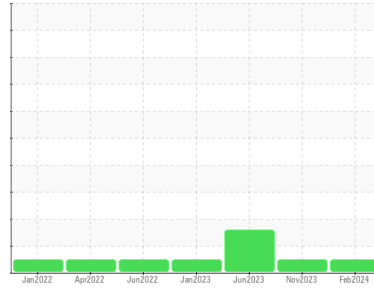




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

1142

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		GFL0090756	GFL0090758	GFL0069691
Sample Date	Client Info		01 Feb 2024	29 Nov 2023	13 Jun 2023
Machine Age	hrs	Client Info	22169	21998	21300
Oil Age	hrs	Client Info	600	600	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>165	12	39	29
Chromium	ppm	ASTM D5185(m)	>5	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	1	3	2
Lead	ppm	ASTM D5185(m)	>150	<1	4	2
Copper	ppm	ASTM D5185(m)	>90	<1	2	2
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)		17	1	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		47	68	63
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		913	1086	1053
Calcium	ppm	ASTM D5185(m)		1132	1174	1111
Phosphorus	ppm	ASTM D5185(m)		961	1107	1122
Zinc	ppm	ASTM D5185(m)		1091	1313	1263
Sulfur	ppm	ASTM D5185(m)		2697	2663	2620
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

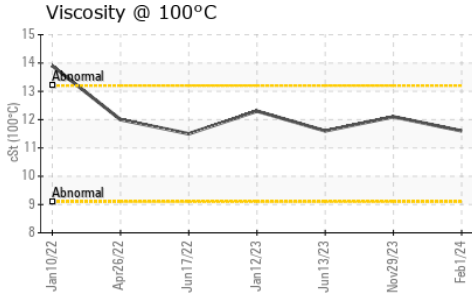
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	6	15	▲ 37
Sodium	ppm	ASTM D5185(m)		6	13	6
Potassium	ppm	ASTM D5185(m)	>20	5	8	1

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>7.5	0.2	1.1	0.5
Nitration	Abs/cm	ASTM D7624*	>20	7.5	11.8	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.2	23.7	21.7



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	14.7	19.8	16.5

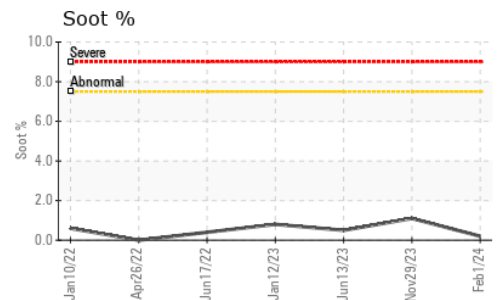
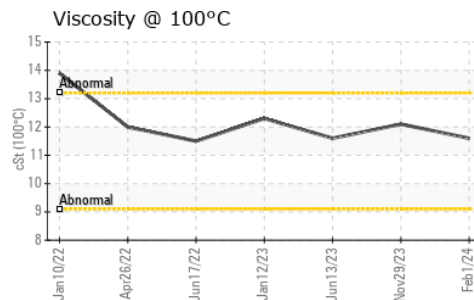
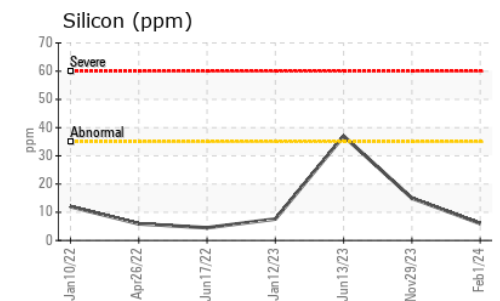
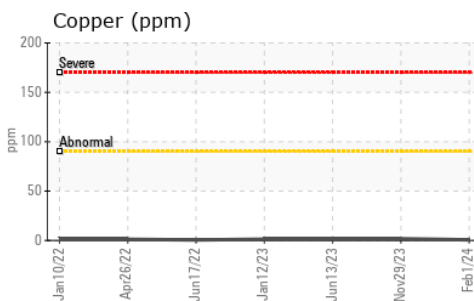
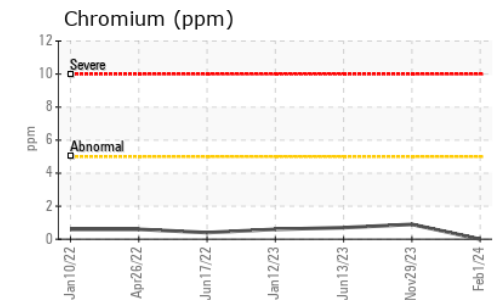
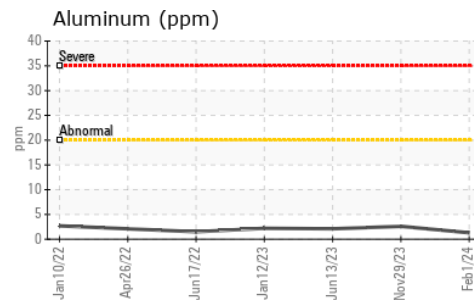
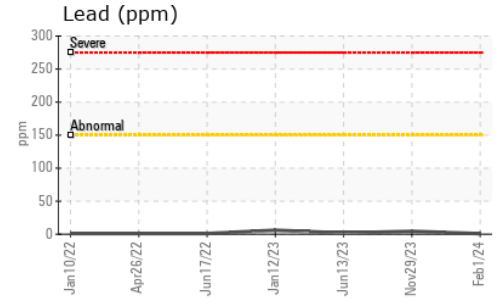
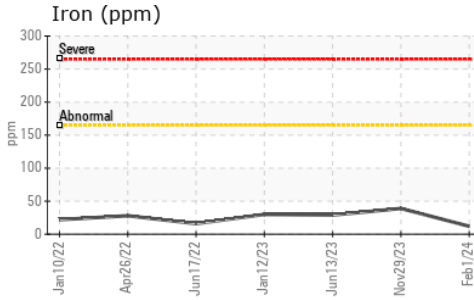
VISUAL

	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)	11.6	12.1	11.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 504 - Edmonton**
Sample No. : GFL0090756 **Received** : 07 Mar 2024 **12015 28 Street NE**
Lab Number : 02620405 **Tested** : 07 Mar 2024 **Edmonton, AB**
Unique Number : 5737515 **Diagnosed** : 07 Mar 2024 - Wes Davis **CA T6S 1E2**
Test Package : MOB 1 **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.