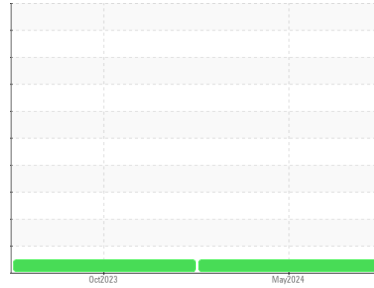




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

401107

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

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.

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		GFL0096809	GFL0096722	---
Sample Date	Client Info		02 May 2024	23 Oct 2023	---
Machine Age	hrs	Client Info	0	836215	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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) >100	45	30	---
Chromium	ppm	ASTM D5185(m) >20	2	1	---
Nickel	ppm	ASTM D5185(m) >4	0	0	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m) >3	0	<1	---
Aluminum	ppm	ASTM D5185(m) >20	3	3	---
Lead	ppm	ASTM D5185(m) >40	9	4	---
Copper	ppm	ASTM D5185(m) >330	4	2	---
Tin	ppm	ASTM D5185(m) >15	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
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) 0	3	4	---
Barium	ppm	ASTM D5185(m) 0	<1	<1	---
Molybdenum	ppm	ASTM D5185(m) 60	64	59	---
Manganese	ppm	ASTM D5185(m) 0	<1	0	---
Magnesium	ppm	ASTM D5185(m) 1010	1031	961	---
Calcium	ppm	ASTM D5185(m) 1070	1144	1047	---
Phosphorus	ppm	ASTM D5185(m) 1150	1017	969	---
Zinc	ppm	ASTM D5185(m) 1270	1269	1177	---
Sulfur	ppm	ASTM D5185(m) 2060	2451	2404	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	6	---
Sodium	ppm	ASTM D5185(m)	5	5	---
Potassium	ppm	ASTM D5185(m) >20	9	6	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	2.1	1	---
Nitration	Abs/cm	ASTM D7624* >20	11.6	9.1	---
Sulfation	Abs./1mm	ASTM D7415* >30	26.3	21.1	---

