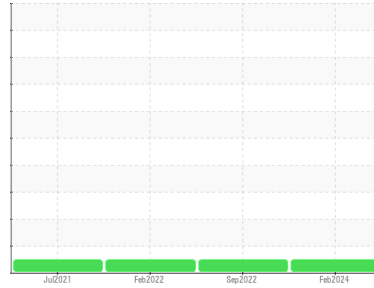




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
201018

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 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		GFL0108234	GFL0051252	GFL0024250
Sample Date	Client Info		23 Feb 2024	27 Sep 2022	10 Feb 2022
Machine Age	hrs	Client Info	13562	12526	12710
Oil Age	hrs	Client Info	600	0	400
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<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)	>110	15	11	35
Chromium	ppm	ASTM D5185(m)	>4	<1	0	2
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>2	<1	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	2	2	2
Lead	ppm	ASTM D5185(m)	>45	0	1	1
Copper	ppm	ASTM D5185(m)	>85	1	1	2
Tin	ppm	ASTM D5185(m)	>4	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)	2	2	8	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	60	62	60
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	986	1006	1060
Calcium	ppm	ASTM D5185(m)	1050	1083	1174	1110
Phosphorus	ppm	ASTM D5185(m)	995	1057	1060	1071
Zinc	ppm	ASTM D5185(m)	1180	1203	1242	1281
Sulfur	ppm	ASTM D5185(m)	2600	2680	2341	2508
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

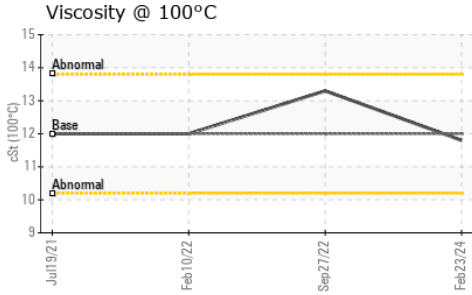
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	3	3	6
Sodium	ppm	ASTM D5185(m)		<1	6	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.1	0	0.3
Nitration	Abs/cm	ASTM D7624*	>20	9.1	10.6	11.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.9	24.5	22.4



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	18.1	23.9	20.7

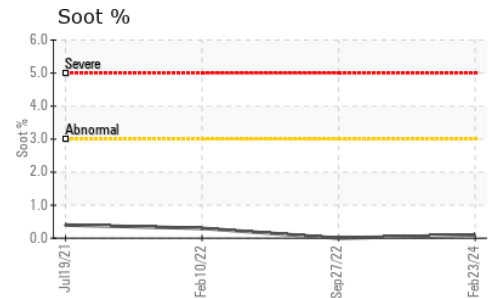
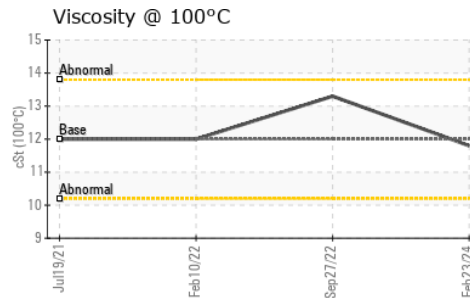
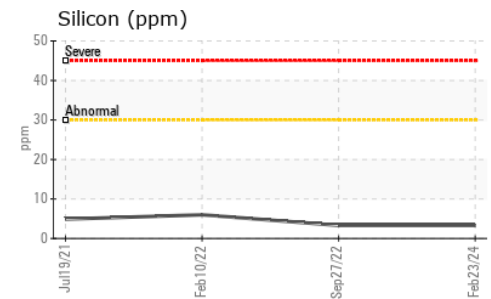
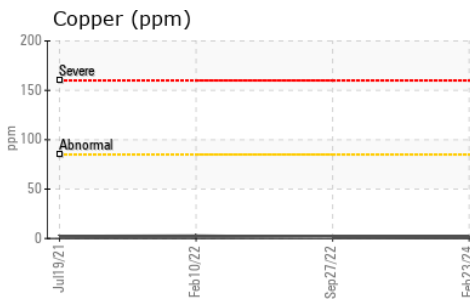
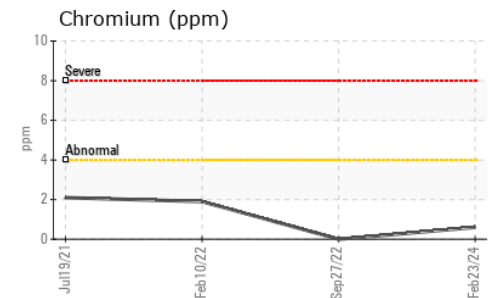
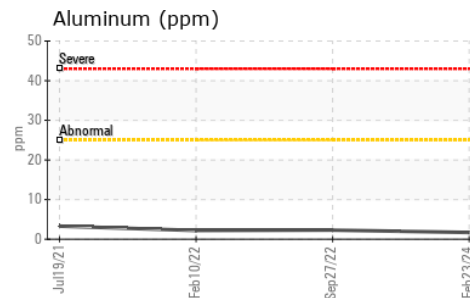
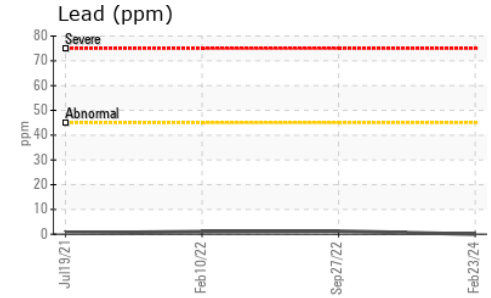
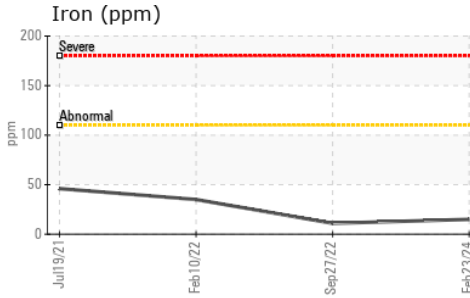
VISUAL

	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)	12.00	11.8	13.3	12.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108234
Lab Number : **02621900**
Unique Number : 5747019
Test Package : MOB 1

GFL Environmental - 355 - Saskatoon
 100 Cory Road
 Saskatoon, SK
 CA S7K 3J7
 Contact: Ryan Polichuk
 rpolichuk@gflenv.com
 T: (306)244-9500
 F:

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.