



OIL ANALYSIS REPORT

Sample Rating Trend

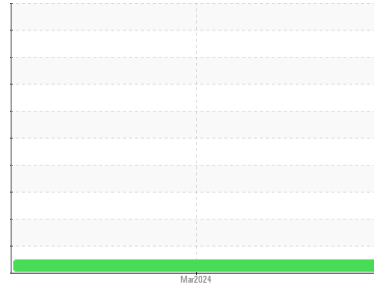
NORMAL



Area
[1246223]
Machine Id
351018

Component
Diesel Engine
Fluid

PETRO CANADA DURON SHP 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0107924	---	---
Sample Date	Client Info	22 Mar 2024	---	---
Machine Age	hrs Client Info	8803	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		NORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >110	4	---	---
Chromium	ppm ASTM D5185(m) >4	0	---	---
Nickel	ppm ASTM D5185(m) >2	0	---	---
Titanium	ppm ASTM D5185(m)	0	---	---
Silver	ppm ASTM D5185(m) >2	0	---	---
Aluminum	ppm ASTM D5185(m) >25	<1	---	---
Lead	ppm ASTM D5185(m) >45	0	---	---
Copper	ppm ASTM D5185(m) >85	<1	---	---
Tin	ppm ASTM D5185(m) >4	0	---	---
Antimony	ppm ASTM D5185(m)	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	160	---	---
Barium	ppm ASTM D5185(m) 0	0	---	---
Molybdenum	ppm ASTM D5185(m) 60	<1	---	---
Manganese	ppm ASTM D5185(m) 0	0	---	---
Magnesium	ppm ASTM D5185(m) 1010	33	---	---
Calcium	ppm ASTM D5185(m) 1070	2054	---	---
Phosphorus	ppm ASTM D5185(m) 1150	931	---	---
Zinc	ppm ASTM D5185(m) 1270	1074	---	---
Sulfur	ppm ASTM D5185(m) 2060	2793	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

CONTAMINANTS

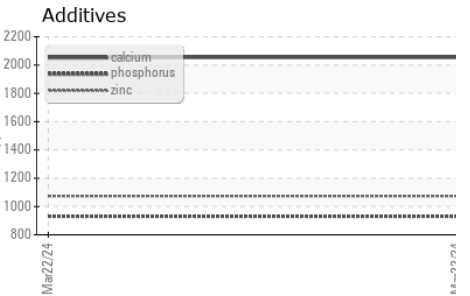
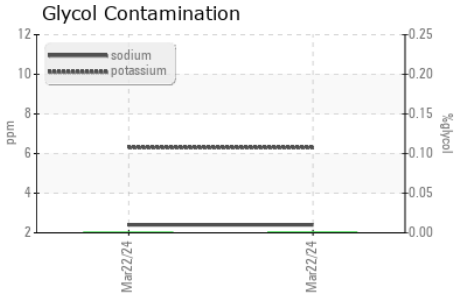
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	2	---	---
Sodium	ppm ASTM D5185(m)	2	---	---
Potassium	ppm ASTM D5185(m) >20	6	---	---
Glycol	% ASTM D7922*	0.0	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0	---	---
Nitration	Abs/cm ASTM D7624* >20	5.6	---	---
Sulfation	Abs./1mm ASTM D7415* >30	20.7	---	---



OIL ANALYSIS REPORT

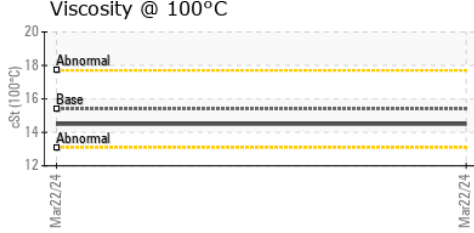
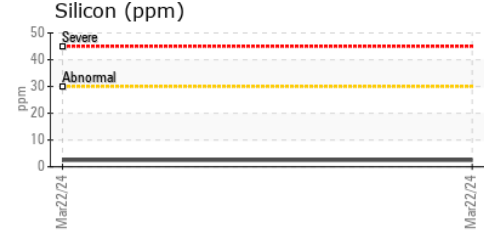
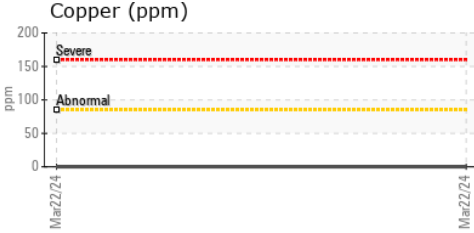
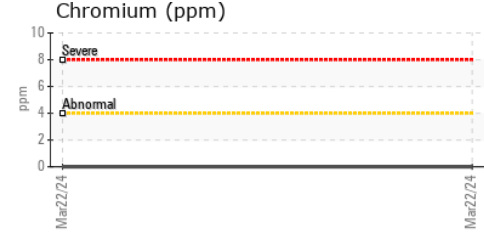
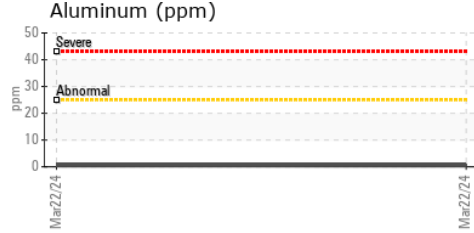
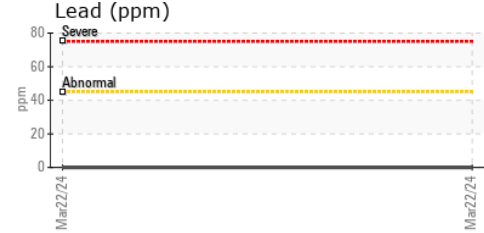
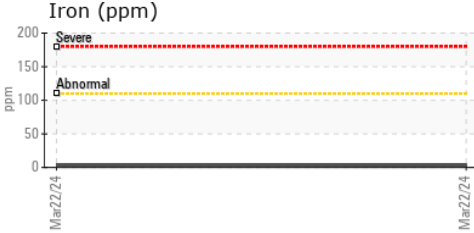


FLUID DEGRADATION	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	16.7	---

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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.5	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107924
Lab Number : 02624553
Unique Number : 5749672
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

GFL Environmental - 350 - Emeral Park Regina
 2B Industrial Drive., Great Plains Industrial Park,
 Emerald Park, SK
 CA S4L 1B6
 Contact: Vaughn Hortness
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 F: (306)244-9501

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.