



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[44599431]
 Machine Id
7468
 Component
Diesel Engine
 Fluid
SHELL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0554144	WC0553336	---
Sample Date		Client Info		14 May 2024	29 Mar 2022	---
Machine Age	kms	Client Info		165273	53336	---
Oil Age	kms	Client Info		0	0	---
Filter Age	kms	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	35	84	---
Chromium	ppm	ASTM D5185(m)	>20	2	4	---
Nickel	ppm	ASTM D5185(m)	>2	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	0	---
Silver	ppm	ASTM D5185(m)	>2	0	1	---
Aluminum	ppm	ASTM D5185(m)	>20	14	31	---
Lead	ppm	ASTM D5185(m)	>40	3	6	---
Copper	ppm	ASTM D5185(m)	>330	2	27	---
Tin	ppm	ASTM D5185(m)	>15	<1	4	---
Vanadium	ppm	ASTM D5185(m)		0	0	---

CONTAMINATION

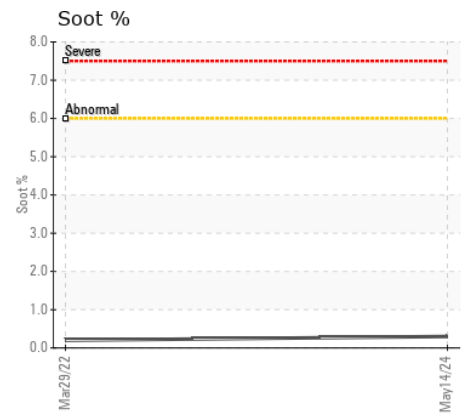
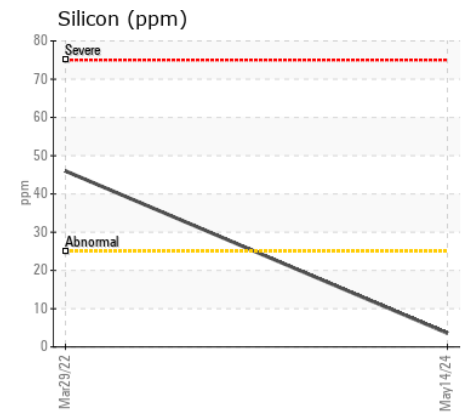
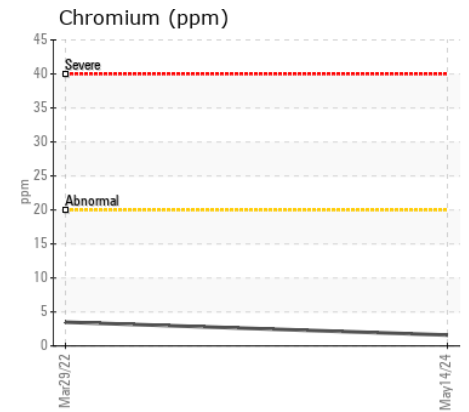
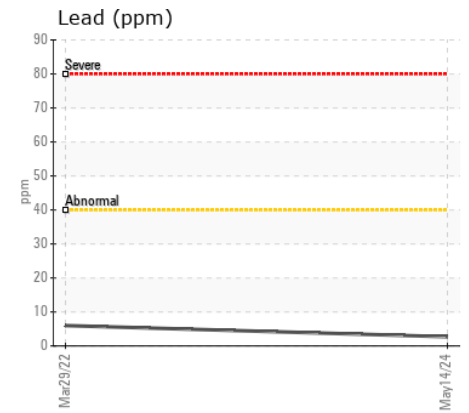
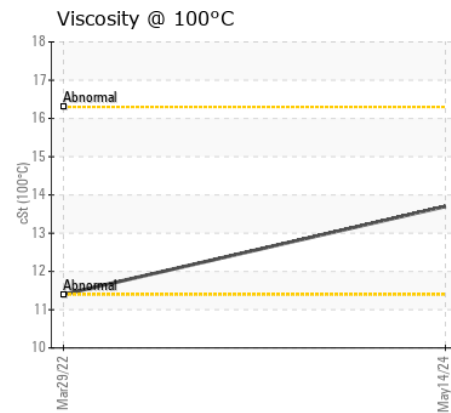
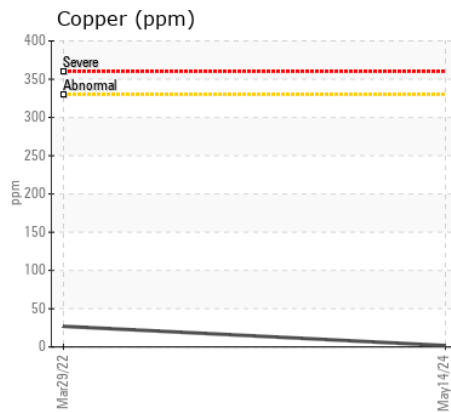
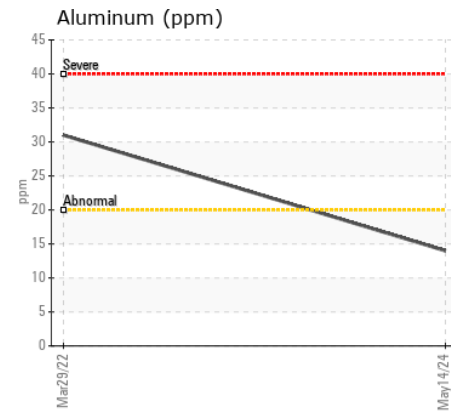
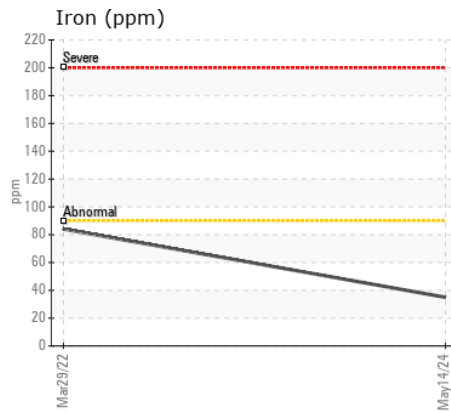
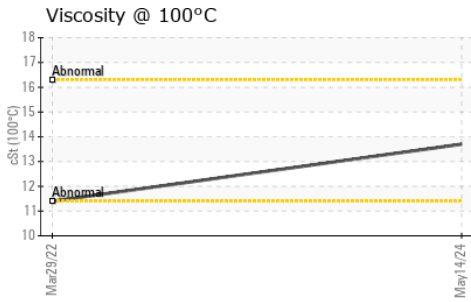
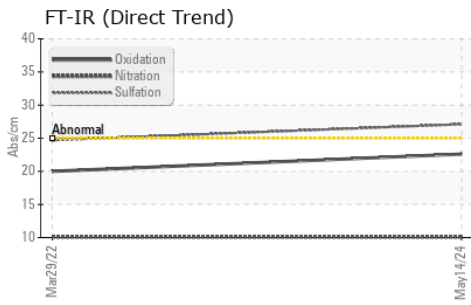
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	46	---
Potassium	ppm	ASTM D5185(m)	>20	40	114	---
Fuel		WC Method	>3.0	<1.0	▲ 1.7	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>6	0.3	0.2	---
Nitration	Abs/cm	ASTM D7624*	>20	10.1	10.1	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	27.1	24.7	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)	>150	2	6	---
Boron	ppm	ASTM D5185(m)		51	39	---
Barium	ppm	ASTM D5185(m)		0	6	---
Molybdenum	ppm	ASTM D5185(m)		<1	62	---
Manganese	ppm	ASTM D5185(m)		<1	5	---
Magnesium	ppm	ASTM D5185(m)		18	471	---
Calcium	ppm	ASTM D5185(m)		2213	1471	---
Phosphorus	ppm	ASTM D5185(m)		912	987	---
Zinc	ppm	ASTM D5185(m)		1096	1194	---
Sulfur	ppm	ASTM D5185(m)		2788	2457	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	22.6	20.0	---
Visc @ 100°C	cSt	ASTM D7279(m)		13.7	▲ 11.4	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0554144
Lab Number : 02635966
Unique Number : 5785128
Test Package : MOB 1
Received : 16 May 2024
Tested : 16 May 2024
Diagnosed : 16 May 2024 - Wes Davis

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.

Rush Truck Centres
 400 Colonnade Dr
 Kemptville, ON
 CA K0G 1J0
 Contact: S. Martel
 smartel@rushtruckcentres.ca
 T: (613)258-3467
 F: (613)258-4927