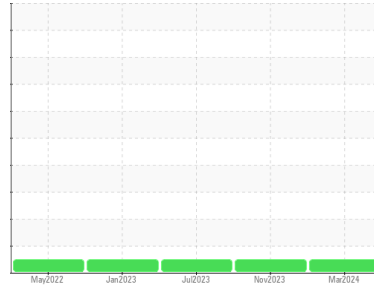




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**810062**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 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>GFL0100603</b>	GFL0100585	GFL0077052
Sample Date	Client Info		<b>02 Mar 2024</b>	11 Nov 2023	01 Jul 2023
Machine Age	hrs	Client Info	<b>52531</b>	3929	3202
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>20</b>	28	51
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185(m)	>30	<b>4</b>	4	4
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	<1	2
Copper	ppm	ASTM D5185(m)	>150	<b>5</b>	8	27
Tin	ppm	ASTM D5185(m)	>5	<b>0</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>2</b>	2	4
Barium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)		<b>61</b>	59	59
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>986</b>	952	952
Calcium	ppm	ASTM D5185(m)		<b>1092</b>	1060	1044
Phosphorus	ppm	ASTM D5185(m)		<b>997</b>	920	994
Zinc	ppm	ASTM D5185(m)		<b>1199</b>	1156	1171
Sulfur	ppm	ASTM D5185(m)		<b>2522</b>	2189	1915
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

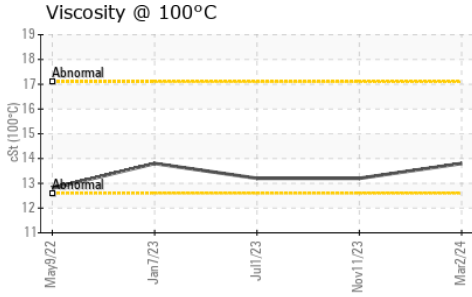
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>8</b>	8	12
Sodium	ppm	ASTM D5185(m)		<b>8</b>	8	3
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	4	5

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>10.3</b>	10.8	13.0
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>21.1</b>	23.5	25.9



# OIL ANALYSIS REPORT



### FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	18.7	22.8	28.5

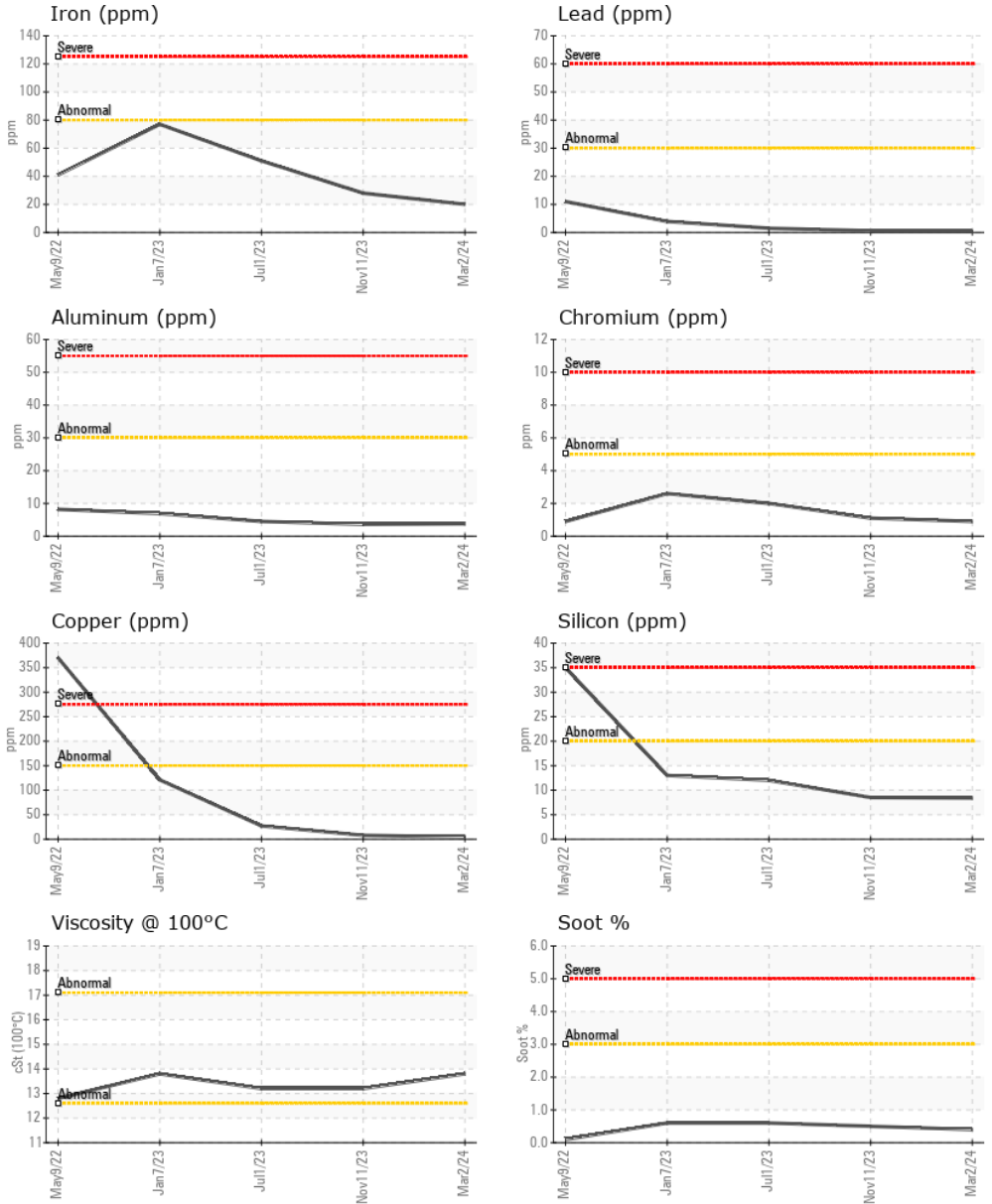
### VISUAL

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

### FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)	13.8	13.2	13.2

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0100603  
**Lab Number** : 02621332  
**Unique Number** : 5746451  
**Test Package** : MOB 1  
**Received** : 12 Mar 2024  
**Tested** : 12 Mar 2024  
**Diagnosed** : 12 Mar 2024 - Wes Davis

**GFL Environmental - 575 - Squamish Hauling**  
 38950 Queens Way,  
 Squamish, BC  
 CA V8B 0K8  
 Contact: Dean Imbeau  
 dimbeau@gflenv.com  
 T: (604)892-5604  
 F: (604)892-5238

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.