



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
701044

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (20 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0110732	GFL0085679	GFL0059869
Sample Date		Client Info		23 Feb 2024	29 Sep 2023	07 Feb 2023
Machine Age	hrs	Client Info		560	560	0
Oil Age	hrs	Client Info		560	560	0
Filter Age	hrs	Client Info		560	560	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	SEVERE	ABNORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	63	36	24
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<1	2	0
Titanium	ppm	ASTM D5185(m)		0	0	<1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	7	▲ 90	3
Lead	ppm	ASTM D5185(m)	>40	4	24	<1
Copper	ppm	ASTM D5185(m)	>330	140	▲ 897	2
Tin	ppm	ASTM D5185(m)	>15	0	2	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

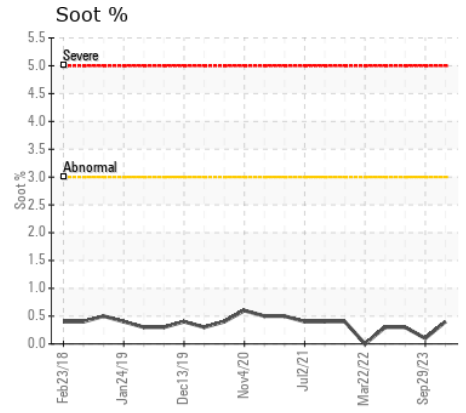
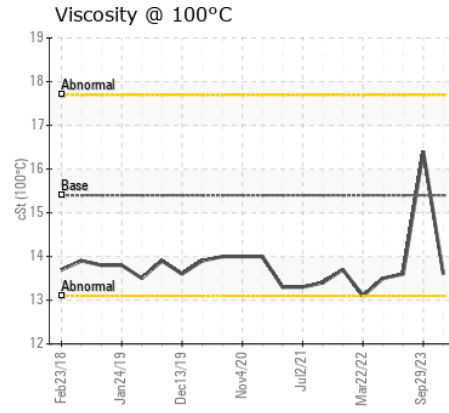
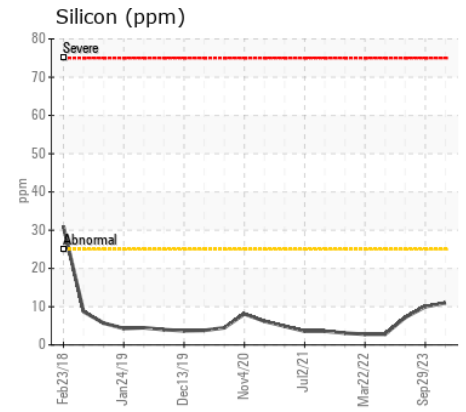
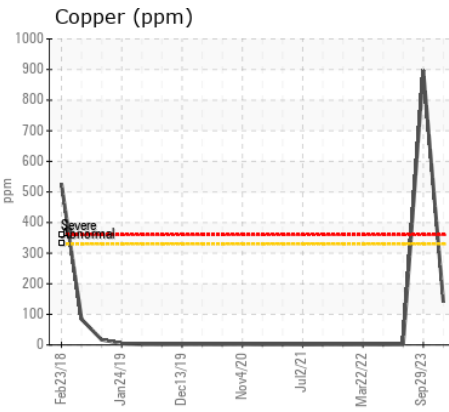
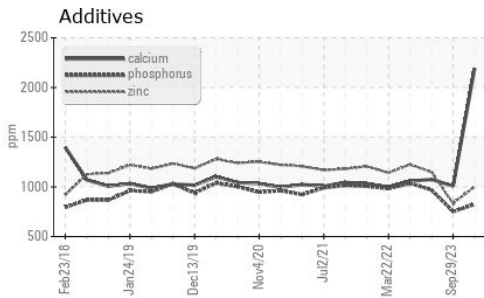
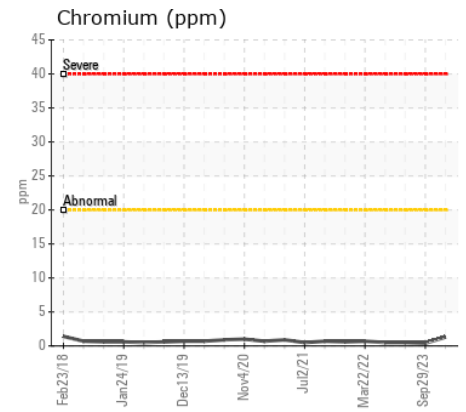
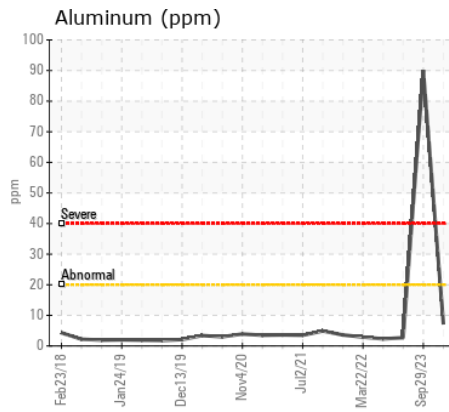
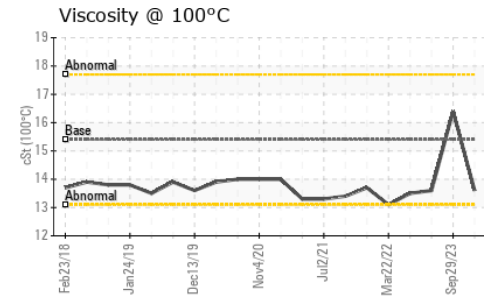
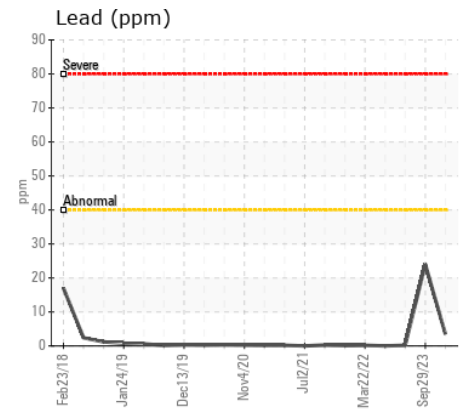
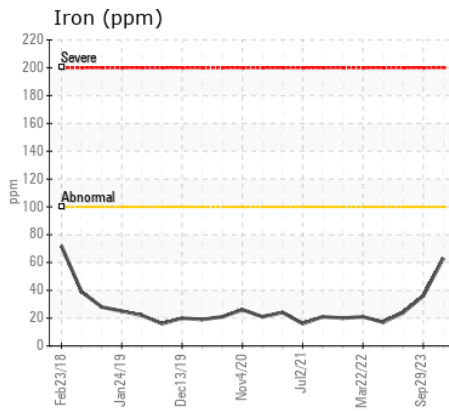
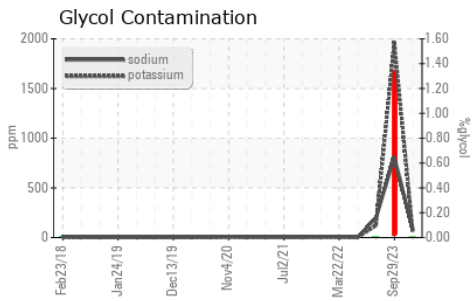
Test for glycol is negative. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	11	10	7
Potassium	ppm	ASTM D5185(m)	>20	55	▲ 1959	▲ 121
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	ASTM D7922*		0.0	▲ 1.341	0.0
Soot %	%	ASTM D7844*	>3	0.4	0.1	0.3
Nitration	Abs/cm	ASTM D7624*	>20	9.4	14.3	10.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.0	17.2	22.6
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		82	● 809	● 196
Boron	ppm	ASTM D5185(m)	0	5	8	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	20	133	58
Manganese	ppm	ASTM D5185(m)	0	2	6	<1
Magnesium	ppm	ASTM D5185(m)	1010	61	45	909
Calcium	ppm	ASTM D5185(m)	1070	2190	1008	1075
Phosphorus	ppm	ASTM D5185(m)	1150	824	752	970
Zinc	ppm	ASTM D5185(m)	1270	1000	834	1149
Sulfur	ppm	ASTM D5185(m)	2060	2786	2539	2445
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.2	12.5	18.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.6	16.4	13.6



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110732
Lab Number : 02618837
Unique Number : 5735947
Test Package : MOB 1
Received : 29 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Wes Davis

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.