



Machine Id
831052
Component
Transmission (Auto)
Fluid
PETRO CANADA DuraDrive HD Synthetic 668 (--- GAL)

RECOMMENDATION

The fluid change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112422	GFL0060230	---
Sample Date		Client Info		26 Feb 2024	03 Oct 2022	---
Machine Age	hrs	Client Info		3582	1017	---
Oil Age	hrs	Client Info		1835	1017	---
Filter Age	hrs	Client Info		1835	1017	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

Copper ppm levels are abnormal. Clutch disc wear or oil cooler leaching indicated.

Iron	ppm	ASTM D5185(m)	>220	104	53	---
Chromium	ppm	ASTM D5185(m)	>2	<1	0	---
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	---
Titanium	ppm	ASTM D5185(m)		0	0	---
Silver	ppm	ASTM D5185(m)	>5	0	0	---
Aluminum	ppm	ASTM D5185(m)	>75	29	10	---
Lead	ppm	ASTM D5185(m)	>95	27	13	---
Copper	ppm	ASTM D5185(m)	>60	▲ 87	22	---
Tin	ppm	ASTM D5185(m)	>10	4	2	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

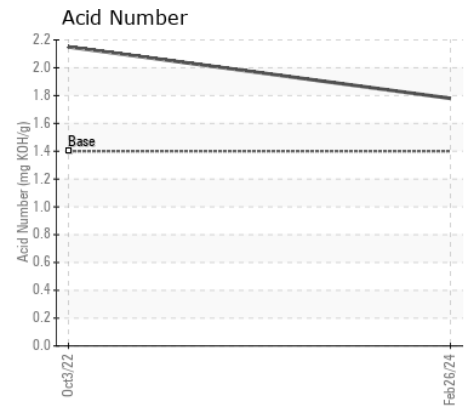
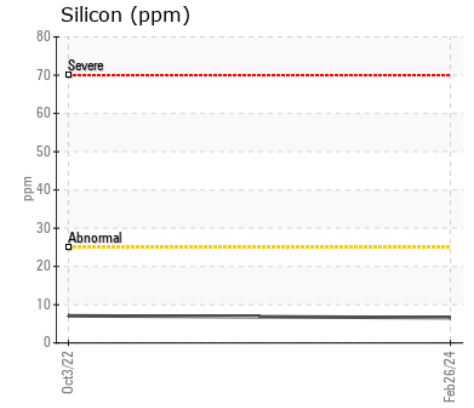
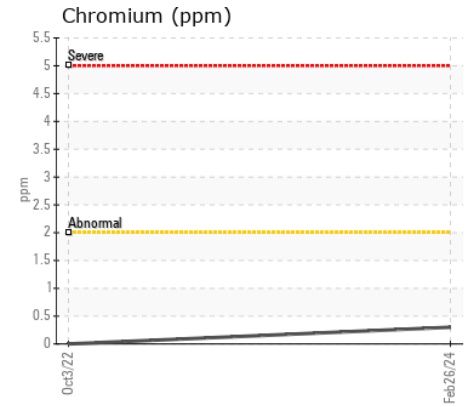
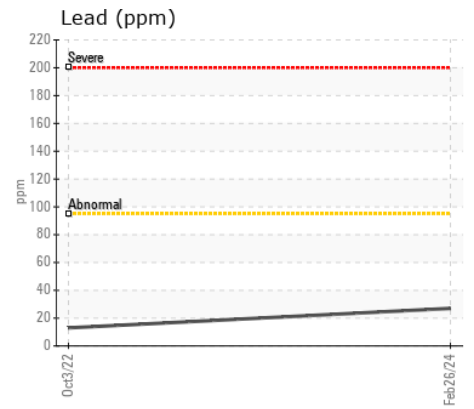
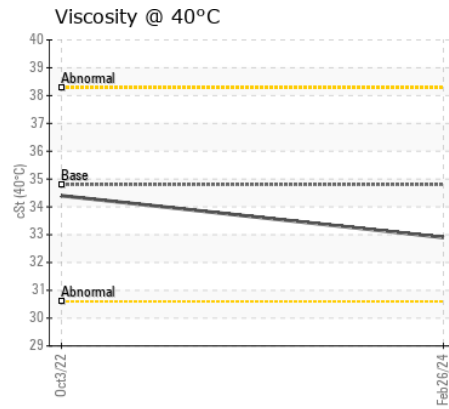
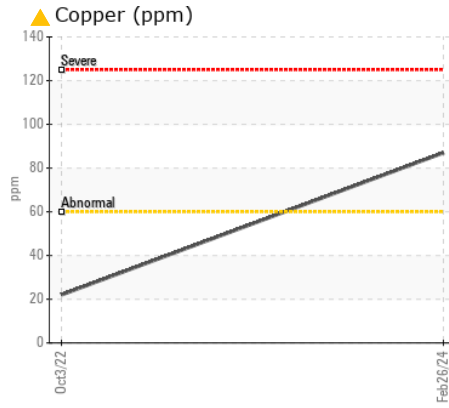
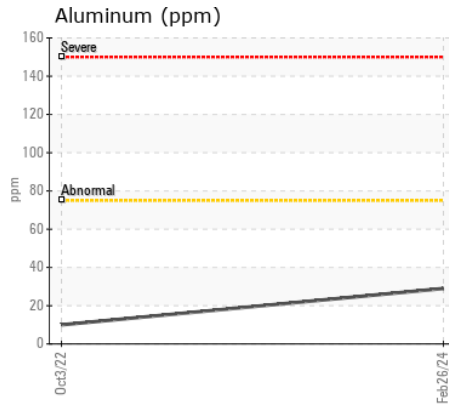
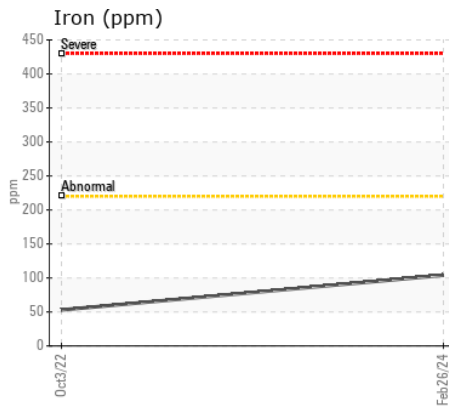
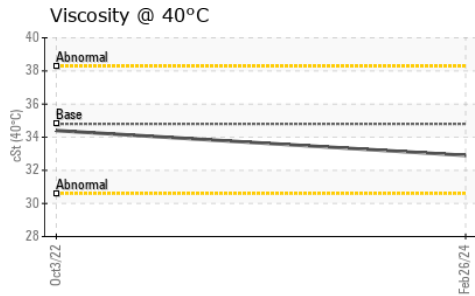
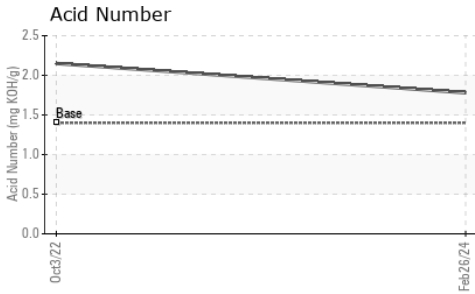
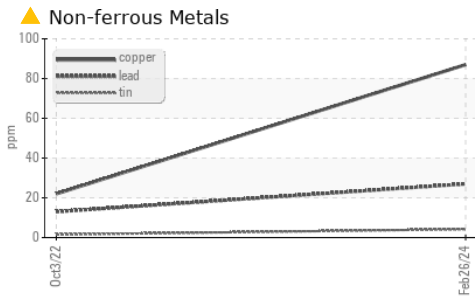
There is no indication of any contamination in the fluid.

Silicon	ppm	ASTM D5185(m)	>25	7	7	---
Potassium	ppm	ASTM D5185(m)	>20	4	4	---
Water		WC Method	>0.1	NEG	NEG	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	---

FLUID CONDITION

The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		16	14	---
Boron	ppm	ASTM D5185(m)	78	120	156	---
Barium	ppm	ASTM D5185(m)		<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	<1	<1	---
Manganese	ppm	ASTM D5185(m)		3	4	---
Magnesium	ppm	ASTM D5185(m)	0	2	2	---
Calcium	ppm	ASTM D5185(m)	113	149	158	---
Phosphorus	ppm	ASTM D5185(m)	222	396	465	---
Zinc	ppm	ASTM D5185(m)		49	29	---
Sulfur	ppm	ASTM D5185(m)	1326	2233	2475	---
Acid Number (AN)	mg KOH/g	ASTM D974*	1.4	1.78	2.15	---
Visc @ 40°C	cSt	ASTM D7279(m)	34.8	32.9	34.4	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112422 **Received** : 04 Mar 2024
Lab Number : 02619606 **Tested** : 04 Mar 2024
Unique Number : 5736716 **Diagnosed** : 05 Mar 2024 - Kevin Marson
Test Package : MOB 2 (Additional Tests: TAN Man)

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com
 T: (403)369-6163

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.