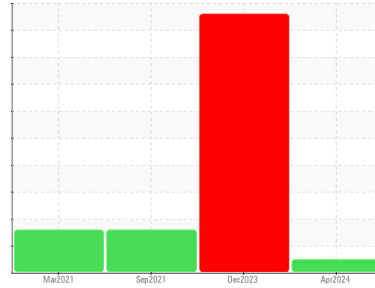




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

500528

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0108218	GFL0047666	GFL0024285
Sample Date	Client Info		15 Apr 2024	09 Dec 2023	29 Sep 2021
Machine Age	hrs	Client Info	9708	0	6702
Oil Age	hrs	Client Info	500	0	492
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	SEVERE	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	▲ 1.5	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>165	36	75	18
Chromium	ppm	ASTM D5185(m)	>5	1	2	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	3	4
Lead	ppm	ASTM D5185(m)	>150	<1	2	1
Copper	ppm	ASTM D5185(m)	>90	2	31	3
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
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	23	2	270
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	50	51	92	105
Manganese	ppm	ASTM D5185(m)	0	<1	<1	2
Magnesium	ppm	ASTM D5185(m)	950	836	955	674
Calcium	ppm	ASTM D5185(m)	1050	1185	1016	1403
Phosphorus	ppm	ASTM D5185(m)	995	736	1025	731
Zinc	ppm	ASTM D5185(m)	1180	875	1187	838
Sulfur	ppm	ASTM D5185(m)	2600	1874	2631	2047
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

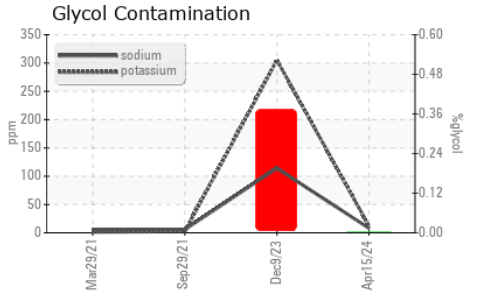
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>35	5	15	▲ 29
Sodium	ppm	ASTM D5185(m)		8	● 114	6
Potassium	ppm	ASTM D5185(m)	>20	12	▲ 305	2
Glycol	%	ASTM D7922*		0.0	▲ 0.372	NEG

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>7.5	0.3	0.9	0.1
Nitration	Abs/cm	ASTM D7624*	>20	10.6	13.1	6.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	22.6	23.5



OIL ANALYSIS REPORT

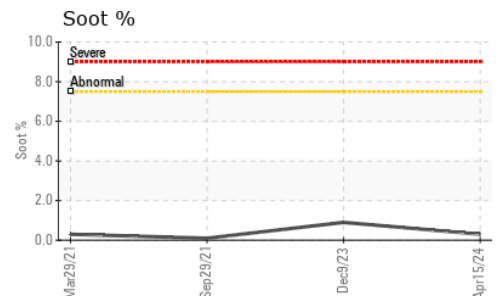
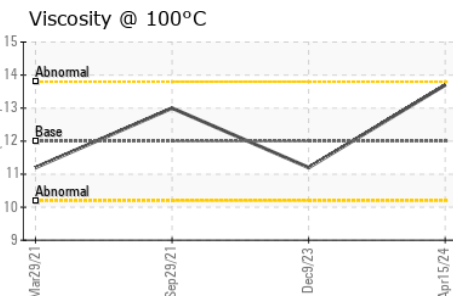
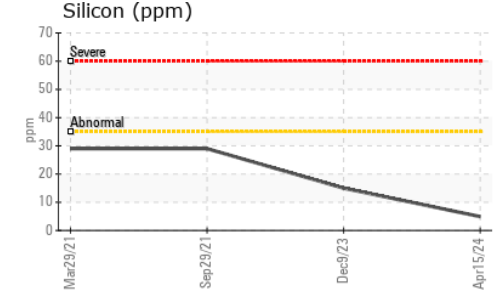
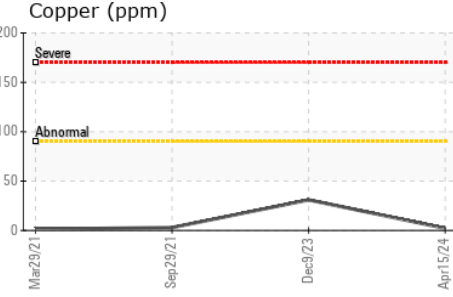
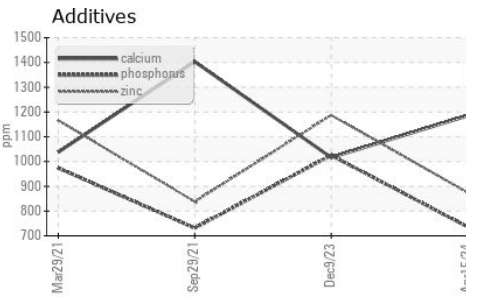
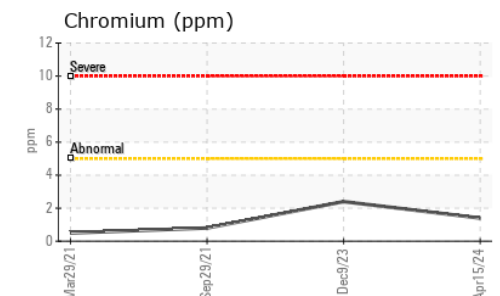
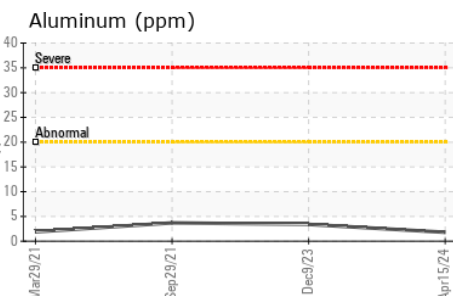
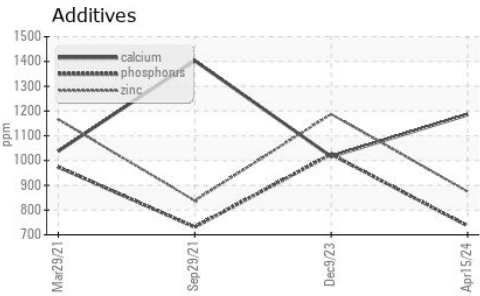
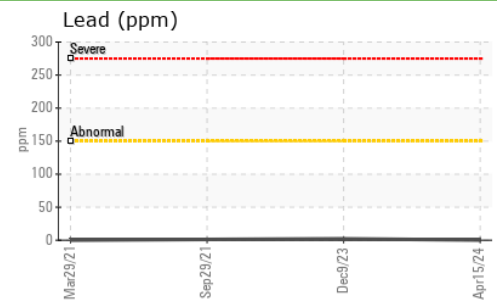
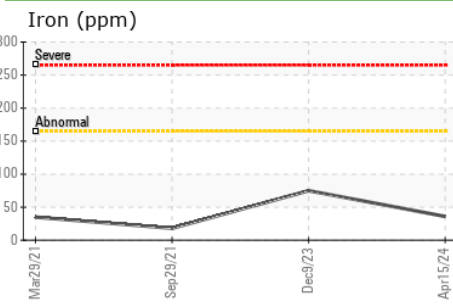
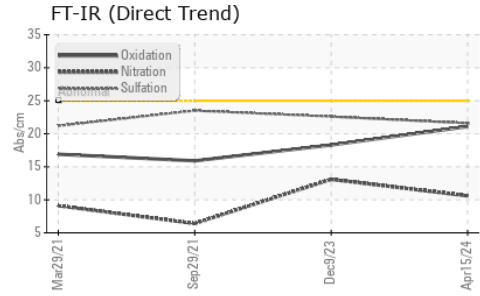


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	21.1	18.3	15.9

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	13.7	▲ 11.2	13.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108218
Lab Number : 02631096
Unique Number : 5772249
Test Package : MOB 1
Received : 24 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Kevin Marson

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.