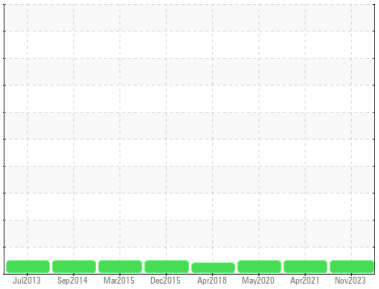
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
GMC 300672
Component
Front Diesel Engine
Fluid
SAFETY-KLEEN PERFORMANCE PLUS XHD-7 15W40 (25 LTR)

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear
All component wear rates are normal.

Contamination
Light fuel dilution occurring. No other contaminants were detected 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		**PC0078494**	PC0028974	PC0029136
Sample Date		Client Info		**21 Nov 2023**	27 Apr 2021	14 May 2020
Machine Age	yrs	Client Info		**1**	41974	40642
Oil Age	yrs	Client Info		**0**	500	4700
Oil Changed		Client Info		**Changed**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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	**2**	2	4
Chromium	ppm	ASTM D5185(m)	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	<1
Silver	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>25	**2**	1	2
Lead	ppm	ASTM D5185(m)	>40	**<1**	0	0
Copper	ppm	ASTM D5185(m)	>330	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>15	**0**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
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)		**81**	2	5
Barium	ppm	ASTM D5185(m)		**<1**	0	<1
Molybdenum	ppm	ASTM D5185(m)		**78**	57	59
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**940**	956	937
Calcium	ppm	ASTM D5185(m)		**1179**	1039	1115
Phosphorus	ppm	ASTM D5185(m)		**958**	1007	1036
Zinc	ppm	ASTM D5185(m)		**1116**	1216	1199
Sulfur	ppm	ASTM D5185(m)		**2608**	2765	2760
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**3**	3	2
Sodium	ppm	ASTM D5185(m)		**1**	1	<1
Potassium	ppm	ASTM D5185(m)	>20	**0**	<1	5
Fuel	%	ASTM D7593*	>5	**1**	<1.0	0.6

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**5.0**	5.3	8.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.0**	18.8	22.5

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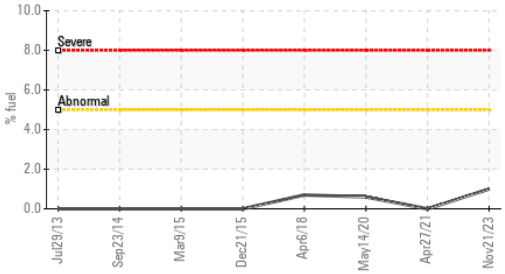
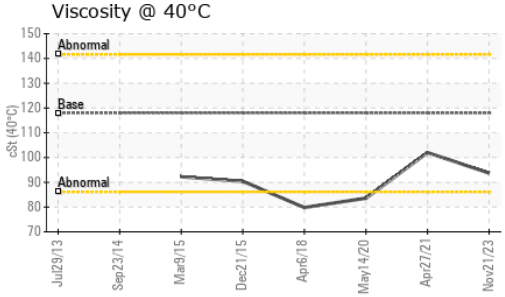
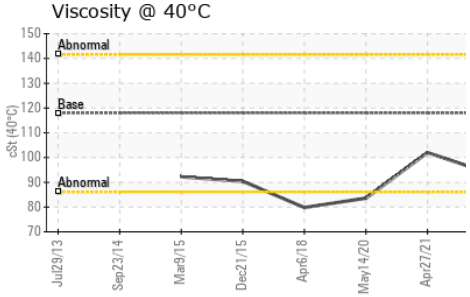
Fuel Dilution



Viscosity @ 40°C



Viscosity @ 40°C



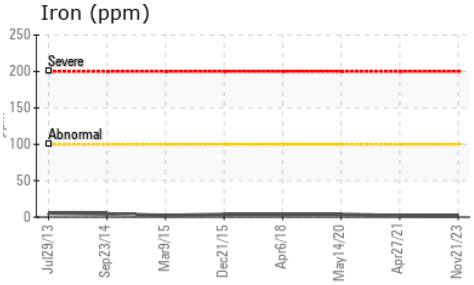
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**13.9**	13.5	14.5

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

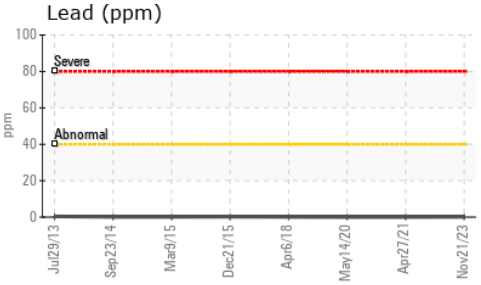
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118	**93.7**	102	83.6
Visc @ 100°C	cSt	ASTM D7279(m)	15.7	**12.8**	13.7	11.9
Viscosity Index (VI)	Scale	ASTM D2270*	140	**133**	134	135

GRAPHS

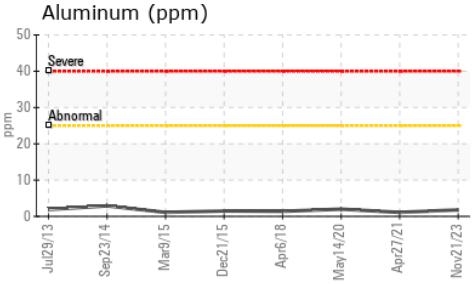
Iron (ppm)



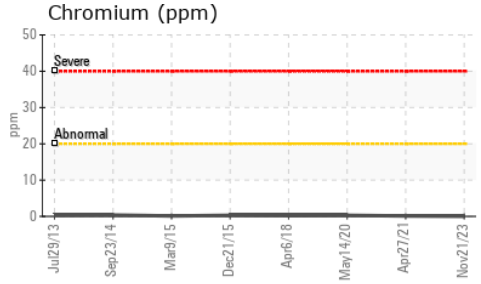
Lead (ppm)



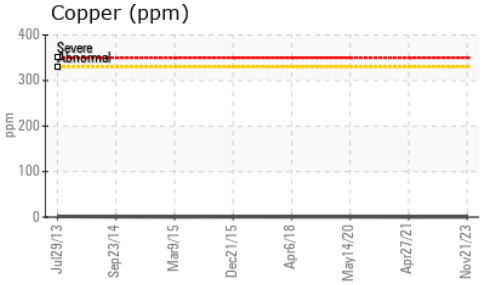
Aluminum (ppm)



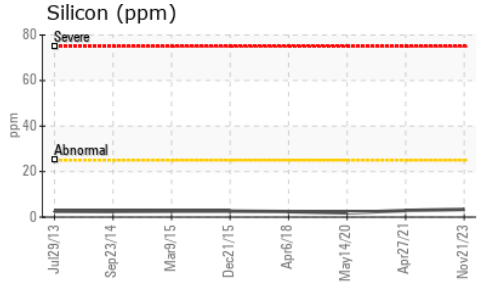
Chromium (ppm)



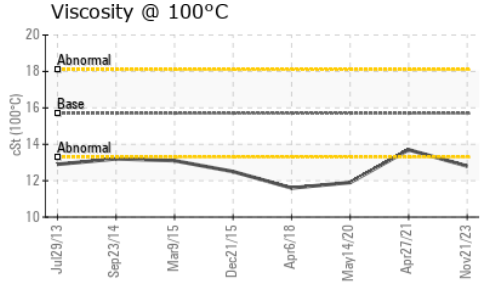
Copper (ppm)



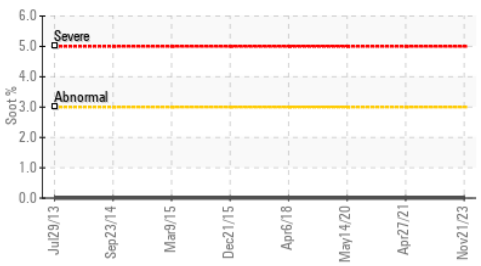
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078494 **Received** : 06 Dec 2023
Lab Number : 02601168 **Diagnosed** : 07 Dec 2023
Unique Number : 5694253 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, KV40, PercentFuel, 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.

HAMILTON FIRE DEPT
MECHANICAL DIV., 177 BAY STREET NORTH
HAMILTON, ON
CA L8R 2P8
Contact: Jenny-Lynn Pellegrino
jenny-lynn.pellegrino@hamilton.ca
T: (905)546-2424
F: (905)961-9116