



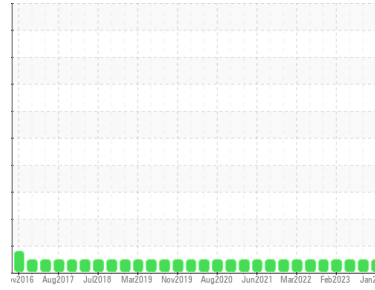
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**4703**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (40 LTR)**



## DIAGNOSIS

### Recommendation

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

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>GFL0097586</b>	GFL0097549	GFL0088928
Sample Date	Client Info		<b>23 Jan 2024</b>	30 Oct 2023	26 Jul 2023
Machine Age	hrs	Client Info	<b>16839</b>	16249	0
Oil Age	hrs	Client Info	<b>590</b>	456	0
Oil Changed	Client Info		<b>Changed</b>	Changed	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	<b>8</b>	10	17
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >15	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >20	<b>2</b>	2	2
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	2	4
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>4</b>	6	4
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>61</b>	71	63
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>993</b>	1139	1040
Calcium	ppm	ASTM D5185(m) 1070	<b>1112</b>	1264	1125
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1044</b>	1177	1060
Zinc	ppm	ASTM D5185(m) 1270	<b>1215</b>	1407	1265
Sulfur	ppm	ASTM D5185(m) 2060	<b>2635</b>	2898	2382
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

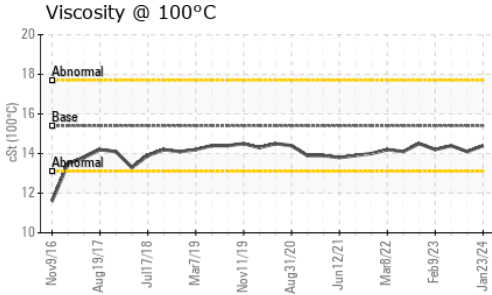
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	4	3
Sodium	ppm	ASTM D5185(m)	<b>4</b>	5	5
Potassium	ppm	ASTM D5185(m) >20	<b>3</b>	2	3

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0.4</b>	0.4	0.7
Nitration	Abs/cm	ASTM D7624* >20	<b>10.5</b>	9.3	10.8
Sulfation	Abs./1mm	ASTM D7415* >30	<b>22.6</b>	21.2	25.3



# OIL ANALYSIS REPORT

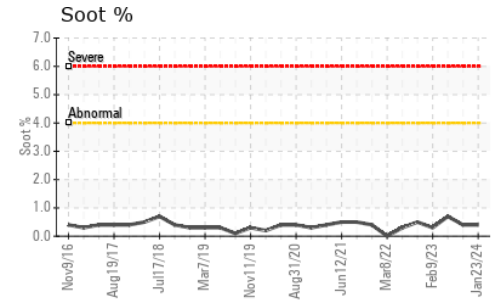
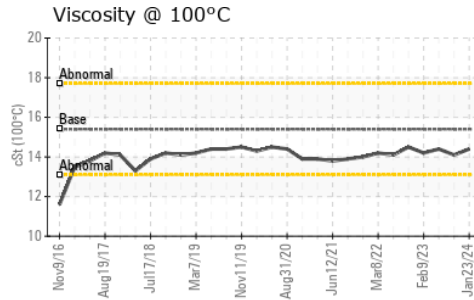
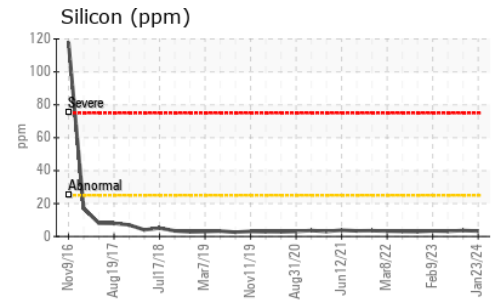
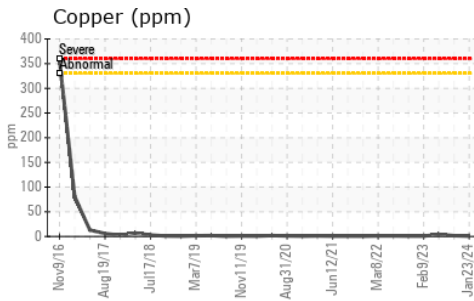
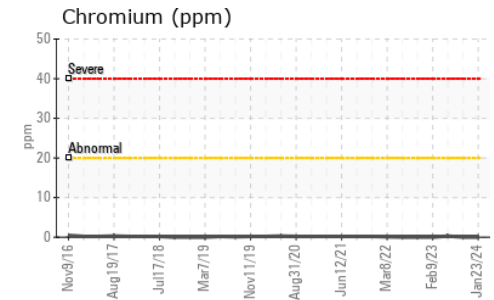
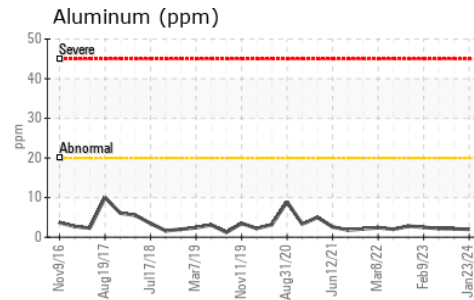
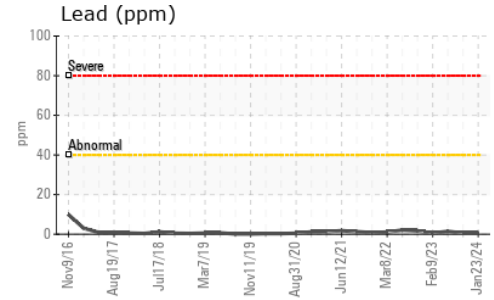
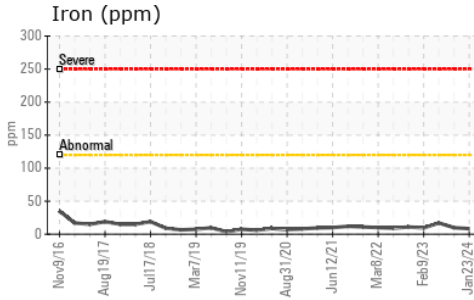


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>19.5</b>	17.8	21.8

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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.4</b>	14.1	14.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0097586 **Received** : 25 Jan 2024  
**Lab Number** : **02611061** **Diagnosed** : 25 Jan 2024  
**Unique Number** : 5720156 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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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.