



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
701047
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110735	GFL0097452	GFL0085686
Sample Date		Client Info		14 Feb 2024	30 Nov 2023	07 Sep 2023
Machine Age	hrs	Client Info		570	570	0
Oil Age	hrs	Client Info		570	570	0
Filter Age	hrs	Client Info		570	570	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	8	14	9
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	2	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	0
Copper	ppm	ASTM D5185(m)	>330	1	2	1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

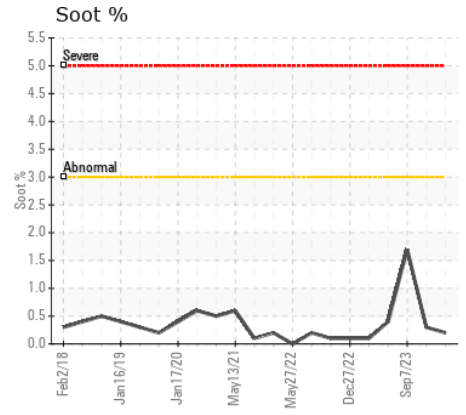
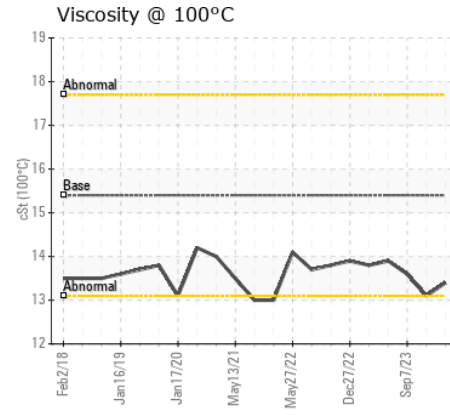
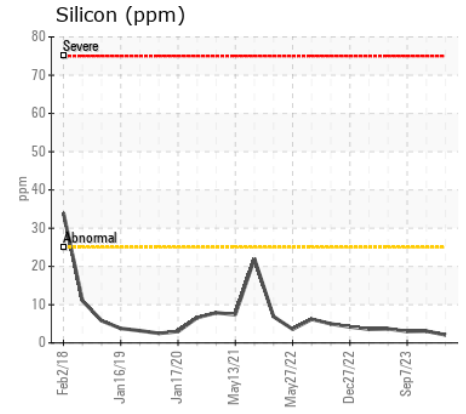
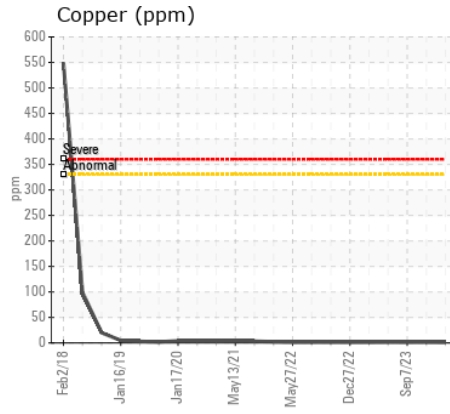
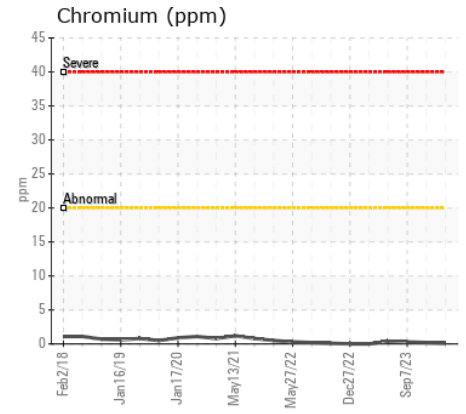
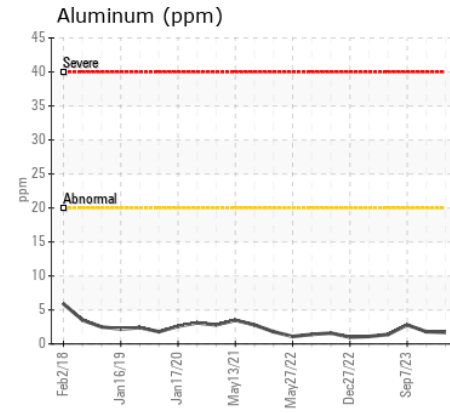
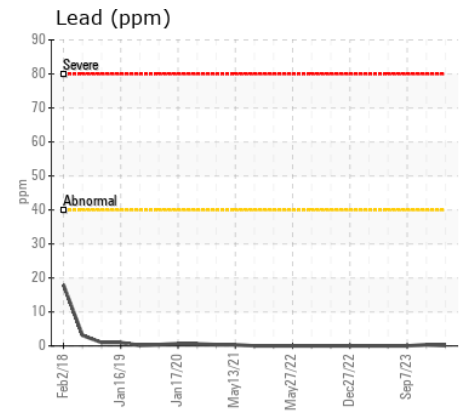
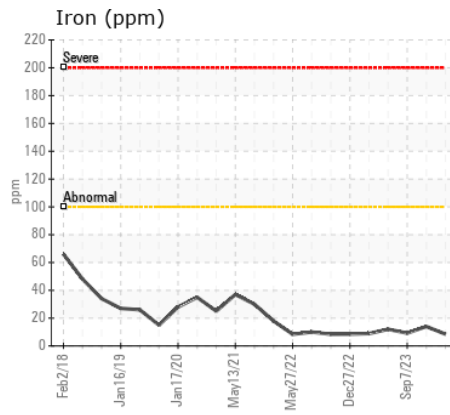
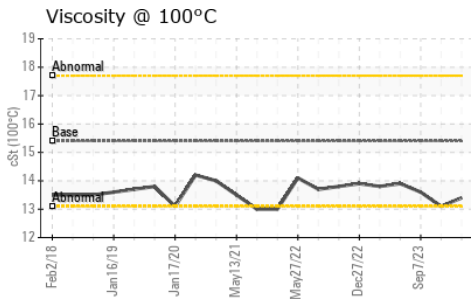
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	3
Potassium	ppm	ASTM D5185(m)	>20	1	1	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.2	0.3	1.7
Nitration	Abs/cm	ASTM D7624*	>20	9.2	9.9	16.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.8	21.5	23.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	0	2	2	1
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	55	55	56
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	892	886	943
Calcium	ppm	ASTM D5185(m)	1070	988	963	1003
Phosphorus	ppm	ASTM D5185(m)	1150	946	907	1017
Zinc	ppm	ASTM D5185(m)	1270	1111	1123	1163
Sulfur	ppm	ASTM D5185(m)	2060	2448	2247	2450
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	19.3	35.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.4	13.1	13.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110735 **Received** : 16 Feb 2024
Lab Number : 02616138 **Tested** : 16 Feb 2024
Unique Number : 5733248 **Diagnosed** : 16 Feb 2024 - Wes Davis
Test Package : MOB 1

GFL Environmental - 221 - Windsor
 905 Tecumseh Road W
 Windsor, ON
 CA N8W 4J5
 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.

T:
F: