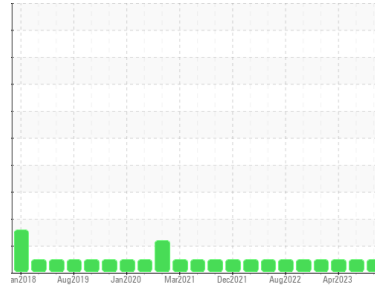




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
701043

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		GFL0085677	GFL0077317	GFL0070432
Sample Date	Client Info		10 Oct 2023	11 Jul 2023	25 Apr 2023
Machine Age	hrs	Client Info	602	602	602
Oil Age	hrs	Client Info	602	602	602
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	20	14	15
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >4	<1	0	<1
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m) >3	<1	0	0
Aluminum	ppm	ASTM D5185(m) >20	2	2	1
Lead	ppm	ASTM D5185(m) >40	0	<1	0
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	<1
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	61	57	57
Manganese	ppm	ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	962	952	940
Calcium	ppm	ASTM D5185(m) 1070	1044	1013	1095
Phosphorus	ppm	ASTM D5185(m) 1150	965	1012	1033
Zinc	ppm	ASTM D5185(m) 1270	1199	1181	1179
Sulfur	ppm	ASTM D5185(m) 2060	2300	2341	2460
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

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

INFRA-RED

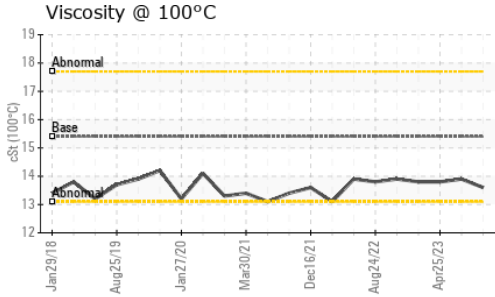
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	0.4	0.3	0.3
Nitration	Abs/cm	ASTM D7624* >20	10.1	10.0	9.7
Sulfation	Abs/.1mm	ASTM D7415* >30	22.1	21.2	20.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	18.8	18.0	17.7



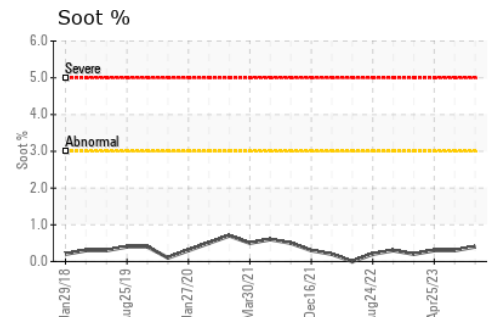
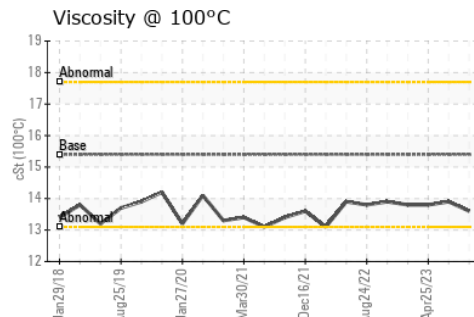
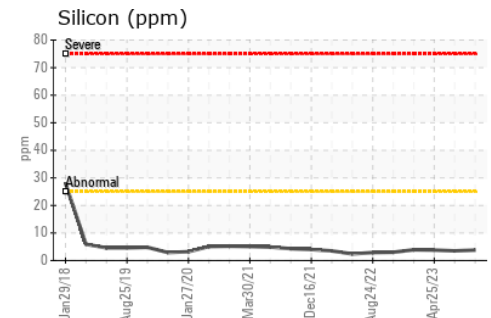
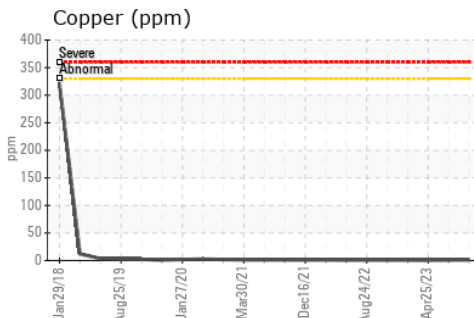
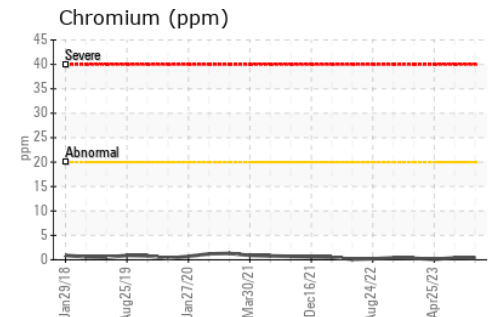
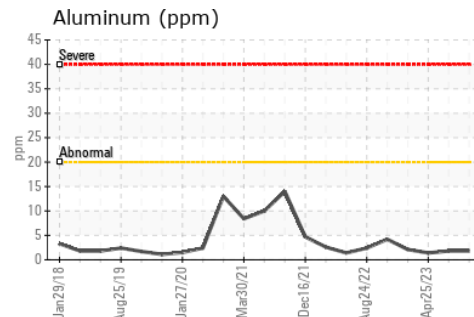
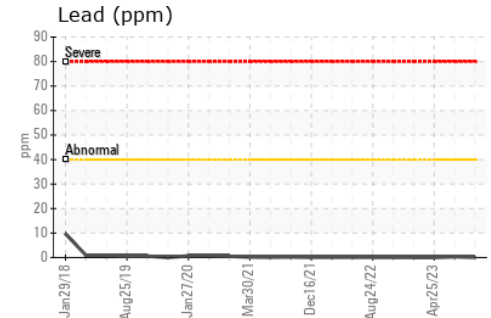
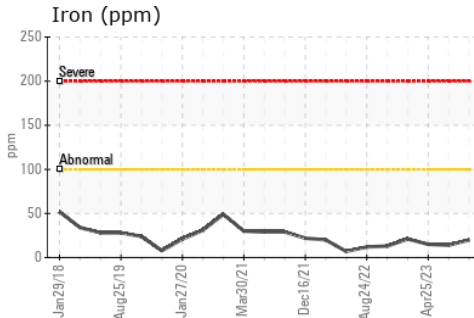
OIL ANALYSIS REPORT



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	13.6	13.9	13.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**
Sample No. : GFL0085677 **Received** : 12 Oct 2023 **905 Tecumseh Road W**
Lab Number : 02588517 **Diagnosed** : 12 Oct 2023 **Windsor, ON**
Unique Number : 5657583 **Diagnostician** : Wes Davis **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.