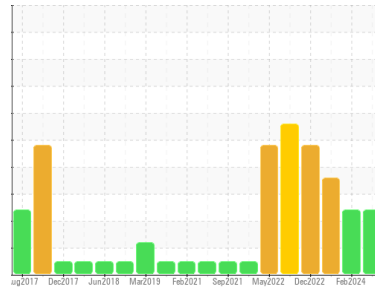




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

801069

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0112487	GFL0102666	GFL0077955
Sample Date	Client Info	25 Apr 2024	29 Feb 2024	16 Apr 2023
Machine Age	hrs	0	12743	11649
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		SEVERE	SEVERE	ATTENTION

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >100	52	80	22
Chromium	ppm	ASTM D5185(m) >20	2	4	<1
Nickel	ppm	ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	8	12	2
Lead	ppm	ASTM D5185(m) >40	8	9	<1
Copper	ppm	ASTM D5185(m) >330	158	65	4
Tin	ppm	ASTM D5185(m) >15	<1	2	<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	2	2
Barium	ppm	ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm	ASTM D5185(m) 50	53	54	62
Manganese	ppm	ASTM D5185(m) 0	1	2	<1
Magnesium	ppm	ASTM D5185(m) 950	861	826	952
Calcium	ppm	ASTM D5185(m) 1050	952	952	1079
Phosphorus	ppm	ASTM D5185(m) 995	888	812	1070
Zinc	ppm	ASTM D5185(m) 1180	1065	999	1155
Sulfur	ppm	ASTM D5185(m) 2600	1964	2104	2697
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

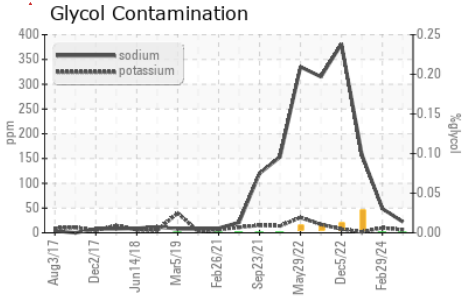
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >25	8	15	21
Sodium	ppm	ASTM D5185(m)	22	49	158
Potassium	ppm	ASTM D5185(m) >20	6	10	2
Fuel	%	ASTM D7593* >5	▲ 9	▲ 11.8	<1.0
Glycol	%	ASTM D7922*	0.0	0.0	▲ 0.028

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844* >3	0.5	0.6	0
Nitration	Abs/cm	ASTM D7624* >20	10.7	12.0	5.1
Sulfation	Abs./1mm	ASTM D7415* >30	21.6	21.7	18.2



OIL ANALYSIS REPORT

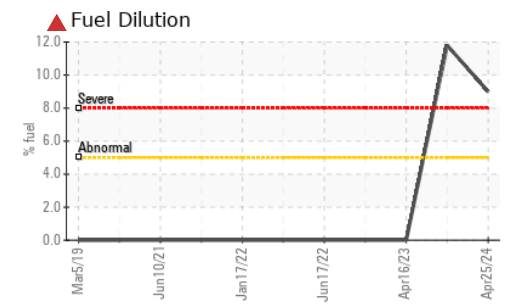
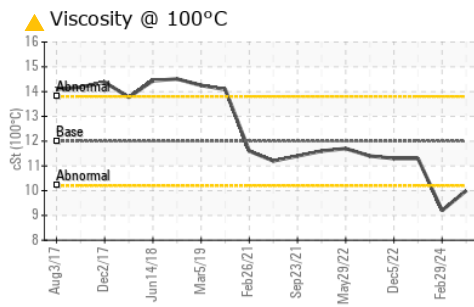
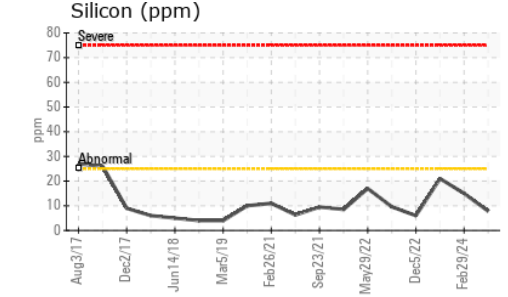
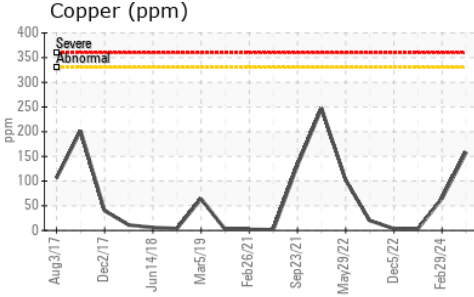
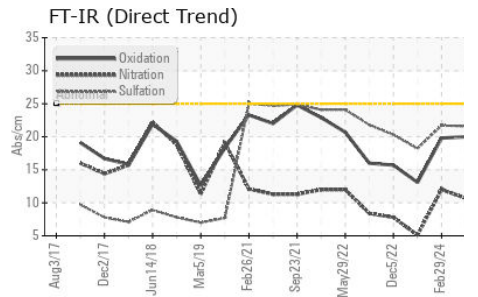
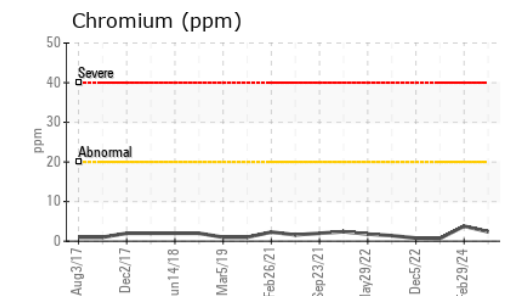
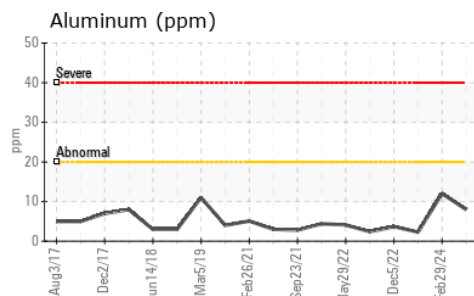
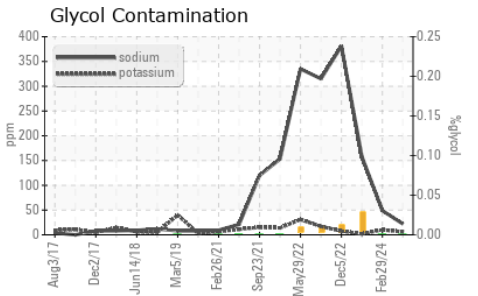
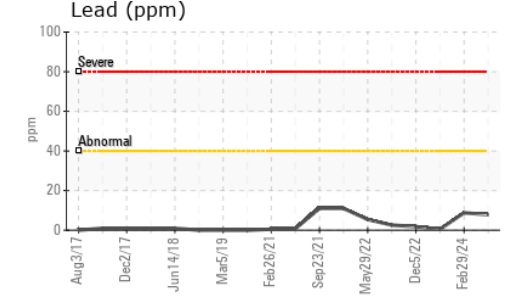
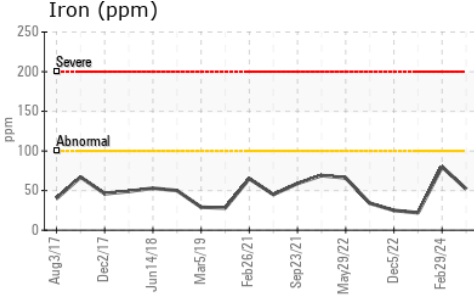
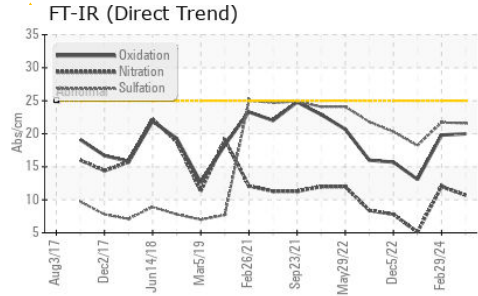


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	20.0	19.8	13.1

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	▲ 10.0	▲ 9.2	11.3

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112487
Lab Number : 02631564
Unique Number : 5772717
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

GFL Environmental - 554 - Edmonton SW
 8409 -15th Street NW
 Edmonton, AB
 CA T6P 0B8

*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.*

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 T: (780)231-0521
 F: