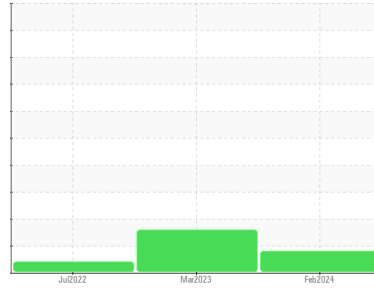




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
731123

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX MV 46 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0109821	GFL0070220	GFL0033932
Sample Date	Client Info	13 Feb 2024	02 Mar 2023	25 Jul 2022
Machine Age	hrs	6085	4195	2875
Oil Age	hrs	6085	4195	2875
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ATTENTION	ABNORMAL	ATTENTION

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	1	2	1
Chromium	ppm ASTM D5185m >10	0	<1	0
Nickel	ppm ASTM D5185m >10	0	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	0	<1	<1
Lead	ppm ASTM D5185m >10	0	0	0
Copper	ppm ASTM D5185m >75	2	2	2
Tin	ppm ASTM D5185m >10	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	2	0	0
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 0	2	<1	<1
Manganese	ppm ASTM D5185m 1	<1	0	0
Magnesium	ppm ASTM D5185m 0	19	4	4
Calcium	ppm ASTM D5185m 50	95	51	49
Phosphorus	ppm ASTM D5185m 330	332	268	302
Zinc	ppm ASTM D5185m 430	407	324	358
Sulfur	ppm ASTM D5185m 760	887	882	993

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	<1	2	1
Sodium	ppm ASTM D5185m	<1	2	<1
Potassium	ppm ASTM D5185m >20	0	0	0

FLUID CLEANLINESS

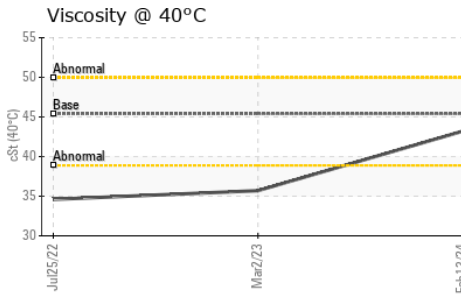
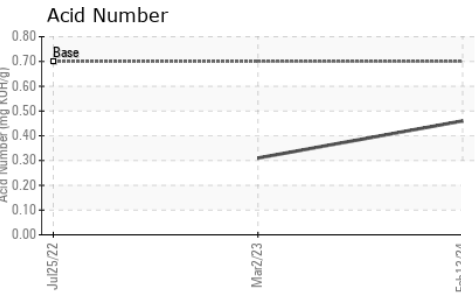
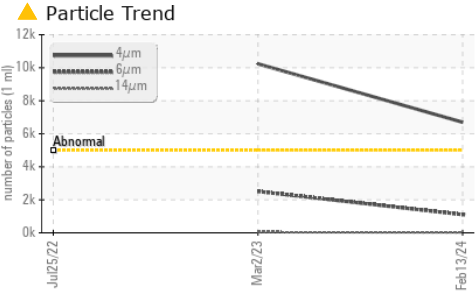
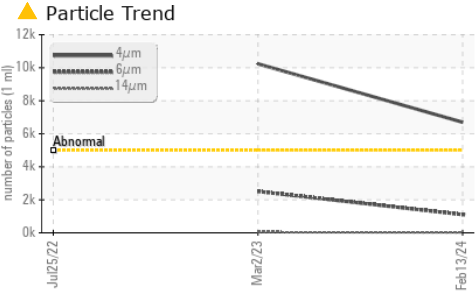
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 6698	▲ 10236	---
Particles >6µm	ASTM D7647 >1300	1104	▲ 2507	---
Particles >14µm	ASTM D7647 >160	23	37	---
Particles >21µm	ASTM D7647 >40	4	4	---
Particles >38µm	ASTM D7647 >10	0	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/12	▲ 21/19/12	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.70	0.46	0.31	---



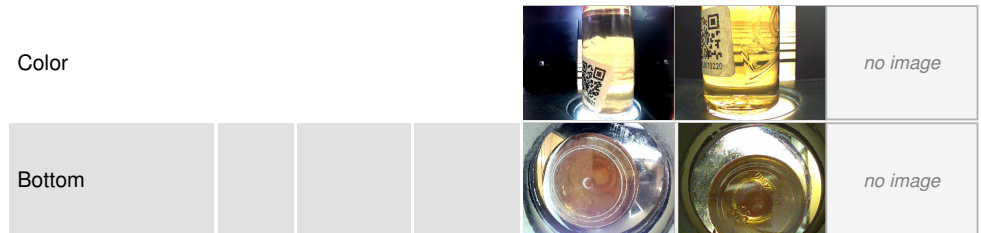
OIL ANALYSIS REPORT



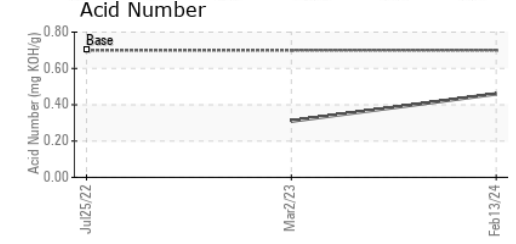
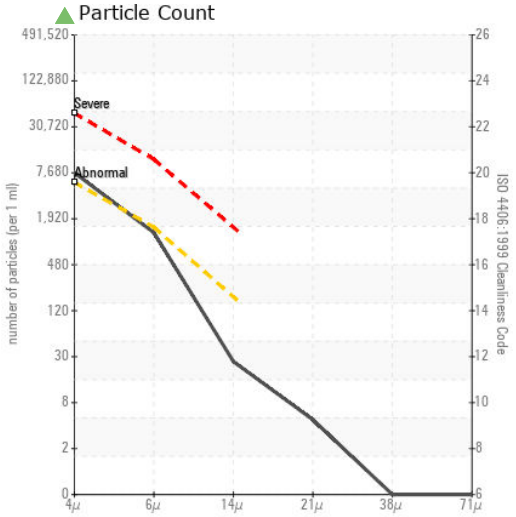
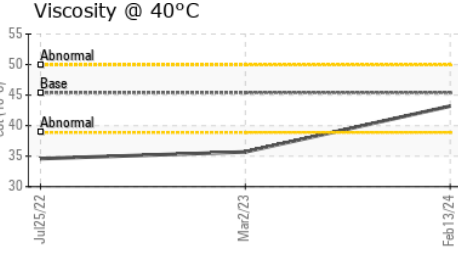
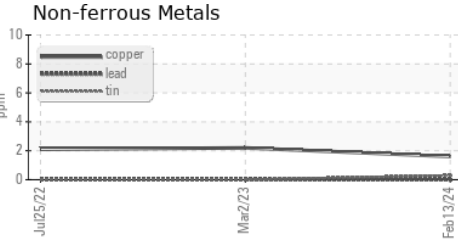
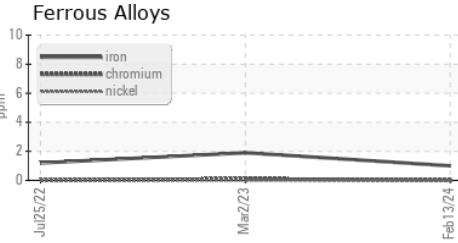
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45.4	43.2	▲ 35.7	▲ 34.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109821 **Received** : 15 Feb 2024
Lab Number : 06090097 **Tested** : 16 Feb 2024
Unique Number : 10882950 **Diagnosed** : 16 Feb 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PrtCount)

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)