

Machine Id
WESTERN STAR 424079
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0122264	---	---
Sample Date		Client Info		30 May 2024	---	---
Machine Age	hrs	Client Info		15483	---	---
Oil Age	hrs	Client Info		457	---	---
Filter Age	hrs	Client Info		457	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	7	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>4	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	1	---	---
Lead	ppm	ASTM D5185(m)	>40	2	---	---
Copper	ppm	ASTM D5185(m)	>330	88	---	---
Tin	ppm	ASTM D5185(m)	>15	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	VLITE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

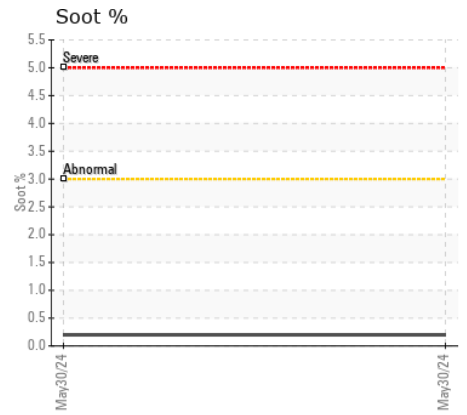
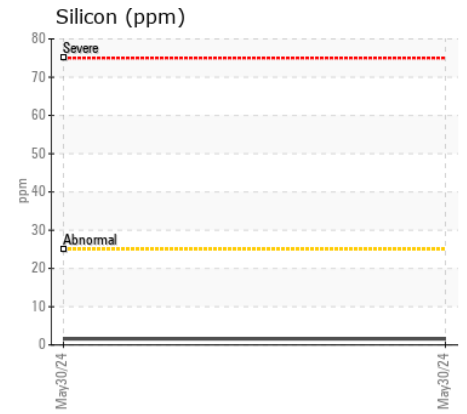
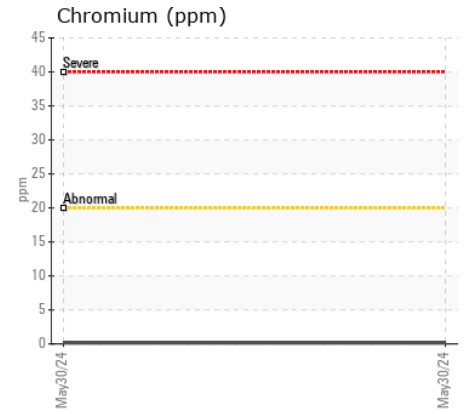
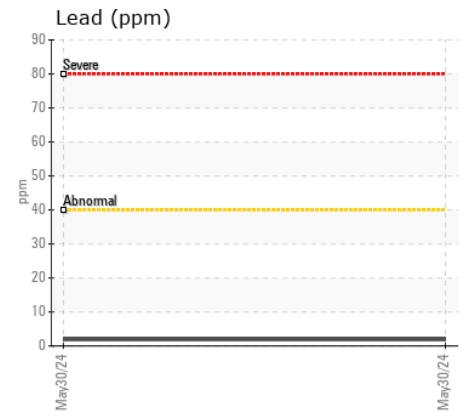
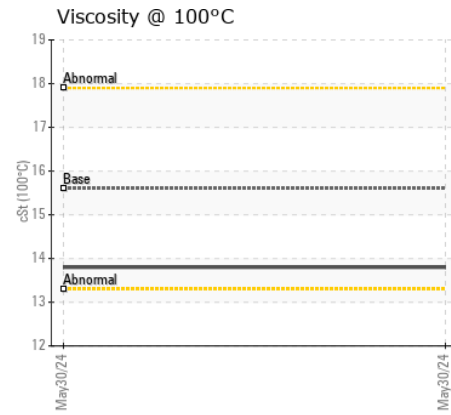
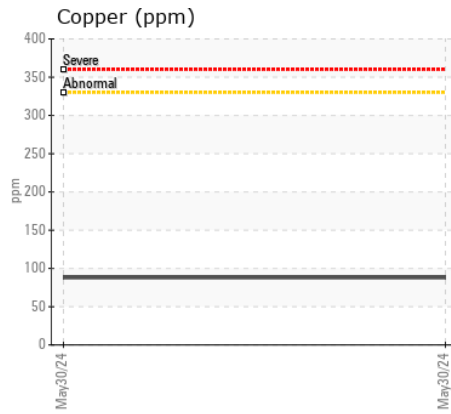
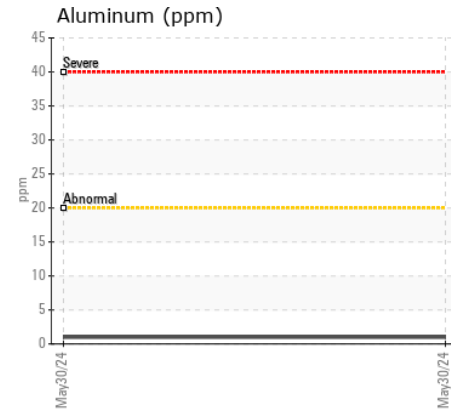
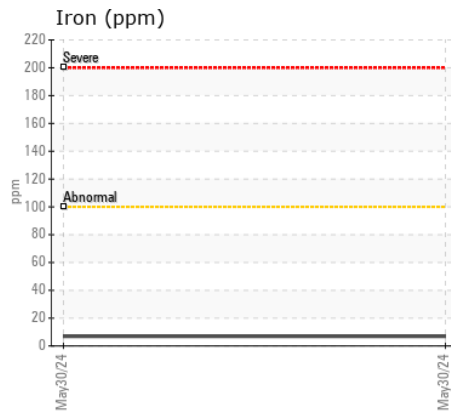
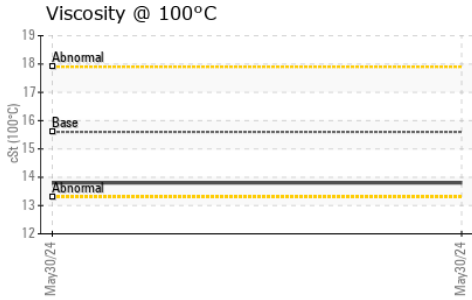
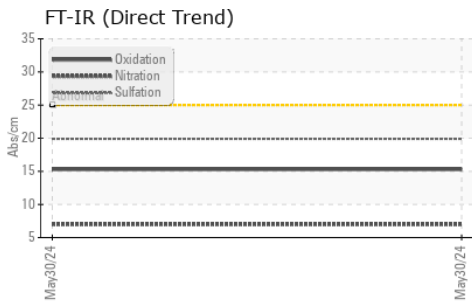
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.2	---	---
Nitration	Abs/cm	ASTM D7624*	>20	7.0	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	VLITE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)	0	2	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	60	62	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	1010	1003	---	---
Calcium	ppm	ASTM D5185(m)	1070	1096	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	1012	---	---
Zinc	ppm	ASTM D5185(m)	1270	1207	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2463	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.3	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	13.8	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0122264
Lab Number : 02640175
Unique Number : 5789337
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 987 - Charlottetown
 7 Superior Crescent
 Charlottetown, PE
 CA C1A 7N5
 Contact: Vicki Metcalfe
 vmetcalfe@gflenv.com
 T: (782)377-5918
 F: (506)453-9490

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.