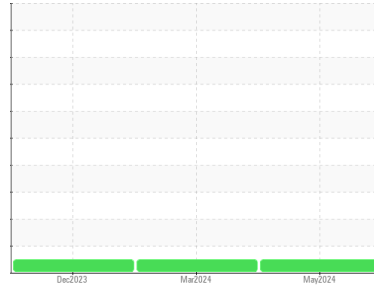




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

**401144**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- 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>GFL0119011</b>	GFL0102674	GFL0101706
Sample Date	Client Info		<b>23 May 2024</b>	20 Mar 2024	26 Dec 2023
Machine Age	hrs	Client Info	<b>391298</b>	16270	15733
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
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)	>80	<b>22</b>	21	22
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>2</b>	2	4
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>2</b>	1	1
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	0
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)	2	<b>2</b>	3	14
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>59</b>	56	55
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	950	<b>966</b>	924	859
Calcium	ppm	ASTM D5185(m)	1050	<b>1042</b>	1005	1012
Phosphorus	ppm	ASTM D5185(m)	995	<b>991</b>	930	966
Zinc	ppm	ASTM D5185(m)	1180	<b>1174</b>	1138	1065
Sulfur	ppm	ASTM D5185(m)	2600	<b>2356</b>	2324	2805
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	3	5
Sodium	ppm	ASTM D5185(m)		<b>6</b>	6	6
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	6

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>9.9</b>	9.5	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.2</b>	20.6	24.5

