



Machine Id
701048
 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		GFL0110716	GFL0097443	GFL0085675
Sample Date		Client Info		26 Mar 2024	15 Jan 2024	16 Oct 2023
Machine Age	hrs	Client Info		610	610	610
Oil Age	hrs	Client Info		610	610	610
Filter Age	hrs	Client Info		610	610	610
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	10	12	12
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	0	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	2
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	1	3
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

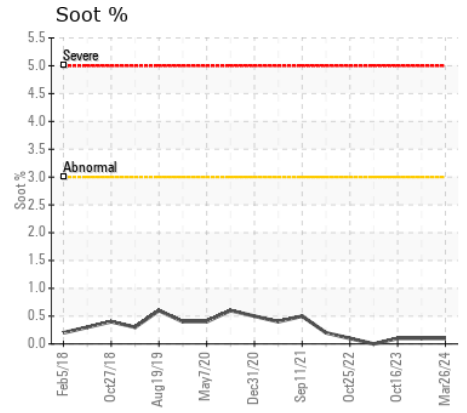
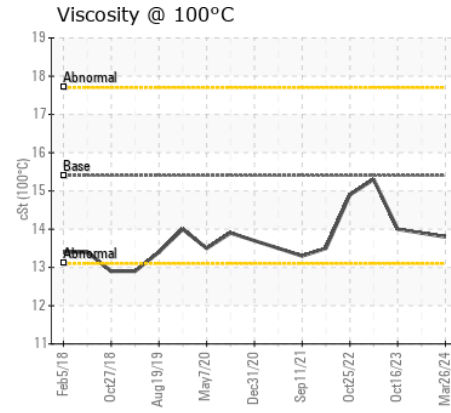
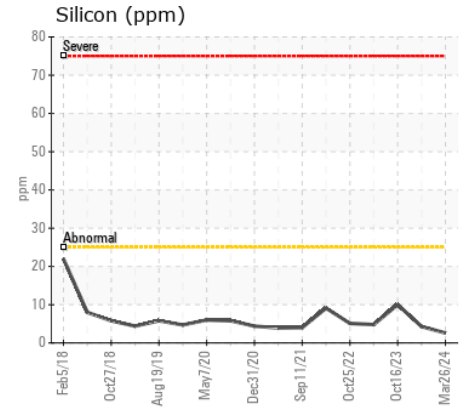
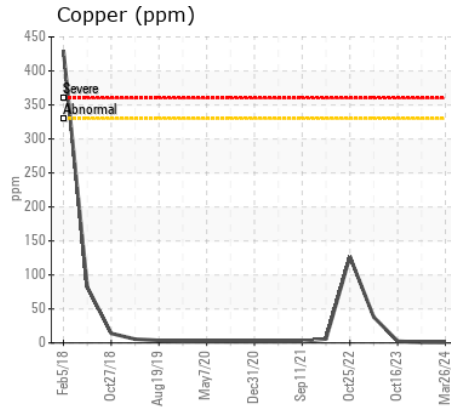
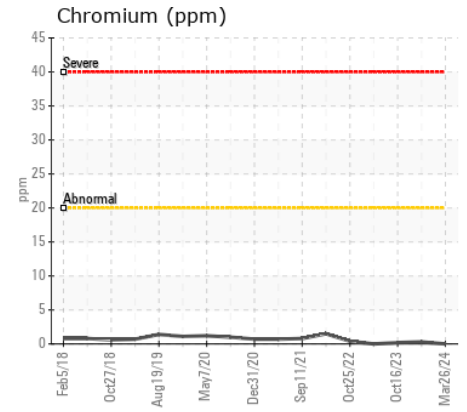
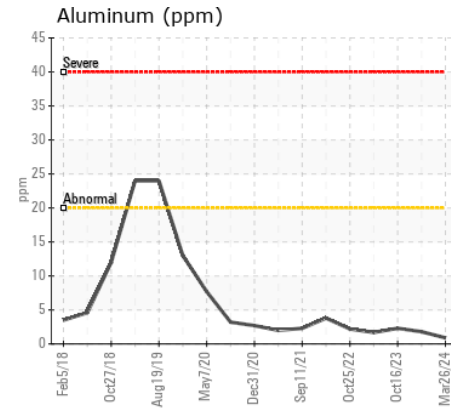
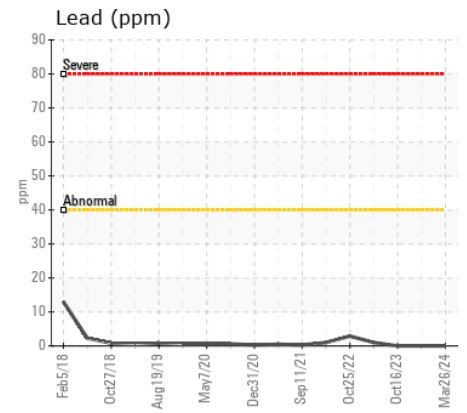
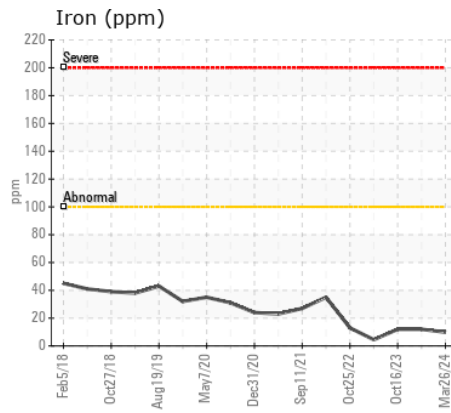
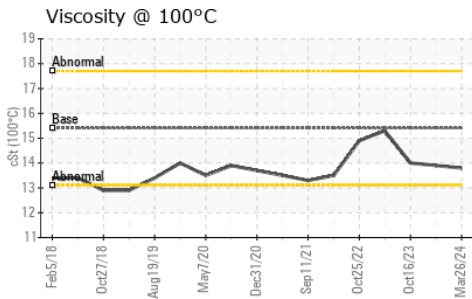
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	10
Potassium	ppm	ASTM D5185(m)	>20	1	3	9
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	ASTM D7844*	>3	0.1	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	9.9	9.3	8.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	21.3	21.2
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	4	11
Boron	ppm	ASTM D5185(m)	0	2	4	34
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	57	58	60
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	1010	930	854	280
Calcium	ppm	ASTM D5185(m)	1070	1023	1153	1860
Phosphorus	ppm	ASTM D5185(m)	1150	964	986	996
Zinc	ppm	ASTM D5185(m)	1270	1163	1173	1178
Sulfur	ppm	ASTM D5185(m)	2060	2399	2585	2808
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	17.5	16.8
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.8	13.9	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0110716
Lab Number : 02625148
Unique Number : 5750267
Test Package : MOB 1
Received : 28 Mar 2024
Tested : 28 Mar 2024
Diagnosed : 28 Mar 2024 - Wes Davis

GFL Environmental - 221 - Windsor
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 Windsor, ON
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 Contact: Rhys Marotte
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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.

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F: