



Machine Id
913156
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		GFL0107329	GFL0079206	GFL0079224
Sample Date		Client Info		28 May 2024	15 Sep 2023	19 Jun 2023
Machine Age	hrs	Client Info		600	1587	9536
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
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)	>120	9	20	15
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	2	2	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	1	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	3
Lead	ppm	ASTM D5185(m)	>40	<1	<1	<1
Copper	ppm	ASTM D5185(m)	>330	2	21	1
Tin	ppm	ASTM D5185(m)	>15	0	2	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

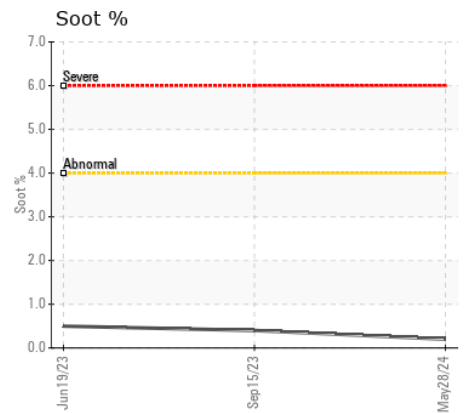
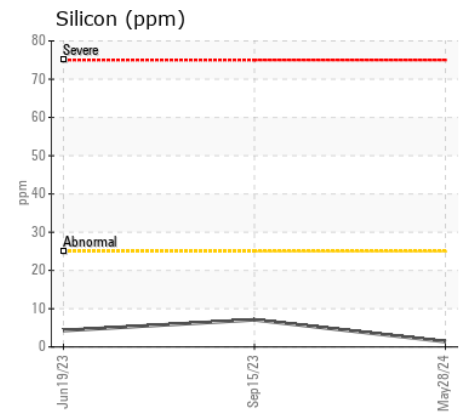
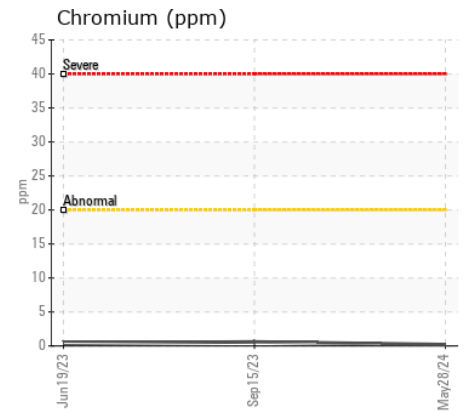
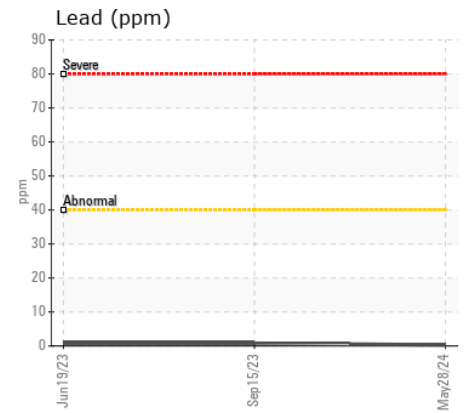
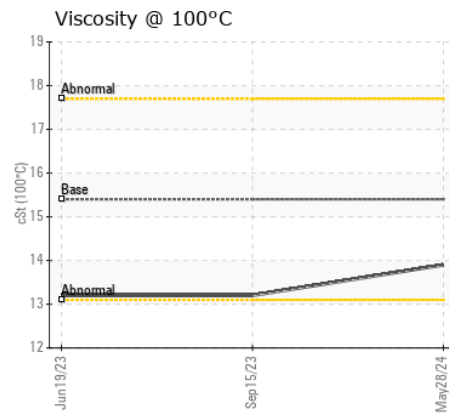
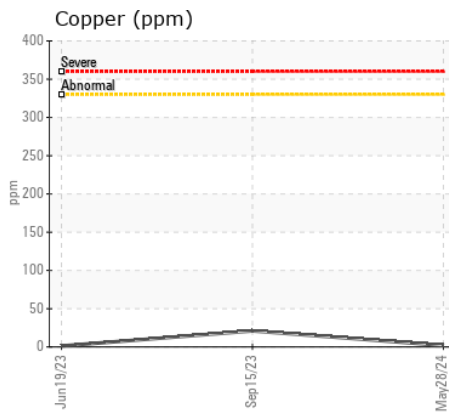
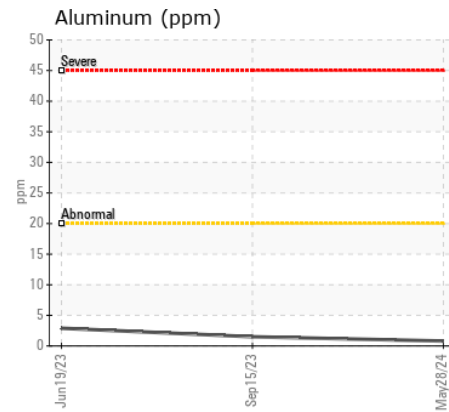
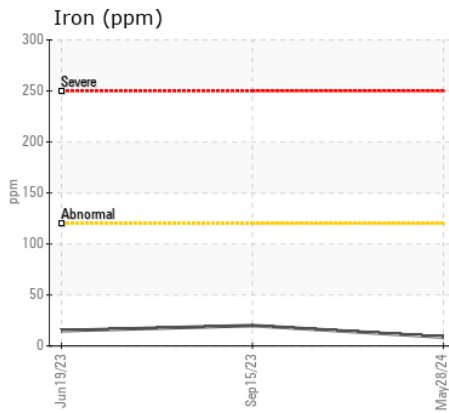
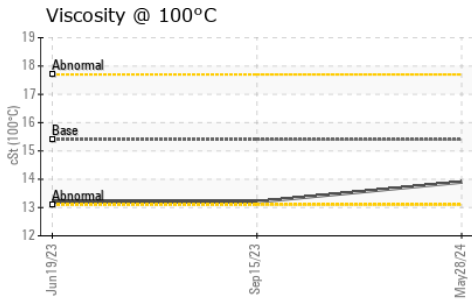
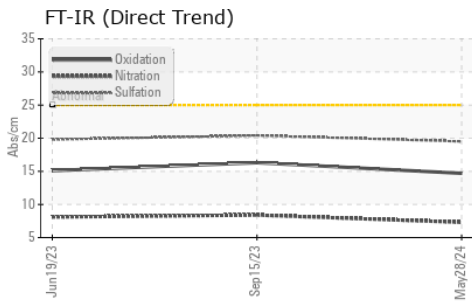
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	7	4
Potassium	ppm	ASTM D5185(m)	>20	<1	2	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	0.2	0.4	0.5
Nitration	Abs/cm	ASTM D7624*	>20	7.3	8.4	8.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	20.4	19.8
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)		1	2	4
Boron	ppm	ASTM D5185(m)	0	5	12	13
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	61	65	61
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	988	935	933
Calcium	ppm	ASTM D5185(m)	1070	1053	1095	1071
Phosphorus	ppm	ASTM D5185(m)	1150	1003	923	983
Zinc	ppm	ASTM D5185(m)	1270	1179	1142	1134
Sulfur	ppm	ASTM D5185(m)	2060	2479	2195	2251
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.7	16.3	15.1
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.9	13.2	13.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107329
Lab Number : 02638780
Unique Number : 5787942
Test Package : MOB 1
Received : 30 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 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.