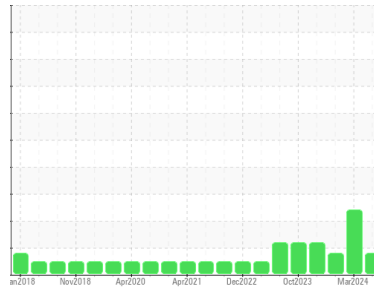




OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id
801047
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (19 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected 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		GFL0117872	GFL0111727	WC0875082
Sample Date	Client Info		02 May 2024	11 Mar 2024	22 Nov 2023
Machine Age	kms	Client Info	674167	10256	9850
Oil Age	kms	Client Info	0	0	0
Oil Changed	Client Info		N/A	Changed	Not Chngd
Sample Status			MARGINAL	SEVERE	MARGINAL

CONTAMINATION

	method	limit/base	current	history1	history2
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)	>80	13	21	4
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	0
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	<1
Aluminum	ppm	ASTM D5185(m)	>30	2	4	2
Lead	ppm	ASTM D5185(m)	>30	0	0	0
Copper	ppm	ASTM D5185(m)	>150	2	1	<1
Tin	ppm	ASTM D5185(m)	>5	0	0	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	8	18	37
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	55	58
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	890	795	871
Calcium	ppm	ASTM D5185(m)	1070	1012	948	1024
Phosphorus	ppm	ASTM D5185(m)	1150	954	845	957
Zinc	ppm	ASTM D5185(m)	1270	1136	1029	1143
Sulfur	ppm	ASTM D5185(m)	2060	2426	2315	2538
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

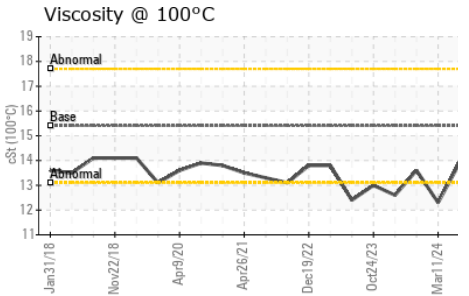
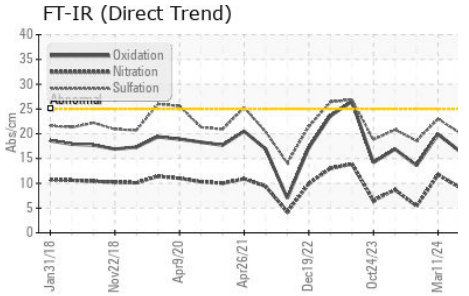
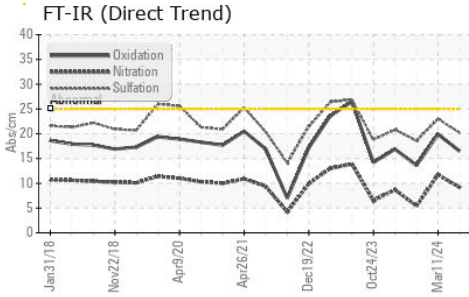
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	3	6	3
Sodium	ppm	ASTM D5185(m)		5	6	3
Potassium	ppm	ASTM D5185(m)	>20	2	4	1
Fuel	%	ASTM D7593*	>5	▲ 2.3	▲ 8.5	▲ 3.4

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.3	0.6	0
Nitration	Abs/cm	ASTM D7624*	>20	9.2	11.7	5.4
Sulfation	Abs./1mm	ASTM D7415*	>30	20.2	23.0	18.6



OIL ANALYSIS REPORT

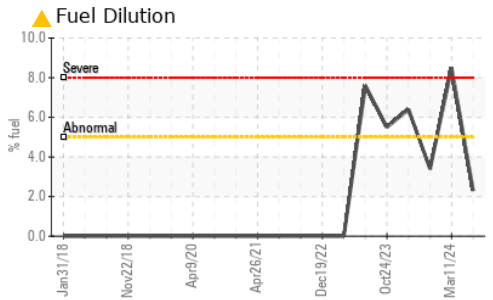
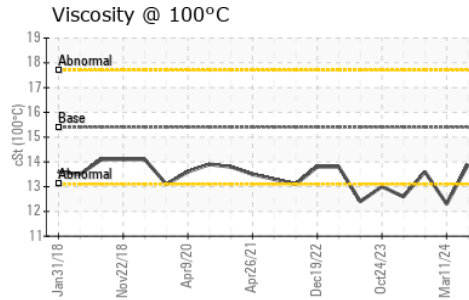
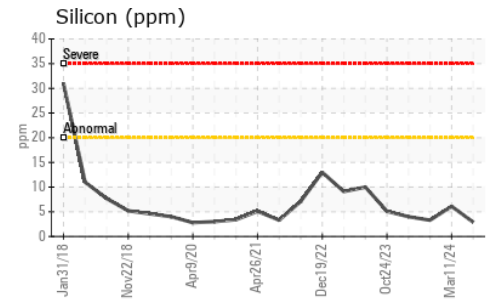
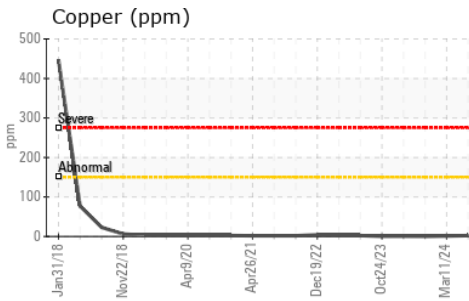
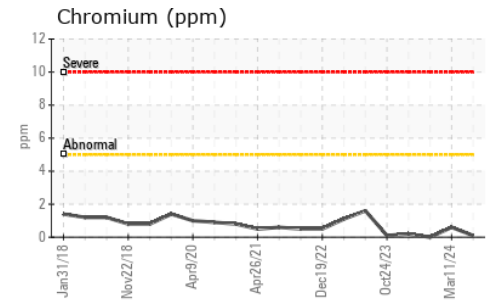
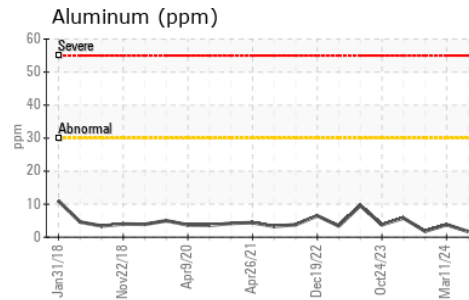
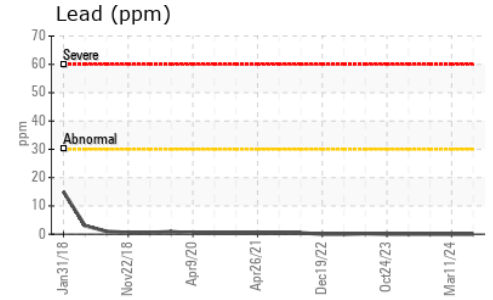
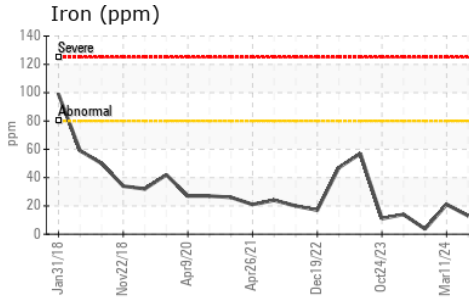


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	16.5	19.9	13.6

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)	15.4	13.9	▲ 12.3	13.6

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117872
Lab Number : **02633412**
Unique Number : 5774565
Test Package : MOB 1 (Additional Tests: PercentFuel)

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6

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.

Contact: Mike Havens
 MHavens@gflenv.com

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