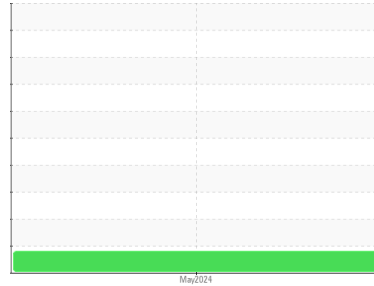




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

**921046**

Component

**Hydraulic System**

Fluid

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

## DIAGNOSIS

### Recommendation

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

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0122836</b>	---	---
Sample Date	Client Info	<b>28 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>8032</b>	---
Oil Age	hrs	Client Info	<b>0</b>	---
Oil Changed	Client Info	<b>Not Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	<b>12</b>	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---
Silver	ppm	ASTM D5185m		<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---
Copper	ppm	ASTM D5185m	>75	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>0</b>	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	---
Molybdenum	ppm	ASTM D5185m	0	<b>2</b>	---
Manganese	ppm	ASTM D5185m	1	<b>0</b>	---
Magnesium	ppm	ASTM D5185m	0	<b>26</b>	---
Calcium	ppm	ASTM D5185m	50	<b>109</b>	---
Phosphorus	ppm	ASTM D5185m	330	<b>361</b>	---
Zinc	ppm	ASTM D5185m	430	<b>452</b>	---
Sulfur	ppm	ASTM D5185m	760	<b>1090</b>	---

## CONTAMINANTS

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

## FLUID CLEANLINESS

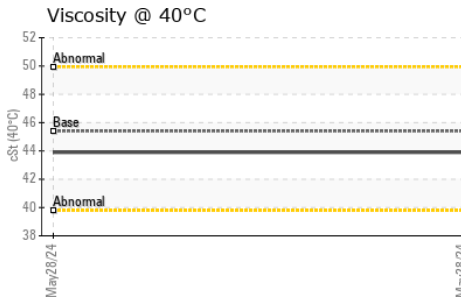
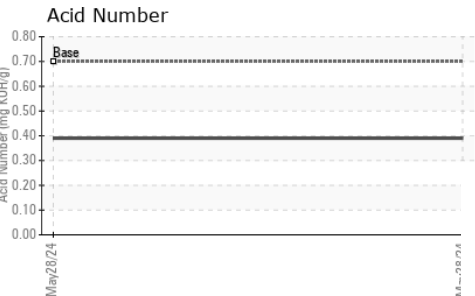
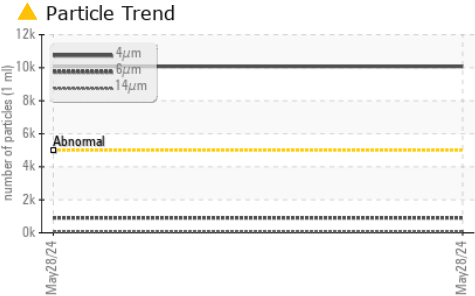
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 10075</b>	---
Particles >6µm	ASTM D7647	>1300	<b>905</b>	---
Particles >14µm	ASTM D7647	>160	<b>71</b>	---
Particles >21µm	ASTM D7647	>40	<b>18</b>	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 21/17/13</b>	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	<b>0.39</b>	---



# OIL ANALYSIS REPORT



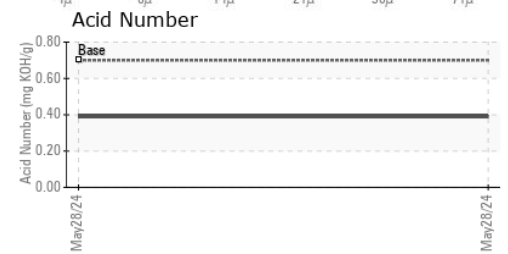
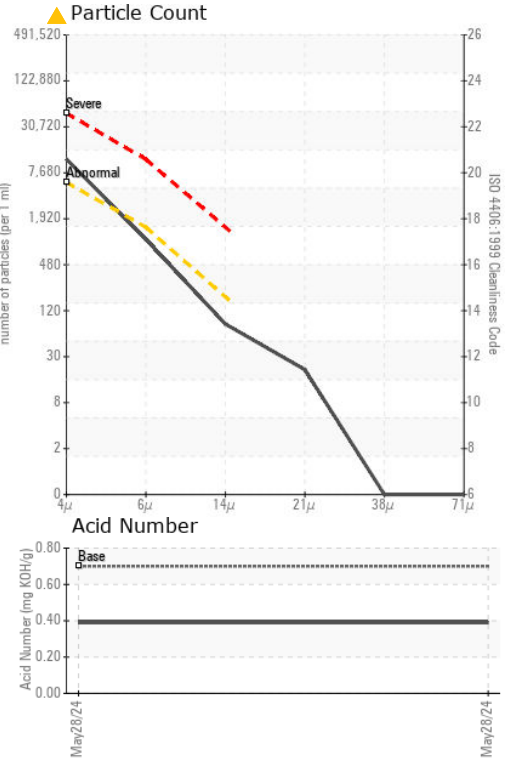
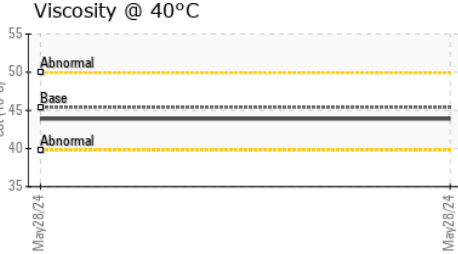
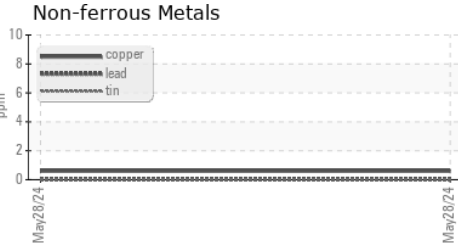
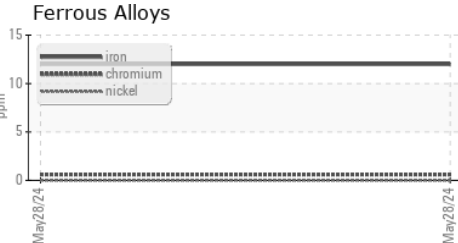
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45.4	43.9	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122836      **Received** : 03 Jun 2024  
**Lab Number** : 06197576      **Tested** : 04 Jun 2024  
**Unique Number** : 11059699      **Diagnosed** : 04 Jun 2024 - Wes Davis  
**Test Package** : FLEET ( Additional Tests : PrtCount )

**GFL Environmental - 837 - Harrison TS**  
 22820 S State Route 291  
 Harrisonville, MO  
 US 64701  
 Contact: JEREMY BROWN  
 jeremyb@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)