



Machine Id
511017
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115554	GFL0090898	GFL0049039
Sample Date		Client Info		05 Apr 2024	05 Oct 2023	11 May 2022
Machine Age	kms	Client Info		425568	377967	232558
Oil Age	kms	Client Info		0	0	1138
Filter Age	kms	Client Info		0	0	1138
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	20	20	26
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	1	1	4
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	4	3	5
Lead	ppm	ASTM D5185(m)	>40	<1	1	2
Copper	ppm	ASTM D5185(m)	>330	8	6	17
Tin	ppm	ASTM D5185(m)	>15	<1	<1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

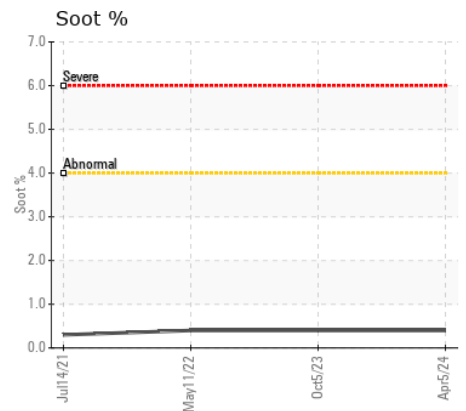
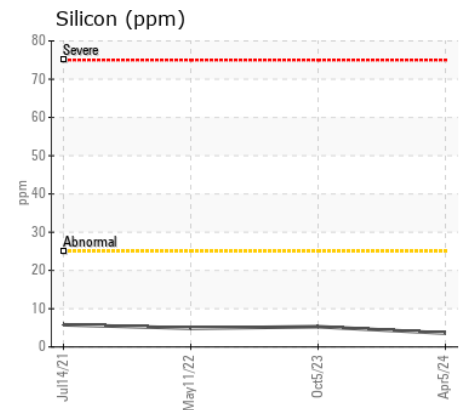
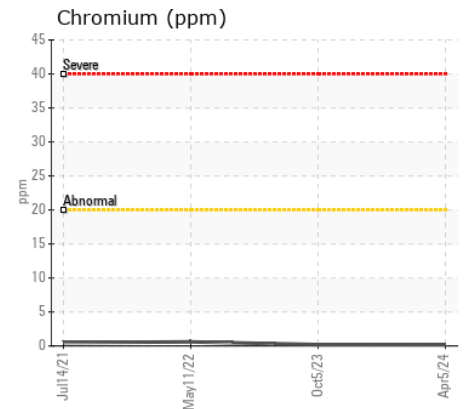
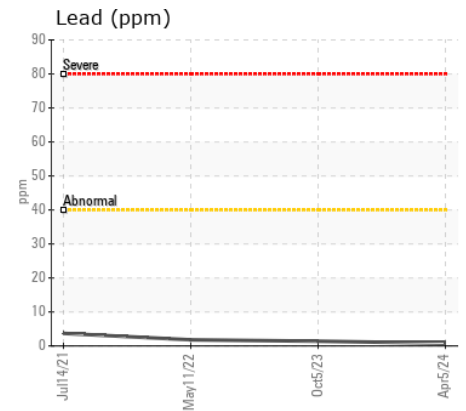
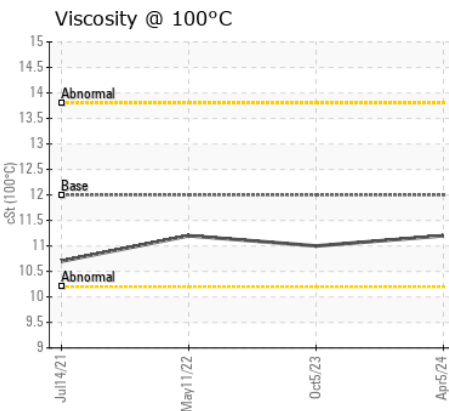
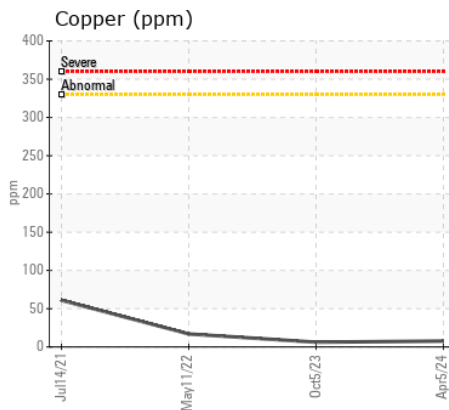
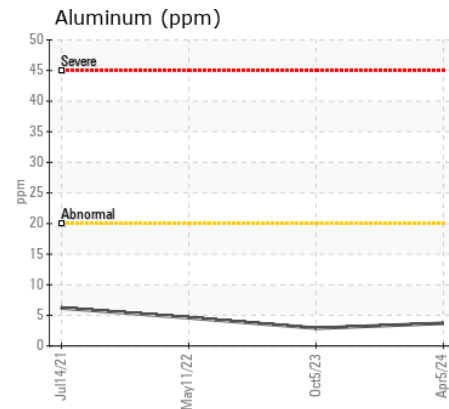
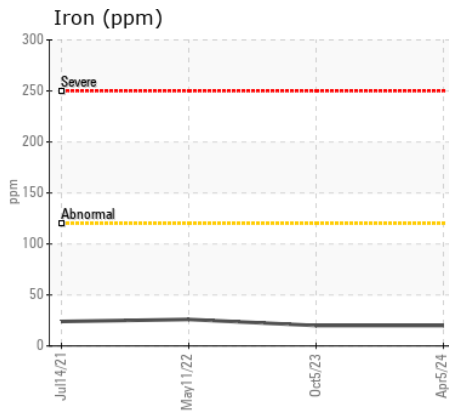
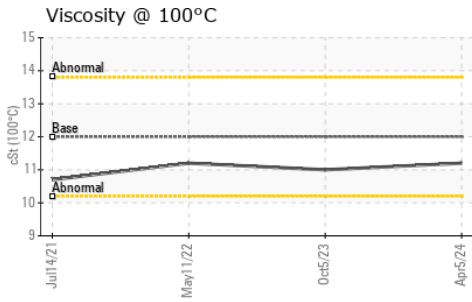
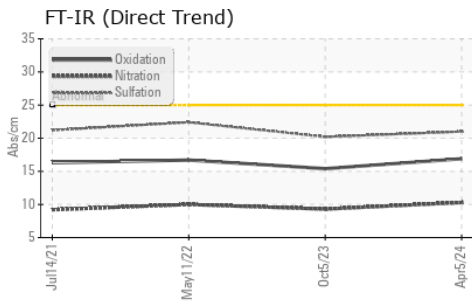
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	4	5	5
Potassium	ppm	ASTM D5185(m)	>20	3	2	6
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	0.4	0.4	0.4
Nitration	Abs/cm	ASTM D7624*	>20	10.3	9.3	10.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.0	20.2	22.4
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
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	2	2
Boron	ppm	ASTM D5185(m)	2	1	7	2
Barium	ppm	ASTM D5185(m)	0	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	50	62	65	61
Manganese	ppm	ASTM D5185(m)	0	<1	0	1
Magnesium	ppm	ASTM D5185(m)	950	958	917	1006
Calcium	ppm	ASTM D5185(m)	1050	1079	1115	1056
Phosphorus	ppm	ASTM D5185(m)	995	932	968	1017
Zinc	ppm	ASTM D5185(m)	1180	1183	1161	1199
Sulfur	ppm	ASTM D5185(m)	2600	2351	2428	2409
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.9	15.4	16.7
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.2	11.0	11.2



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115554
Lab Number : 02627571
Unique Number : 5760703
Test Package : MOB 1 (Additional Tests: Visual)

Received : 09 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 09 Apr 2024 - Wes Davis

GFL Environmental - 245 - BJ Bear
 2616 Cedar Creek Road
 Ayr, ON
 CA N0B 1E0
 Contact: Erik Prpic
 eprpic@gflenv.com
 T: (519)570-9000
 F:

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.