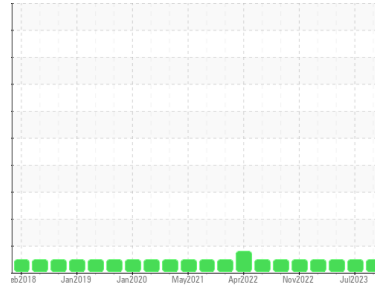




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
701045

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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		GFL0085674	GFL0077303	GFL0070431
Sample Date	Client Info		18 Oct 2023	19 Jul 2023	21 Apr 2023
Machine Age	hrs	Client Info	500	500	500
Oil Age	hrs	Client Info	500	500	500
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	14	12	8
Chromium	ppm	ASTM D5185(m) >20	<1	<1	0
Nickel	ppm	ASTM D5185(m) >4	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >3	<1	<1	0
Aluminum	ppm	ASTM D5185(m) >20	2	1	1
Lead	ppm	ASTM D5185(m) >40	<1	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	2	2	2
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 60	59	56	58
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	948	928	950
Calcium	ppm	ASTM D5185(m) 1070	1030	1004	1099
Phosphorus	ppm	ASTM D5185(m) 1150	976	996	1069
Zinc	ppm	ASTM D5185(m) 1270	1176	1145	1185
Sulfur	ppm	ASTM D5185(m) 2060	2340	2330	2579
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

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

INFRA-RED

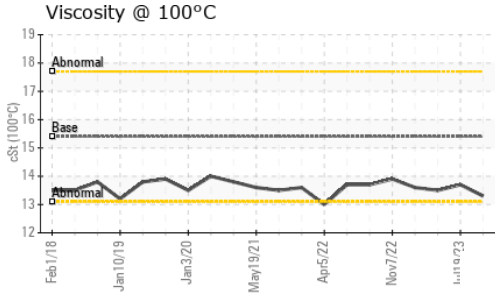
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.4	0.4	0.2
Nitration	Abs/cm	ASTM D7624* >20	10.1	10.0	8.3
Sulfation	Abs/.1mm	ASTM D7415* >30	21.1	21.2	19.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	17.8	18.0	16.0



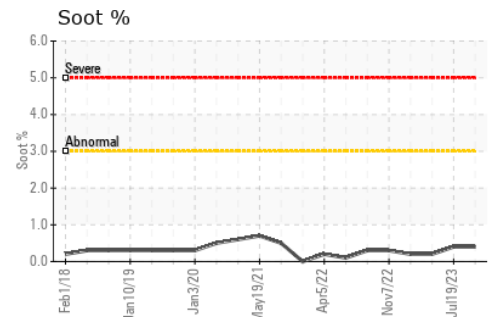
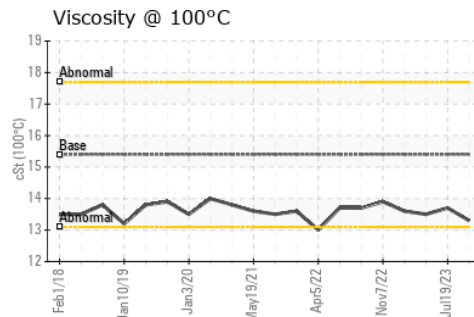
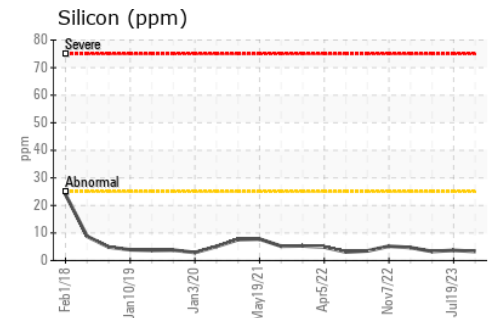
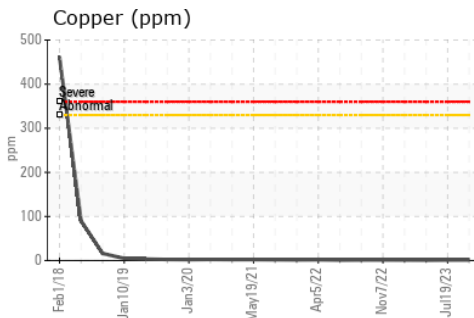
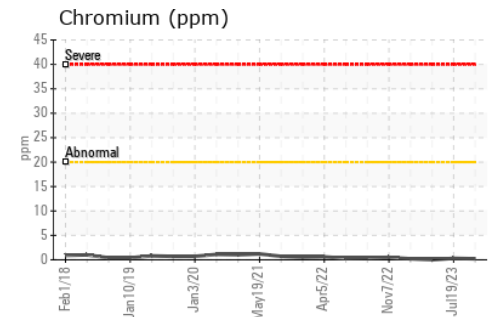
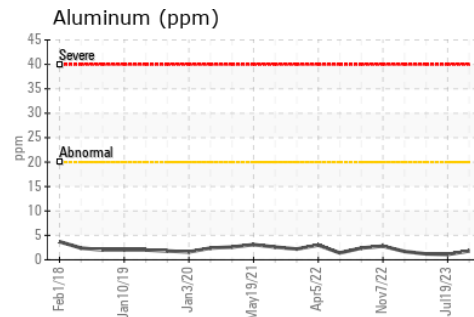
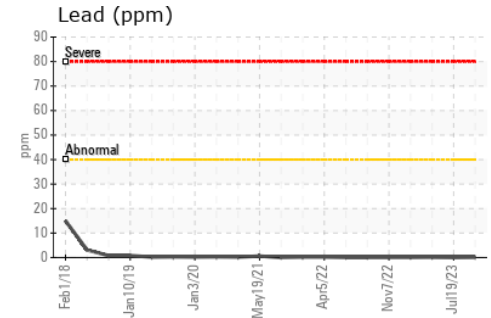
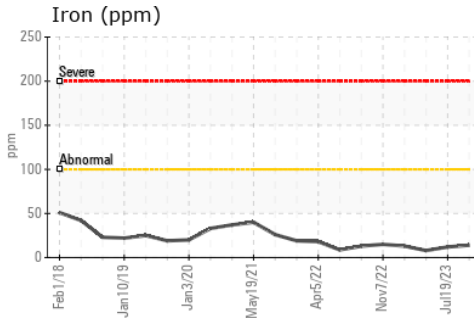
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.3	13.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**
Sample No. : GFL0085674 **Received** : 23 Oct 2023 905 Tecumseh Road W
Lab Number : 02590863 **Diagnosed** : 23 Oct 2023 Windsor, ON
Unique Number : 5667942 **Diagnostician** : Kevin Marson CA N8W 4J5
Test Package : MOB 1 **Contact:** Rhys Marotte
rmarotte@gflenv.com

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.