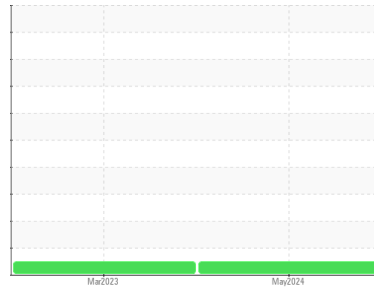


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
25102 - P426
Component
Diesel Engine
Fluid
 DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
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			PC0085036	PC0071376	---
Sample Date	Client Info			08 May 2024	29 Mar 2023	---
Machine Age	mths	Client Info		6	11022	---
Oil Age	mths	Client Info		6	0	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	<1.0	---
Water	WC Method	>0.2		NEG	NEG	---
Glycol	WC Method			NEG	NEG	---

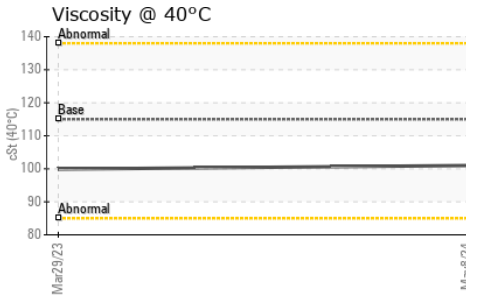
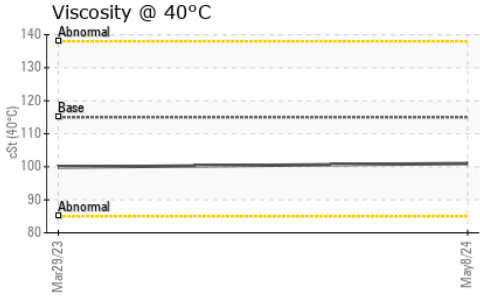
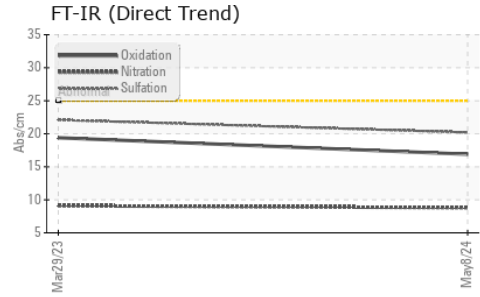
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>90	22	37	---
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	0	0	---
Aluminum	ppm	ASTM D5185(m)	>20	3	5	---
Lead	ppm	ASTM D5185(m)	>40	0	0	---
Copper	ppm	ASTM D5185(m)	>330	1	5	---
Tin	ppm	ASTM D5185(m)	>15	0	<1	---
Antimony	ppm	ASTM D5185(m)		<1	<1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
Beryllium	ppm	ASTM D5185(m)		0	0	---
Cadmium	ppm	ASTM D5185(m)		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	3	6	---
Barium	ppm	ASTM D5185(m)	10	0	<1	---
Molybdenum	ppm	ASTM D5185(m)	100	61	59	---
Manganese	ppm	ASTM D5185(m)		<1	2	---
Magnesium	ppm	ASTM D5185(m)	450	965	950	---
Calcium	ppm	ASTM D5185(m)	3000	1070	1116	---
Phosphorus	ppm	ASTM D5185(m)	1150	1005	993	---
Zinc	ppm	ASTM D5185(m)	1350	1200	1139	---
Sulfur	ppm	ASTM D5185(m)	4250	2555	2592	---
Lithium	ppm	ASTM D5185(m)		<1	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	6	---
Sodium	ppm	ASTM D5185(m)	>158	4	3	---
Potassium	ppm	ASTM D5185(m)	>20	6	3	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	0.3	0.4	---
Nitration	Abs/cm	ASTM D7624*	>20	8.8	9.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.2	22.1	---

OIL ANALYSIS REPORT

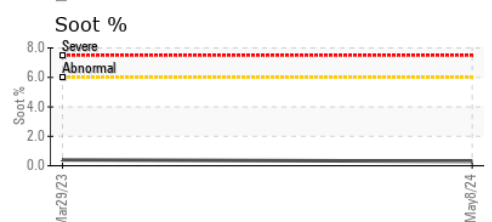
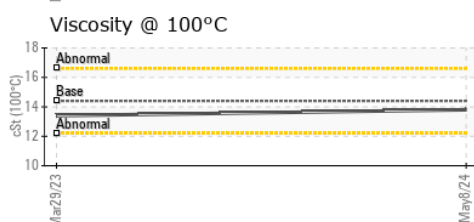
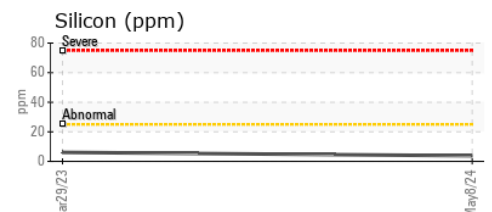
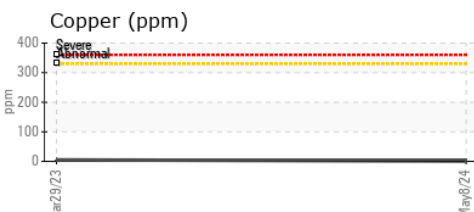
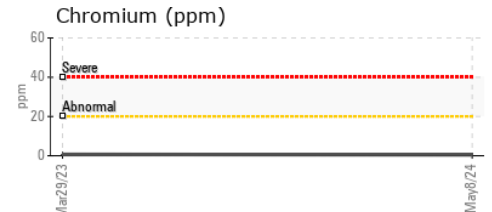
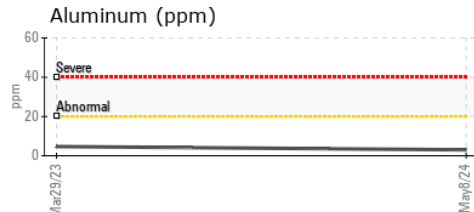
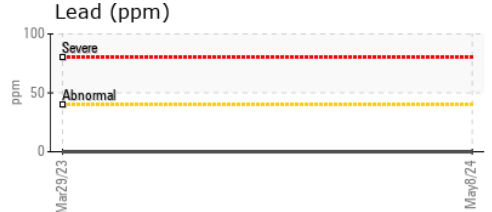
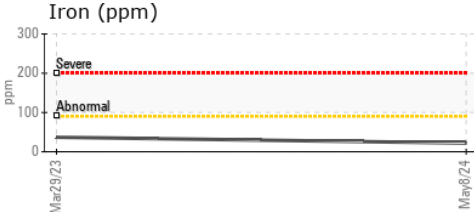


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	16.9	19.4	---

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	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---
Free Water	scalar	Visual*		NEG	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	115	101	99.9	---
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.8	13.4	---
Viscosity Index (VI)	Scale	ASTM D2270*	126	137	133	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0085036 **Received** : 18 Jun 2024
Lab Number : **02642525** **Tested** : 18 Jun 2024
Unique Number : 5800064 **Diagnosed** : 18 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

TORONTO FIRE SERVICES
 40 TORYORK DRIVE
 TORONTO, ON
 CA M9L 1X6
 Contact: Antonio Rodrigues
 antonio.rodrigues@toronto.ca

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.

T:
 F: (416)338-9207