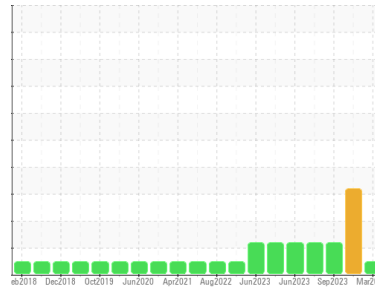




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
801032
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (22 LTR)

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		GFL0107137	GFL0111726	GFL0094216
Sample Date	Client Info		13 Mar 2024	05 Mar 2024	07 Sep 2023
Machine Age	hrs	Client Info	120889	6014	120889
Oil Age	hrs	Client Info	600	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	▲ 4.9	▲ 7
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	0.0	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	9	45	15
Chromium	ppm	ASTM D5185(m)	>5	<1	1	<1
Nickel	ppm	ASTM D5185(m)	>2	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>30	2	6	2
Lead	ppm	ASTM D5185(m)	>30	2	7	0
Copper	ppm	ASTM D5185(m)	>150	73	● 301	1
Tin	ppm	ASTM D5185(m)	>5	0	<1	0
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)	0	11	26	10
Barium	ppm	ASTM D5185(m)	0	2	14	0
Molybdenum	ppm	ASTM D5185(m)	60	58	78	56
Manganese	ppm	ASTM D5185(m)	0	<1	8	<1
Magnesium	ppm	ASTM D5185(m)	1010	777	32	846
Calcium	ppm	ASTM D5185(m)	1070	1185	2081	958
Phosphorus	ppm	ASTM D5185(m)	1150	976	924	949
Zinc	ppm	ASTM D5185(m)	1270	1122	1083	1096
Sulfur	ppm	ASTM D5185(m)	2060	2685	2616	2268
Lithium	ppm	ASTM D5185(m)		<1	2	<1

CONTAMINANTS

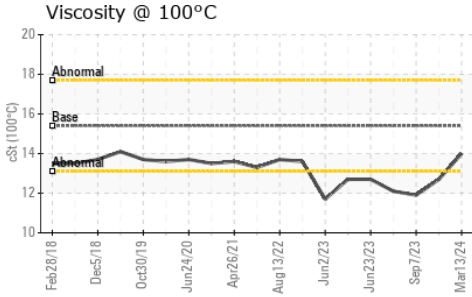
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	5	▲ 21	5
Sodium	ppm	ASTM D5185(m)		3	4	6
Potassium	ppm	ASTM D5185(m)	>20	2	4	2

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0	0.3	0.2
Nitration	Abs/cm	ASTM D7624*	>20	5.8	11.7	9.3
Sulfation	Abs./1mm	ASTM D7415*	>30	18.4	21.8	19.5



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	13.4	18.3	15.8

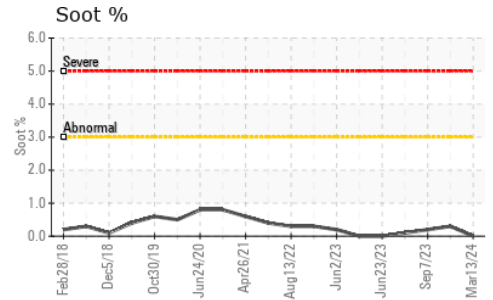
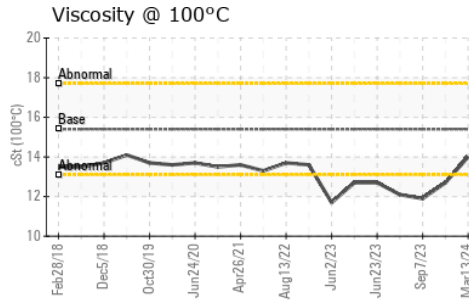
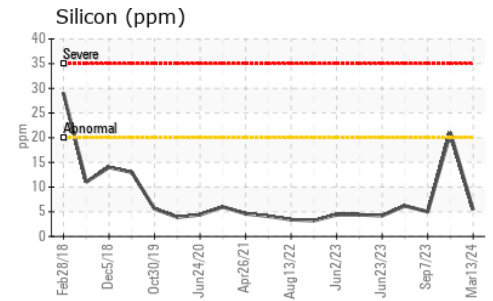
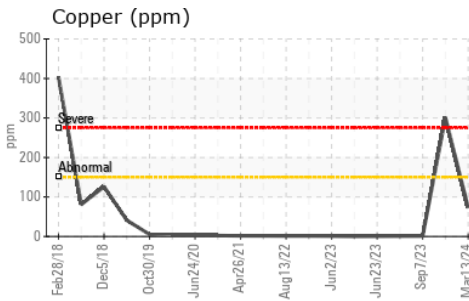
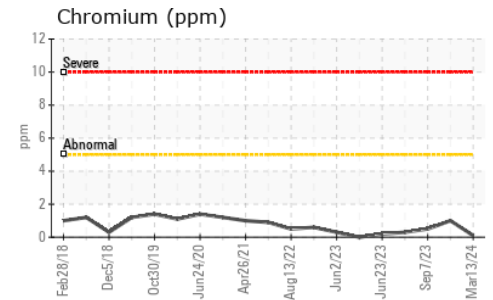
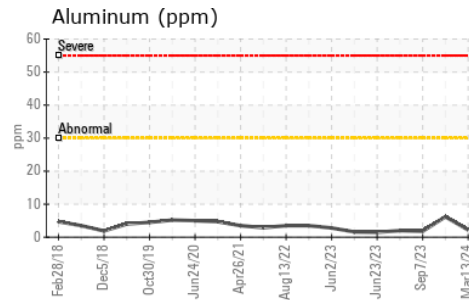
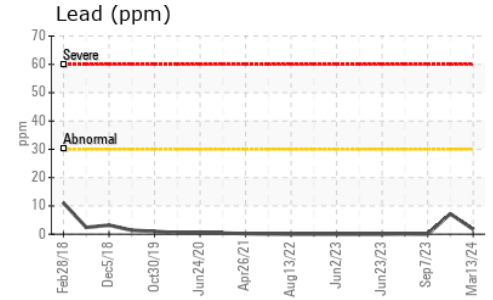
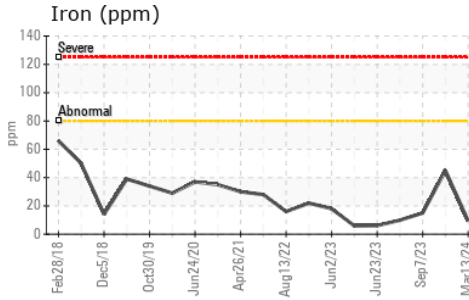
VISUAL

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)	15.4	14.0	12.7	▲ 11.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107137
Lab Number : 02622232
Unique Number : 5747351
Test Package : MOB 1
Received : 15 Mar 2024
Tested : 15 Mar 2024
Diagnosed : 15 Mar 2024 - Wes Davis

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@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.

F: (905)713-2445