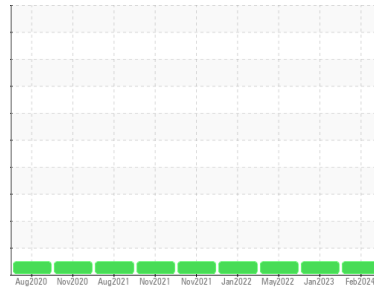




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
501022

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		GFL0108244	GFL0047691	GFL0047704
Sample Date	Client Info		06 Feb 2024	31 Jan 2023	09 May 2022
Machine Age	hrs	Client Info	22549	20718	18660
Oil Age	hrs	Client Info	500	600	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>2.0	<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)	>100	18	16
Chromium	ppm	ASTM D5185(m)	>20	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0
Titanium	ppm	ASTM D5185(m)		0	0
Silver	ppm	ASTM D5185(m)	>3	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	2
Lead	ppm	ASTM D5185(m)	>40	2	3
Copper	ppm	ASTM D5185(m)	>330	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0
Vanadium	ppm	ASTM D5185(m)		0	0
Beryllium	ppm	ASTM D5185(m)		0	0
Cadmium	ppm	ASTM D5185(m)		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	2	<1	1
Barium	ppm	ASTM D5185(m)	0	0	0
Molybdenum	ppm	ASTM D5185(m)	50	62	63
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m)	950	1012	1010
Calcium	ppm	ASTM D5185(m)	1050	1100	1086
Phosphorus	ppm	ASTM D5185(m)	995	1068	1029
Zinc	ppm	ASTM D5185(m)	1180	1233	1238
Sulfur	ppm	ASTM D5185(m)	2600	2739	2472
Lithium	ppm	ASTM D5185(m)		<1	<1

CONTAMINANTS

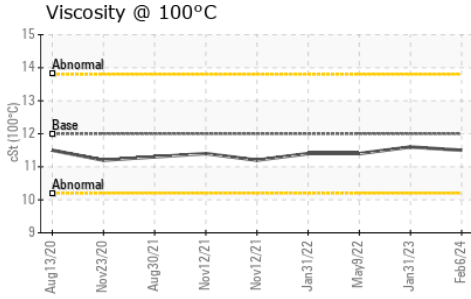
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4	3
Sodium	ppm	ASTM D5185(m)		4	2
Potassium	ppm	ASTM D5185(m)	>20	<1	0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.6	0.6
Nitration	Abs/cm	ASTM D7624*	>20	10.0	11.3
Sulfation	Abs./1mm	ASTM D7415*	>30	21.1	22.0



OIL ANALYSIS REPORT



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs./1mm ASTM D7414*	>25	17.5	18.8	16.6

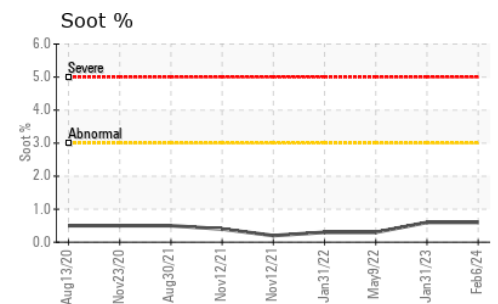
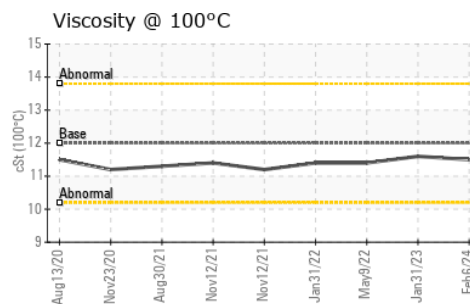
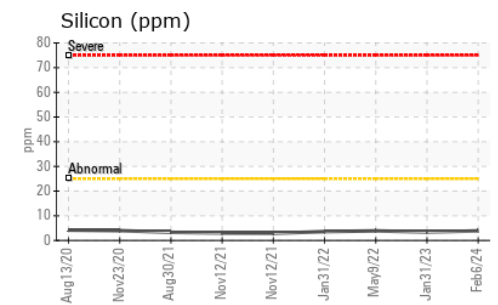
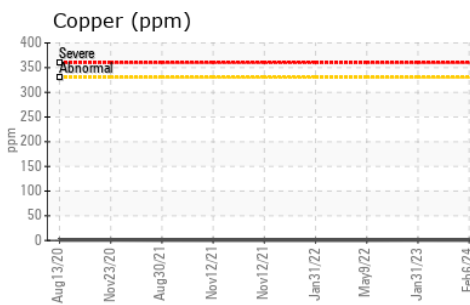
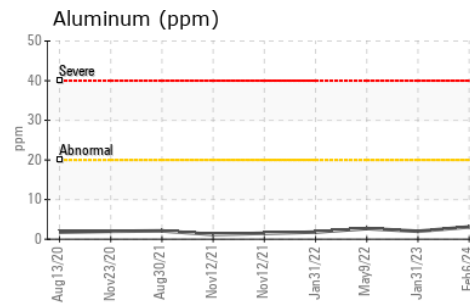
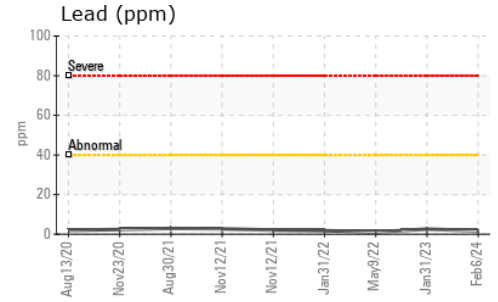
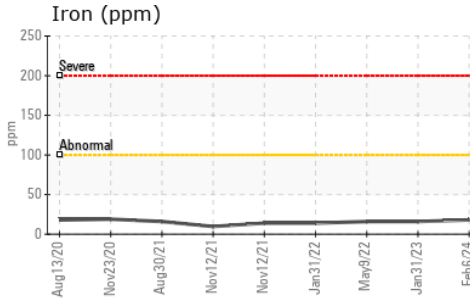
VISUAL

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	11.5	11.6	11.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108244
Lab Number : 02616181
Unique Number : 5733291
Test Package : MOB 1
Received : 16 Feb 2024
Tested : 16 Feb 2024
Diagnosed : 16 Feb 2024 - Wes Davis

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.