



Machine Id
401145
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107323	GFL0079203	GFL0079234
Sample Date		Client Info		29 Feb 2024	09 Sep 2023	19 Jun 2023
Machine Age	hrs	Client Info		10556	4518	9028
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	4	5	4
Chromium	ppm	ASTM D5185(m)	>20	0	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	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	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

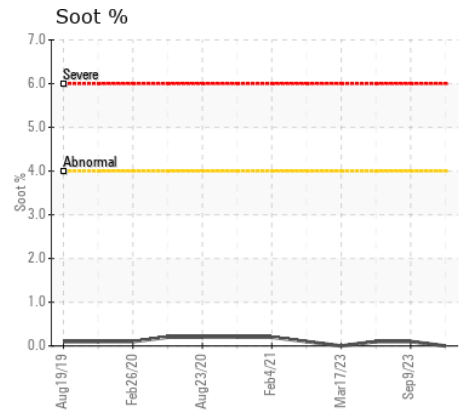
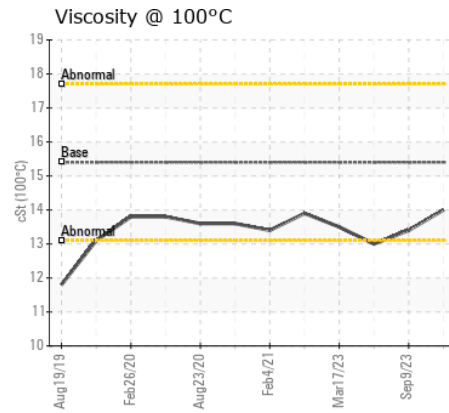
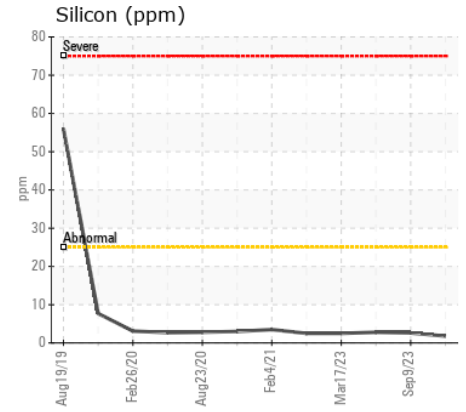
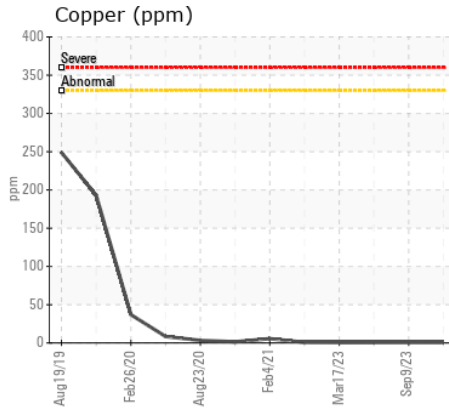
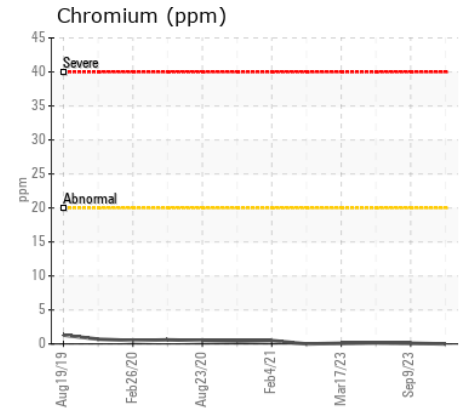
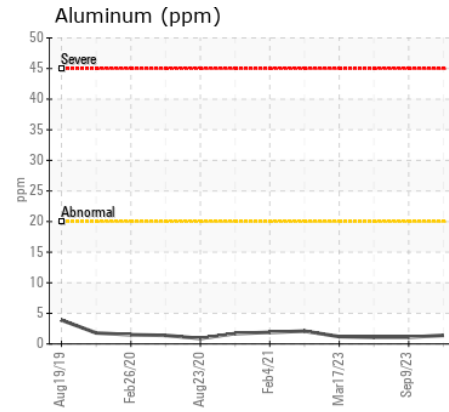
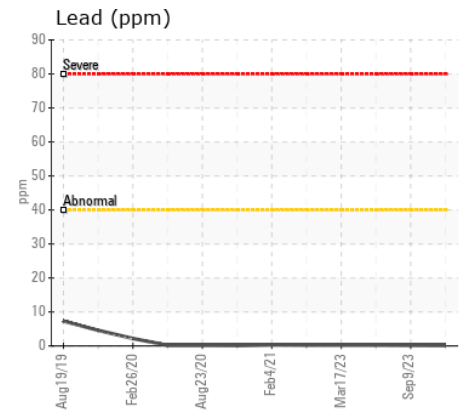
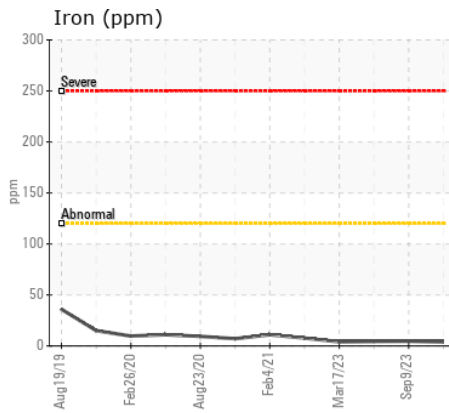
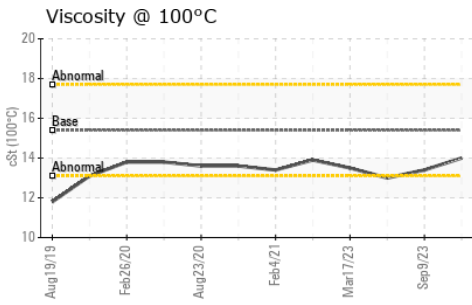
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	3
Potassium	ppm	ASTM D5185(m)	>20	<1	2	<1
Fuel		WC Method	>3.0	<1.0	<1.0	0.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0	0.1	0.1
Nitration	Abs/cm	ASTM D7624*	>20	7.0	7.0	7.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.5	19.0	19.0
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)		1	2	2
Boron	ppm	ASTM D5185(m)	0	1	8	14
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	62	59
Manganese	ppm	ASTM D5185(m)	0	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	965	971	922
Calcium	ppm	ASTM D5185(m)	1070	1062	1056	1052
Phosphorus	ppm	ASTM D5185(m)	1150	1023	1057	1010
Zinc	ppm	ASTM D5185(m)	1270	1181	1192	1131
Sulfur	ppm	ASTM D5185(m)	2060	2680	2533	2419
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.6	14.7	14.9
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.0	13.4	13.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107323
Lab Number : 02619458
Unique Number : 5736568
Test Package : MOB 1
Received : 04 Mar 2024
Tested : 04 Mar 2024
Diagnosed : 04 Mar 2024 - Wes Davis

GFL Environmental - 250 - Sault Ste Marie Hauling + MRF
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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.