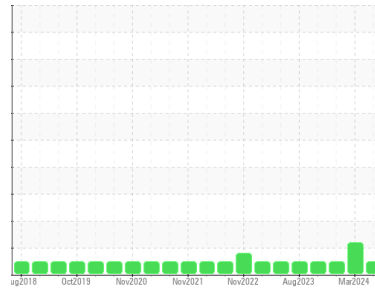




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

701040

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (20 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

Fuel content negligible. 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		GFL0123452	LH	GFL
Sample Date	Client Info		15 Jul 2024	25 Mar 2024	30 Dec 2023
Machine Age	hrs	Client Info	10010	10010	0
Oil Age	hrs	Client Info	10010	0	0
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	ABNORMAL	NORMAL

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) >100	6	13	12
Chromium	ppm	ASTM D5185(m) >20	<1	0	<1
Nickel	ppm	ASTM D5185(m) >4	0	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	1	2	2
Lead	ppm	ASTM D5185(m) >40	0	0	<1
Copper	ppm	ASTM D5185(m) >330	<1	1	1
Tin	ppm	ASTM D5185(m) >15	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	3	1	2
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 60	56	55	56
Manganese	ppm	ASTM D5185(m) 0	0	0	0
Magnesium	ppm	ASTM D5185(m) 1010	910	894	903
Calcium	ppm	ASTM D5185(m) 1070	1014	945	978
Phosphorus	ppm	ASTM D5185(m) 1150	978	916	948
Zinc	ppm	ASTM D5185(m) 1270	1167	1109	1127
Sulfur	ppm	ASTM D5185(m) 2060	2496	2254	2491
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

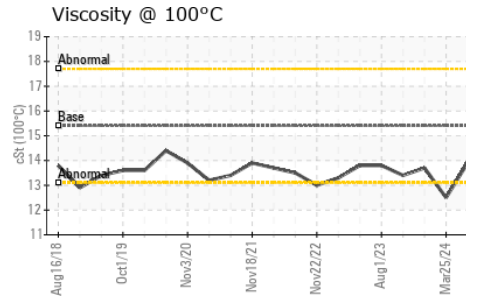
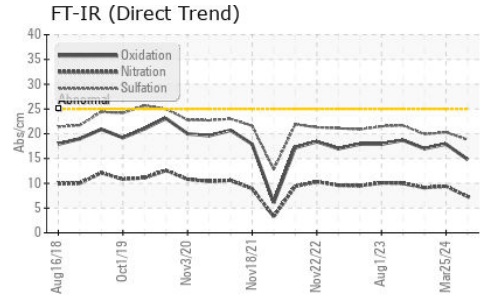
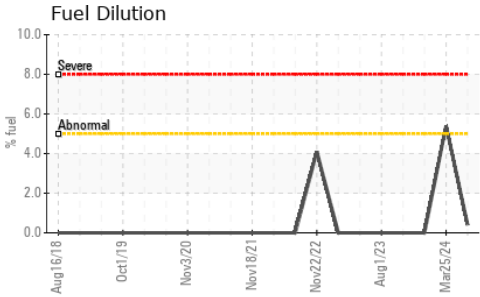
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	2	1	2
Sodium	ppm	ASTM D5185(m)	2	1	1
Potassium	ppm	ASTM D5185(m) >20	1	2	2
Fuel	%	ASTM D7593* >5	0.4	▲ 5.4	<1.0

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.2	0.4	0.3
Nitration	Abs/cm	ASTM D7624* >20	7.3	9.4	9.1
Sulfation	Abs/.1mm	ASTM D7415* >30	18.8	20.3	19.9



OIL ANALYSIS REPORT

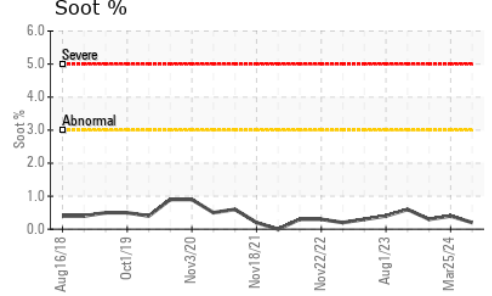
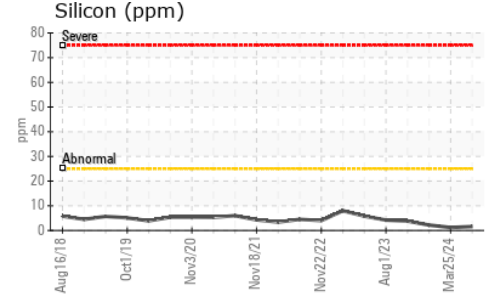
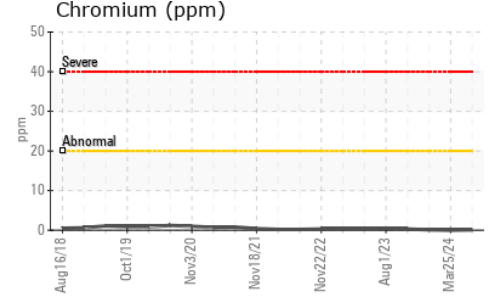
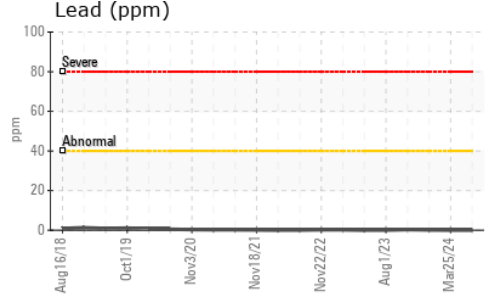
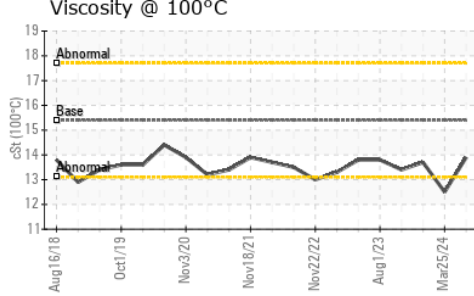
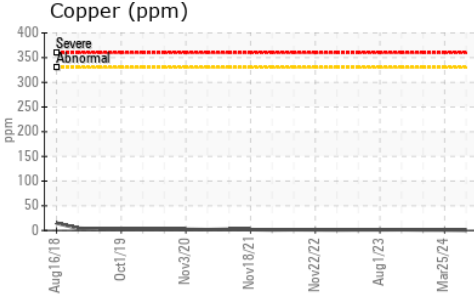
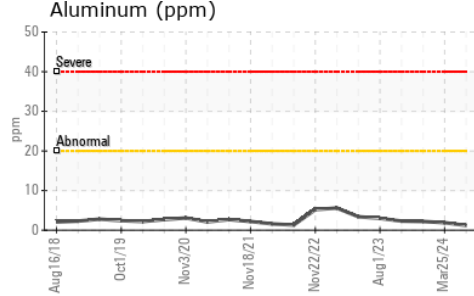
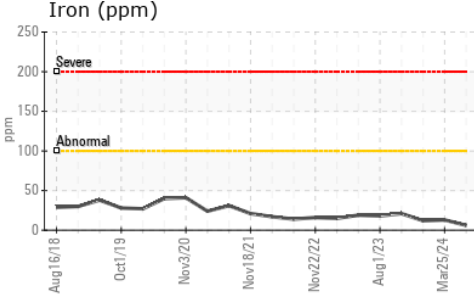


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.8	17.9	17.0

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	▲ 12.5	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0123452 **Received** : 17 Jul 2024
Lab Number : **02648368** **Tested** : 18 Jul 2024
Unique Number : 5813920 **Diagnosed** : 18 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: PercentFuel)

GFL Environmental - 221 - Windsor
 905 Tecumseh Road W
 Windsor, ON
 CA N8W 4J5
 Contact: Pamela-Jean Butler
 pamelajeau.butler@gflenv.com
 T: (519)948-8126
 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.