



Machine Id  
**1142**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0090756</b>	GFL0090758	GFL0069691
Sample Date		Client Info		<b>01 Feb 2024</b>	29 Nov 2023	13 Jun 2023
Machine Age	hrs	Client Info		<b>22169</b>	21998	21300
Oil Age	hrs	Client Info		<b>600</b>	600	600
Filter Age	hrs	Client Info		<b>600</b>	600	600
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>165	<b>12</b>	39	29
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	3	2
Lead	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	4	2
Copper	ppm	ASTM D5185(m)	>90	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

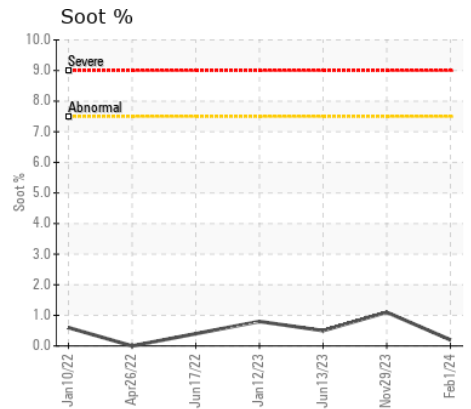
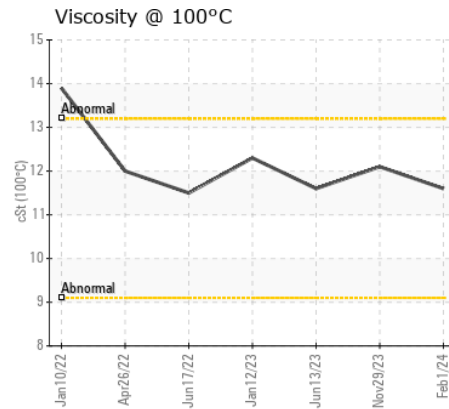
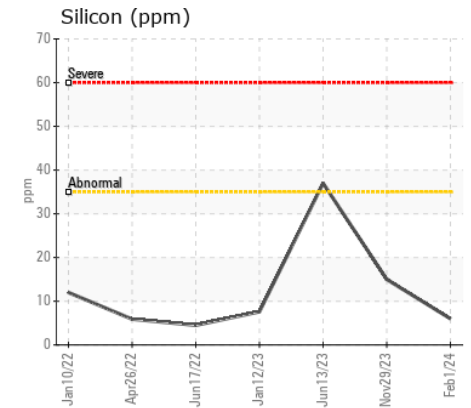
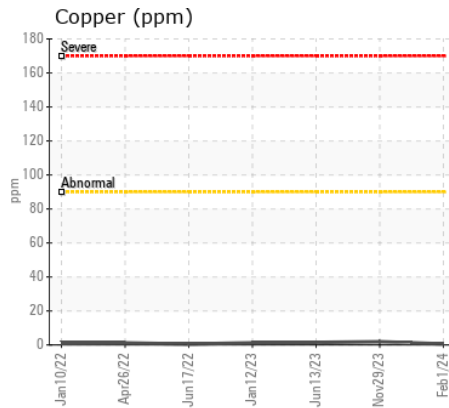
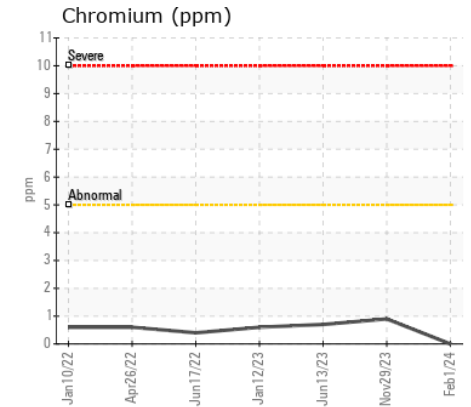
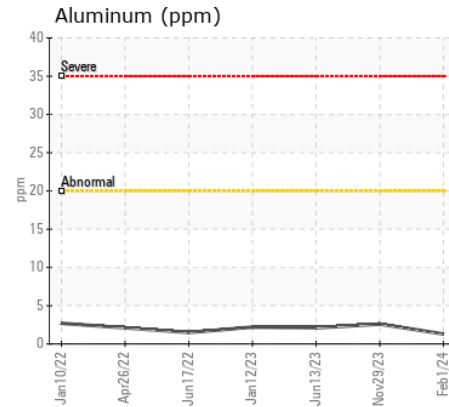
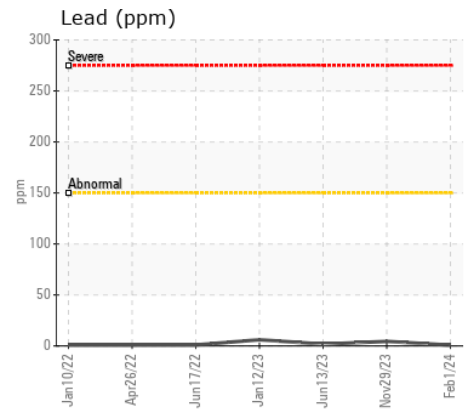
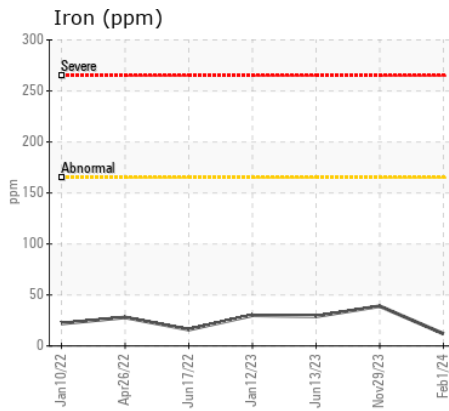
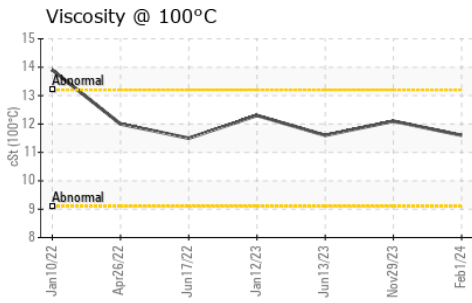
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>35	<b>6</b>	15	▲ 37
Potassium	ppm	ASTM D5185(m)	>20	<b>5</b>	8	1
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
Soot %	%	ASTM D7844*	>7.5	<b>0.2</b>	1.1	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>7.5</b>	11.8	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>19.2</b>	23.7	21.7
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>6</b>	13	6
Boron	ppm	ASTM D5185(m)		<b>17</b>	1	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>47</b>	68	63
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)		<b>913</b>	1086	1053
Calcium	ppm	ASTM D5185(m)		<b>1132</b>	1174	1111
Phosphorus	ppm	ASTM D5185(m)		<b>961</b>	1107	1122
Zinc	ppm	ASTM D5185(m)		<b>1091</b>	1313	1263
Sulfur	ppm	ASTM D5185(m)		<b>2697</b>	2663	2620
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>14.7</b>	19.8	16.5
Visc @ 100°C	cSt	ASTM D7279(m)		<b>11.6</b>	12.1	11.6



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0090756  
**Lab Number** : 02620405  
**Unique Number** : 5737515  
**Test Package** : MOB 1  
**Received** : 07 Mar 2024  
**Tested** : 07 Mar 2024  
**Diagnosed** : 07 Mar 2024 - Wes Davis

**GFL Environmental - 504 - Edmonton**  
 12015 28 Street NE  
 Edmonton, AB  
 CA T6S 1E2  
 Contact: Jerrod Adair  
 jerrodadair@gflenv.com

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.

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