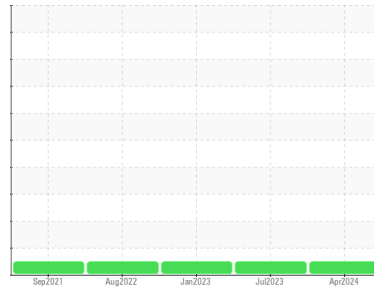




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**201074**

Component

**Diesel Engine**

Fluid

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

## 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>GFL0096807</b>	GFL0084200	GFL0063646
Sample Date	Client Info		<b>17 Apr 2024</b>	24 Jul 2023	30 Jan 2023
Machine Age	hrs	Client Info	<b>20577</b>	4425	4332
Oil Age	hrs	Client Info	<b>0</b>	600	600
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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)	>100	<b>20</b>	27	32
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	3	8
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>3</b>	6	4
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>60</b>	58	58
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>984</b>	968	963
Calcium	ppm	ASTM D5185(m)	1070	<b>1103</b>	1007	1081
Phosphorus	ppm	ASTM D5185(m)	1150	<b>990</b>	1066	1084
Zinc	ppm	ASTM D5185(m)	1270	<b>1216</b>	1160	1163
Sulfur	ppm	ASTM D5185(m)	2060	<b>2469</b>	2641	2722
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>1</b>	3	4
Sodium	ppm	ASTM D5185(m)		<b>2</b>	1	2
Potassium	ppm	ASTM D5185(m)	>20	<b>3</b>	0	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.6</b>	4.4	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.9</b>	17.5	20.0

