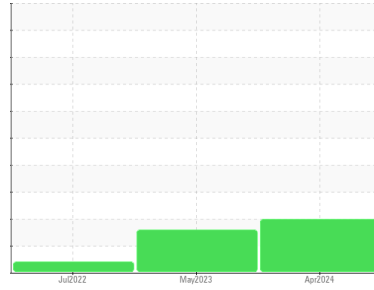




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id

731118

Component

Hydraulic System

Fluid

PETRO CANADA HYDREX MV 46 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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 high amount of particulates present in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0117191	GFL0070386	GFL0050586
Sample Date	Client Info	19 Apr 2024	01 May 2023	26 Jul 2022
Machine Age	hrs	6619	4652	2874
Oil Age	hrs	6619	4652	2874
Oil Changed	Client Info	Not Chngd	Not Chngd	Not Chngd
Sample Status		ABNORMAL	ATTENTION	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	9	3	2
Chromium	ppm ASTM D5185m >10	<1	0	0
Nickel	ppm ASTM D5185m >10	<1	0	0
Titanium	ppm ASTM D5185m	<1	<1	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >10	2	0	0
Lead	ppm ASTM D5185m >10	<1	0	0
Copper	ppm ASTM D5185m >75	2	<1	1
Tin	ppm ASTM D5185m >10	<1	0	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	0	<1
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 0	<1	0	<1
Manganese	ppm ASTM D5185m 1	<1	<1	0
Magnesium	ppm ASTM D5185m 0	5	8	2
Calcium	ppm ASTM D5185m 50	54	37	40
Phosphorus	ppm ASTM D5185m 330	324	255	274
Zinc	ppm ASTM D5185m 430	364	296	334
Sulfur	ppm ASTM D5185m 760	871	548	940

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	4	3	2
Sodium	ppm ASTM D5185m	2	1	0
Potassium	ppm ASTM D5185m >20	<1	1	1

FLUID CLEANLINESS

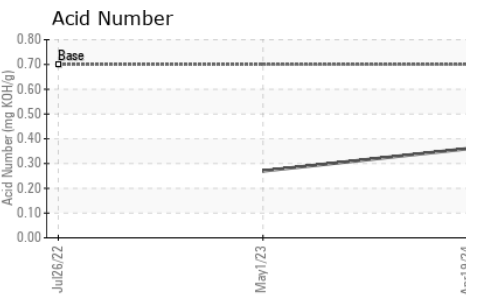
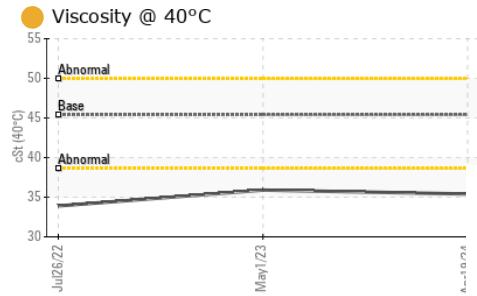
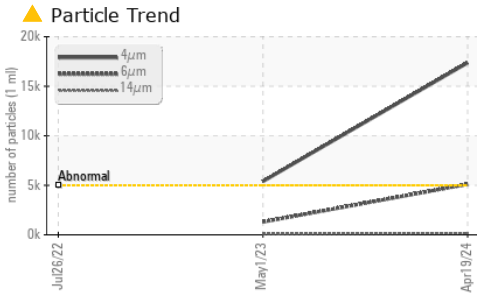
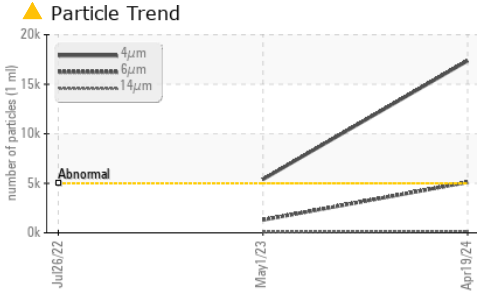
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 17367	● 5386	---
Particles >6µm	ASTM D7647 >1300	▲ 5108	● 1303	---
Particles >14µm	ASTM D7647 >160	▲ 161	61	---
Particles >21µm	ASTM D7647 >40	21	8	---
Particles >38µm	ASTM D7647 >10	0	0	---
Particles >71µm	ASTM D7647 >3	0	0	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/20/15	● 20/18/13	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.70	0.36	0.27	---



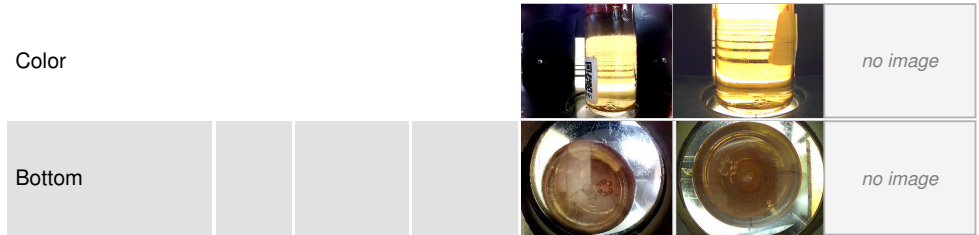
OIL ANALYSIS REPORT



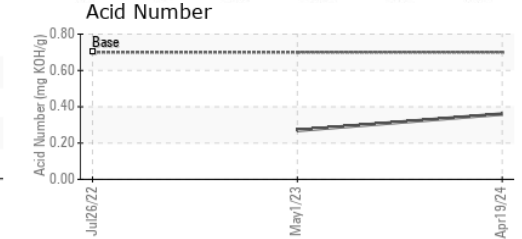
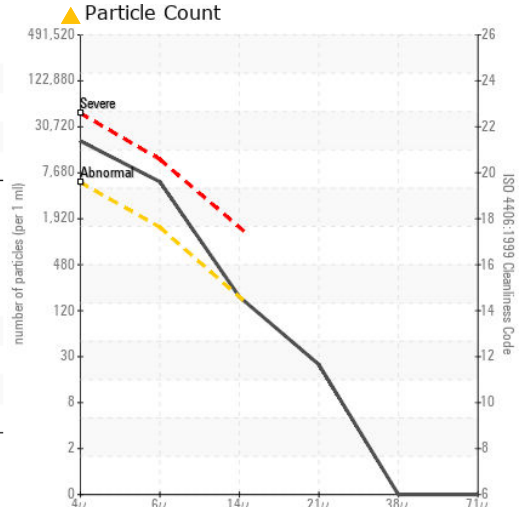
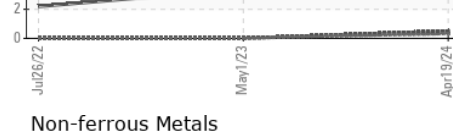
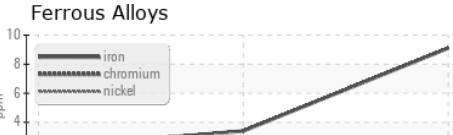
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	35.4	35.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117191
 Lab Number : 06158438
 Unique Number : 10993861
 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)