



Machine Id
OR564
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (24 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0113416	GFL0092218	GFL0092244
Sample Date		Client Info		25 Apr 2024	09 Feb 2024	15 Nov 2023
Machine Age	hrs	Client Info		21261	20550	19711
Oil Age	hrs	Client Info		711	19711	500
Filter Age	hrs	Client Info		711	500	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>51	18	21	25
Chromium	ppm	ASTM D5185(m)	>11	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	0	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>31	1	2	1
Lead	ppm	ASTM D5185(m)	>26	<1	<1	1
Copper	ppm	ASTM D5185(m)	>26	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>4	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

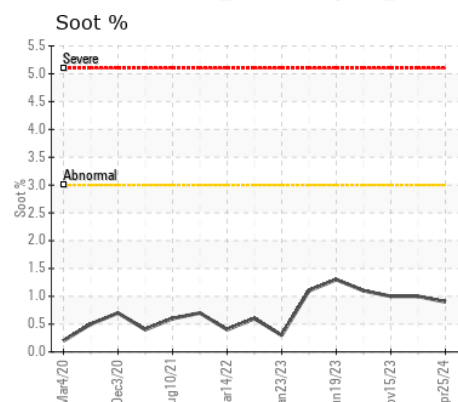
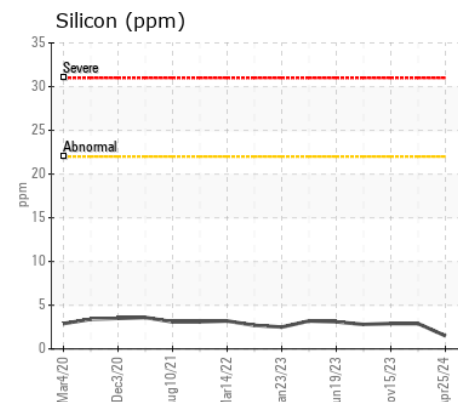
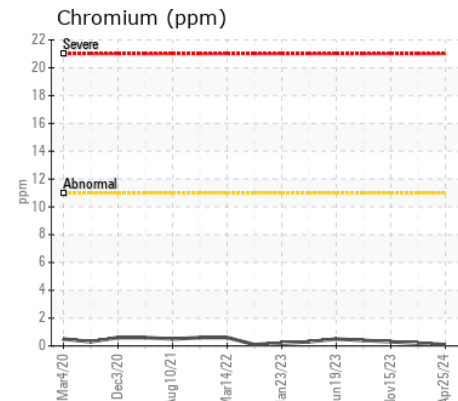
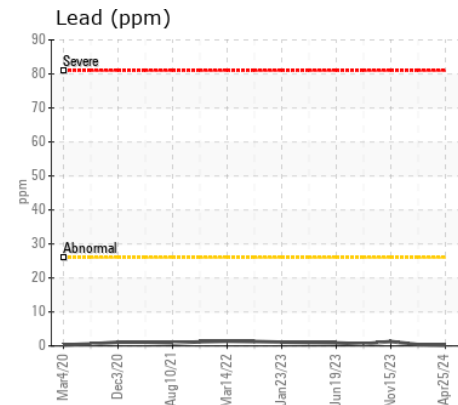
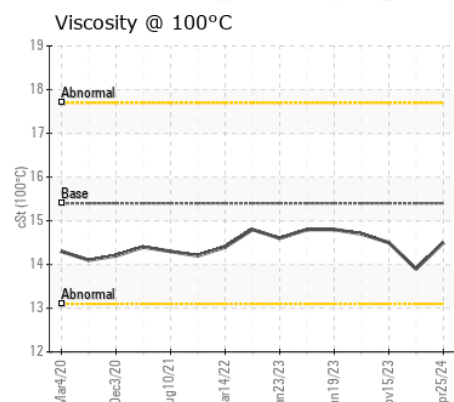
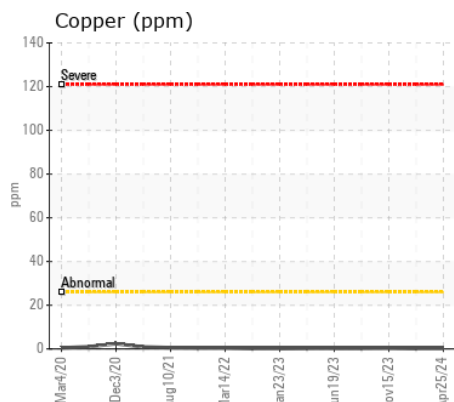
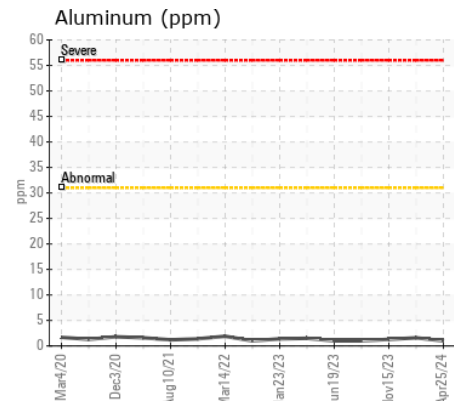
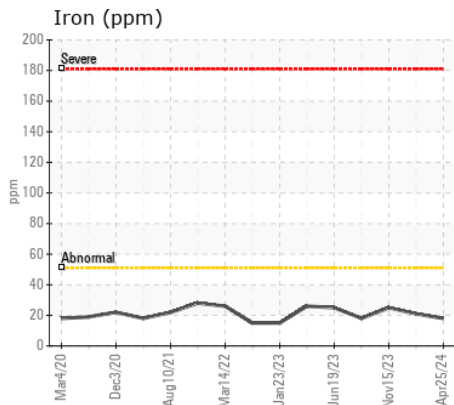
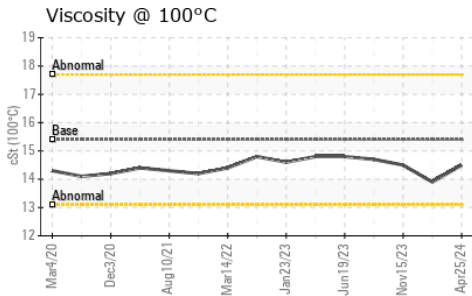
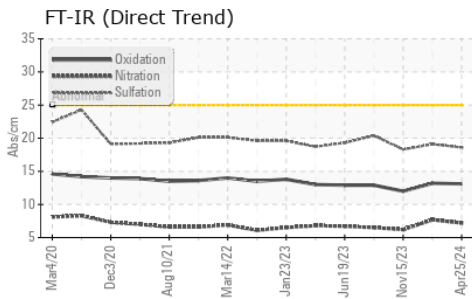
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>22	2	3	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.9	1	1
Nitration	Abs/cm	ASTM D7624*	>20	7.2	7.7	6.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.6	19.1	18.3
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.21	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>31	1	1	2
Boron	ppm	ASTM D5185(m)	0	4	8	4
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	57	53	60
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1010	924	858	957
Calcium	ppm	ASTM D5185(m)	1070	1127	1273	1096
Phosphorus	ppm	ASTM D5185(m)	1150	999	1007	1027
Zinc	ppm	ASTM D5185(m)	1270	1173	1170	1193
Sulfur	ppm	ASTM D5185(m)	2060	2509	2708	2567
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.1	13.2	12.0
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.5	13.9	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113416
Lab Number : 02632666
Unique Number : 5773819
Test Package : MOB 1 (Additional Tests: Visual)

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 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.