

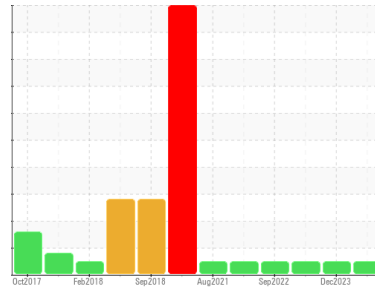


# OIL ANALYSIS REPORT



Machine Id  
**4521**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**

Sample Rating Trend



**NORMAL**



## 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>GFL0112516</b>	GFL0101702	GFL0059377
Sample Date	Client Info		<b>29 May 2024</b>	24 Dec 2023	01 Mar 2023
Machine Age	hrs	Client Info	<b>15764</b>	14788	9999
Oil Age	hrs	Client Info	<b>0</b>	0	475
Oil Changed	Client Info		<b>Changed</b>	N/A	Changed
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>3</b>	5	2
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	4	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	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>4</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>57</b>	57	57
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>922</b>	943	938
Calcium	ppm	ASTM D5185(m)	1050	<b>1025</b>	1029	1065
Phosphorus	ppm	ASTM D5185(m)	995	<b>1004</b>	984	1089
Zinc	ppm	ASTM D5185(m)	1180	<b>1127</b>	1138	1143
Sulfur	ppm	ASTM D5185(m)	2600	<b>2491</b>	2645	2640
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>2</b>	5	5
Sodium	ppm	ASTM D5185(m)		<b>1</b>	2	1
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	5	<1

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>6.2</b>	6.9	5.3
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>18.5</b>	18.5	20.1

