



Machine Id
5619
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102602	GFL0097610	GFL0090607
Sample Date		Client Info		17 Feb 2024	06 Nov 2023	25 Aug 2023
Machine Age	hrs	Client Info		6093	5435	4846
Oil Age	hrs	Client Info		2117	0	0
Filter Age	hrs	Client Info		2117	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	16	16	17
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	1	2	2
Copper	ppm	ASTM D5185(m)	>330	3	3	3
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

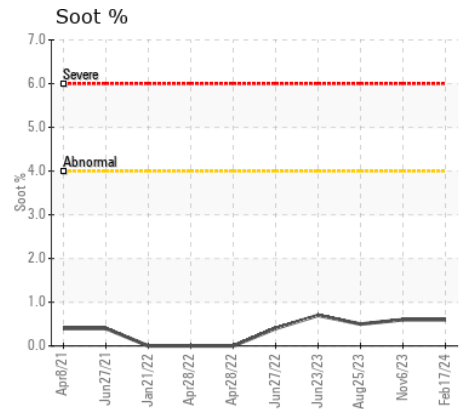
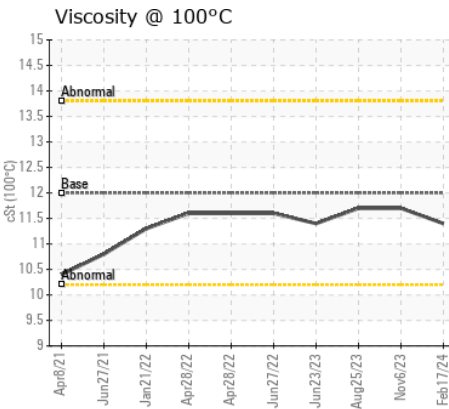
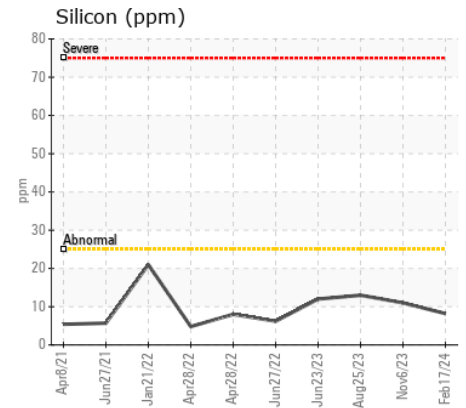
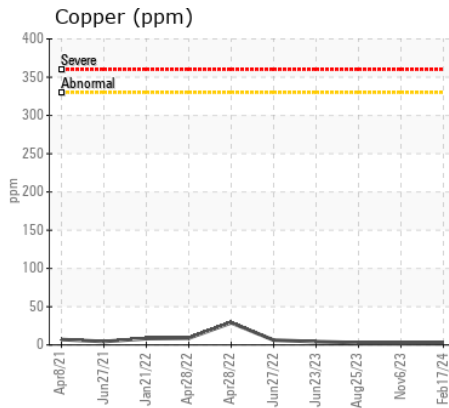
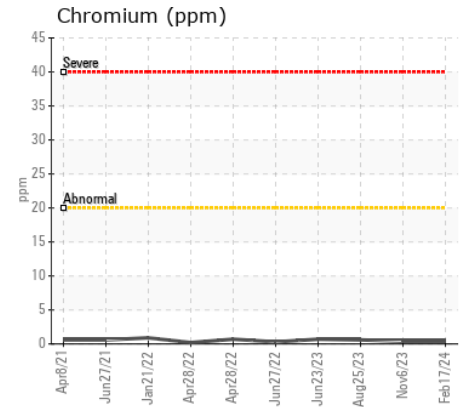
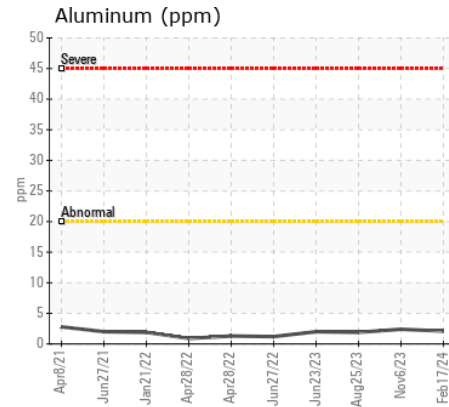
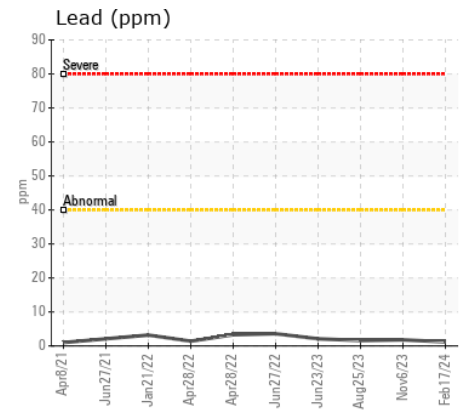
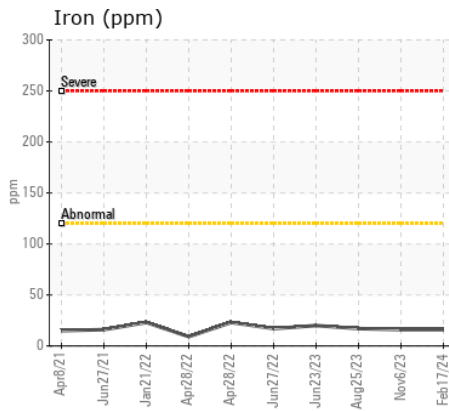
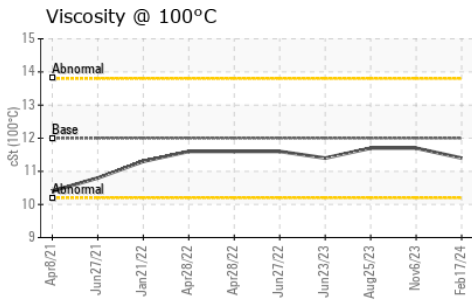
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	8	11	13
Potassium	ppm	ASTM D5185(m)	>20	1	0	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.6	0.6	0.5
Nitration	Abs/cm	ASTM D7624*	>20	9.7	9.5	9.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.7	22.0	22.8
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)		4	4	5
Boron	ppm	ASTM D5185(m)	2	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	60	60	62
Manganese	ppm	ASTM D5185(m)	0	0	0	<1
Magnesium	ppm	ASTM D5185(m)	950	977	991	1027
Calcium	ppm	ASTM D5185(m)	1050	1084	1094	1097
Phosphorus	ppm	ASTM D5185(m)	995	988	1014	1076
Zinc	ppm	ASTM D5185(m)	1180	1180	1217	1233
Sulfur	ppm	ASTM D5185(m)	2600	2336	2261	2389
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.7	18.0	17.9
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.7	11.7



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102602
Lab Number : 02617614
Unique Number : 5734724
Test Package : MOB 1
Received : 23 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 23 Feb 2024 - Wes Davis

GFL Environmental - 554 - Edmonton SW
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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.