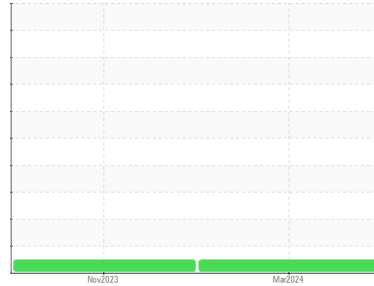




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**213032**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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		<b>GFL0102618</b>	GFL0101718	---
Sample Date	Client Info		<b>07 Mar 2024</b>	20 Nov 2023	---
Machine Age	hrs	Client Info	<b>889</b>	392	---
Oil Age	hrs	Client Info	<b>497</b>	392	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >80	<b>30</b>	75	---
Chromium	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	<1	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185(m) >30	<b>4</b>	8	---
Lead	ppm	ASTM D5185(m) >30	<b>0</b>	2	---
Copper	ppm	ASTM D5185(m) >150	<b>14</b>	65	---
Tin	ppm	ASTM D5185(m) >5	<b>0</b>	<1	---
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 2	<b>8</b>	52	---
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	8	---
Molybdenum	ppm	ASTM D5185(m) 50	<b>57</b>	44	---
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	5	---
Magnesium	ppm	ASTM D5185(m) 950	<b>918</b>	560	---
Calcium	ppm	ASTM D5185(m) 1050	<b>1078</b>	1626	---
Phosphorus	ppm	ASTM D5185(m) 995	<b>922</b>	717	---
Zinc	ppm	ASTM D5185(m) 1180	<b>1122</b>	892	---
Sulfur	ppm	ASTM D5185(m) 2600	<b>2260</b>	1933	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

## CONTAMINANTS

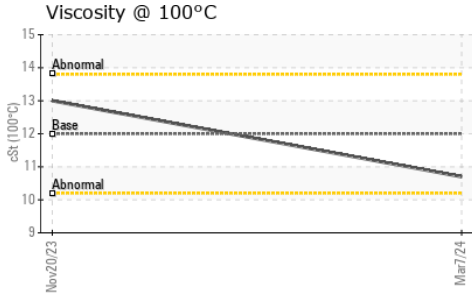
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	<b>5</b>	25	---
Sodium	ppm	ASTM D5185(m)	<b>1</b>	6	---
Potassium	ppm	ASTM D5185(m) >20	<b>6</b>	8	---

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0</b>	0.1	---
Nitration	Abs/cm	ASTM D7624* >20	<b>8.0</b>	8.5	---
Sulfation	Abs./1mm	ASTM D7415* >30	<b>19.2</b>	23.5	---



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	16.6	22.6	---

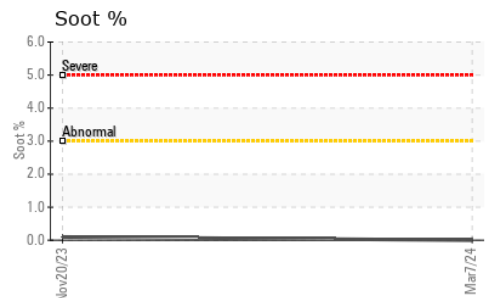
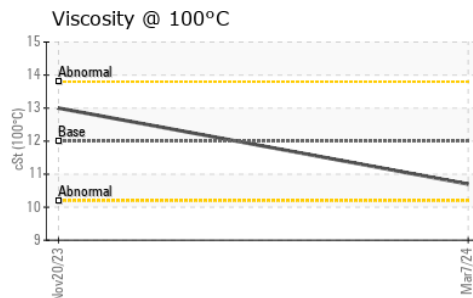
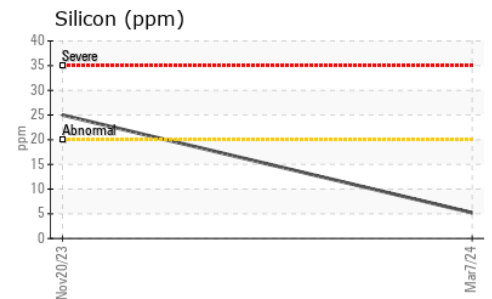
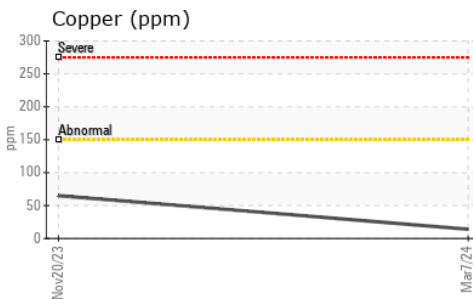
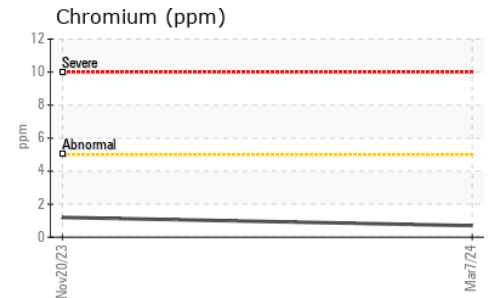
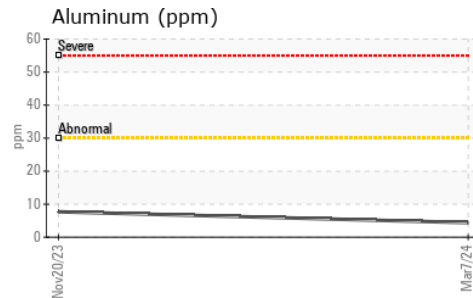
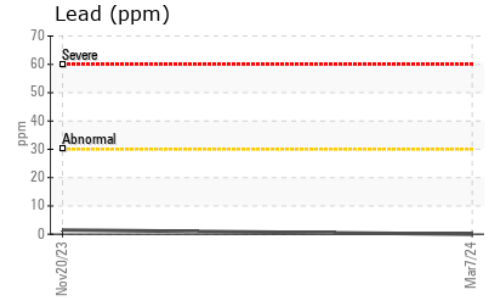
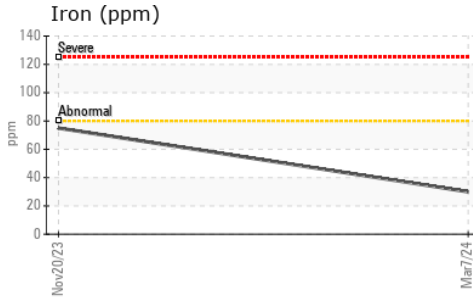
### VISUAL

method	limit/base	current	history1	history2	
Emulsified Water	scalar Visual*	>0.2	NEG	NEG	---
Free Water	scalar Visual*		NEG	NEG	---

### FLUID PROPERTIES

method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	12.00	10.7	13.0	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0102618 **Received** : 25 Mar 2024 **8409 -15th Street NW**  
**Lab Number** : 02624197 **Tested** : 25 Mar 2024 **Edmonton, AB**  
**Unique Number** : 5749316 **Diagnosed** : 25 Mar 2024 - Wes Davis **CA T6P 0B8**  
**Test Package** : MOB 1 **Contact:** Tim Greig **tgreig@gflenv.com**  
**T: (780)231-0521**  
**F:**

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.