



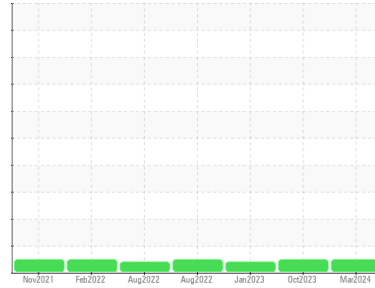
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**411017**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 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>GFL0110648</b>	GFL0064787	GFL0064765
Sample Date	Client Info		<b>23 Mar 2024</b>	16 Oct 2023	16 Jan 2023
Machine Age	hrs	Client Info	<b>7026</b>	6030	4439
Oil Age	hrs	Client Info	<b>600</b>	600	600
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	1
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>17</b>	8	19
Chromium	ppm	ASTM D5185(m)	>20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>15	<b>2</b>	<1	2
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	1	4
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</b>	<1	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)		<b>6</b>	23	14
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>69</b>	85	82
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>627</b>	101	95
Calcium	ppm	ASTM D5185(m)		<b>1435</b>	2047	2117
Phosphorus	ppm	ASTM D5185(m)		<b>874</b>	957	1014
Zinc	ppm	ASTM D5185(m)		<b>1160</b>	1162	1146
Sulfur	ppm	ASTM D5185(m)		<b>2474</b>	2892	2909
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>3</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	3

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.4</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.3</b>	9.7	11.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.9</b>	19.7	24.0

