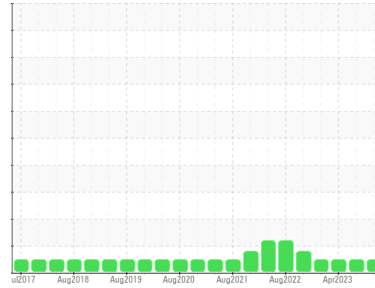




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

8428

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (20 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

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	GFL0085673	GFL0077304	GFL0070433
Sample Date	Client Info	16 Oct 2023	18 Jul 2023	24 Apr 2023
Machine Age	hrs	Client Info	3237	3237
Oil Age	hrs	Client Info	3237	3237
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	23	24	16
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	<1
Silver	ppm ASTM D5185(m) >3	<1	<1	0
Aluminum	ppm ASTM D5185(m) >20	1	1	1
Lead	ppm ASTM D5185(m) >40	<1	<1	<1
Copper	ppm ASTM D5185(m) >330	1	1	<1
Tin	ppm ASTM D5185(m) >15	0	0	<1
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	1	2	1
Barium	ppm ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm ASTM D5185(m) 60	58	59	59
Manganese	ppm ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm ASTM D5185(m) 1010	932	949	957
Calcium	ppm ASTM D5185(m) 1070	1025	1033	1090
Phosphorus	ppm ASTM D5185(m) 1150	945	1003	1088
Zinc	ppm ASTM D5185(m) 1270	1161	1165	1196
Sulfur	ppm ASTM D5185(m) 2060	2324	2324	2529
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	2
Potassium	ppm ASTM D5185(m) >20	0	<1	<1

INFRA-RED

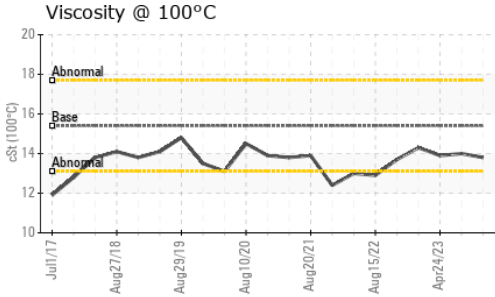
method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.6	0.6	0.4
Nitration	Abs/cm ASTM D7624* >20	11.5	12.2	10.6
Sulfation	Abs/.1mm ASTM D7415* >30	23.3	24.4	21.2

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	20.3	21.8	18.9



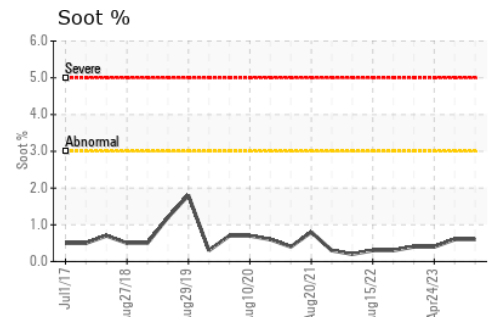
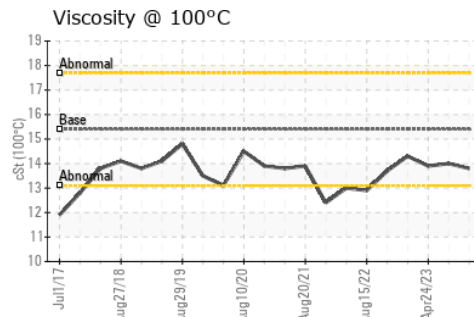
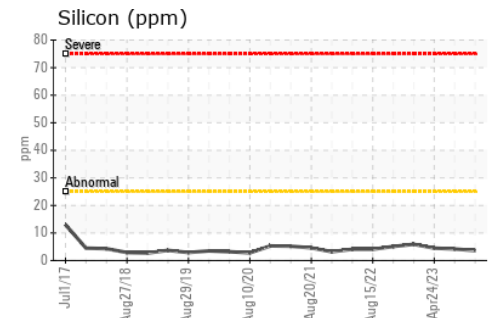
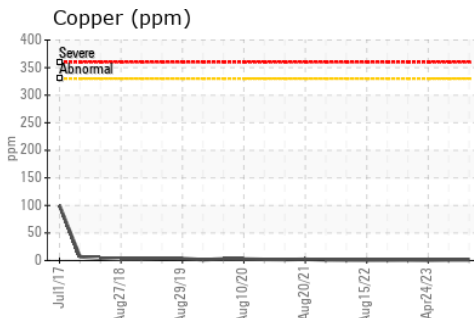
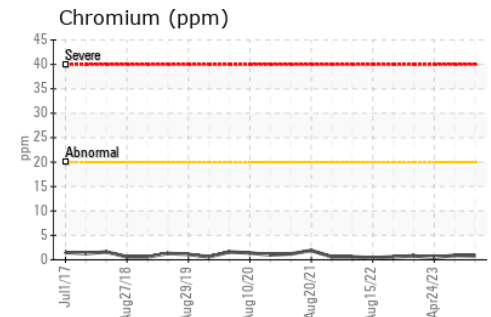
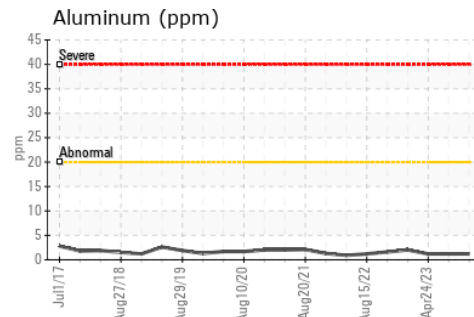
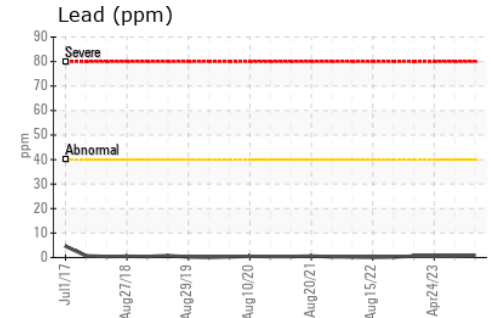
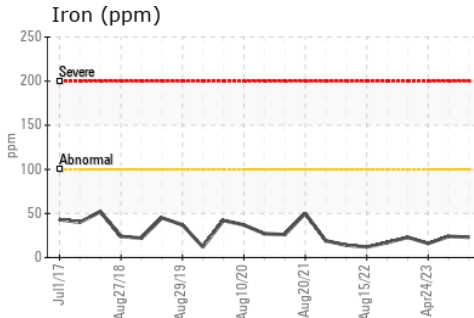
OIL ANALYSIS REPORT



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	13.8	14.0

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**
Sample No. : GFL0085673 **Received** : 18 Oct 2023 **905 Tecumseh Road W**
Lab Number : 02589923 **Diagnosed** : 18 Oct 2023 **Windsor, ON**
Unique Number : 5658989 **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.