40	<1	0	0
Copper	ppm	ASTM D5185(m)	>330	2	1	1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	1	2	5
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	59	57	56
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	948	943	889
Calcium	ppm	ASTM D5185(m)	3000	1083	1156	1325
Phosphorus	ppm	ASTM D5185(m)	1150	962	1075	1076
Zinc	ppm	ASTM D5185(m)	1350	1177	1198	1175
Sulfur	ppm	ASTM D5185(m)	4250	2411	2596	2678
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	11	8	8
Sodium	ppm	ASTM D5185(m)	>158	1	1	1
Potassium	ppm	ASTM D5185(m)	>20	22	19	15

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0.2	0.2
Nitration	Abs/cm	ASTM D7624*	>20	7.3	7.1	7.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2	21.7	21.3

OIL ANALYSIS REPORT

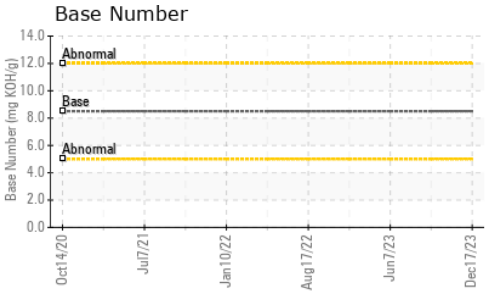
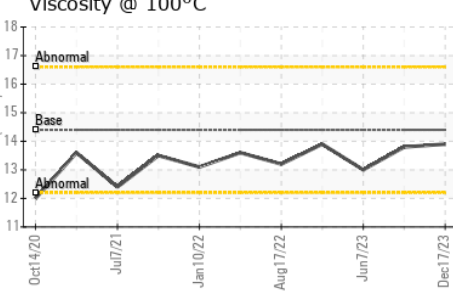
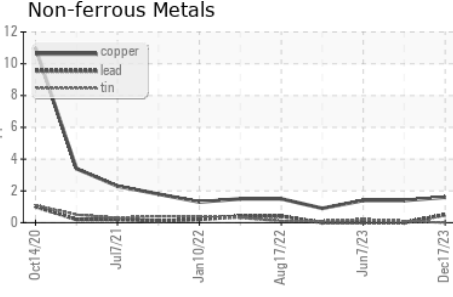
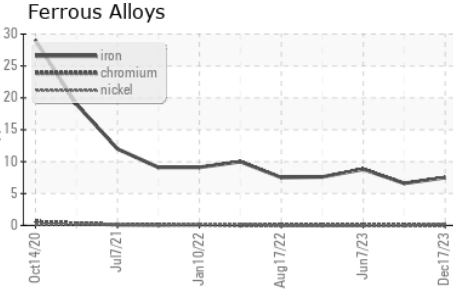


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.1	15.6	16.3

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
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
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	115	93.7	92.6	86.1
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.9	13.8	13.0
Viscosity Index (VI)	Scale	ASTM D2270*	126	151	151	150

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 LES ENTREPRISES MICHAUVILLE INC.
Sample No. : PC0076044 **Received** : 18 Dec 2023
Lab Number : 02603694 **Diagnosed** : 19 Dec 2023
Unique Number : 5696779 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: KV40, VI)

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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 T:
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