



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**921060**

Component

**Hydraulic System**

Fluid

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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	<b>GFL0122925</b>	---	---
Sample Date	Client Info	<b>29 May 2024</b>	---	---
Machine Age	hrs Client Info	<b>7748</b>	---	---
Oil Age	hrs Client Info	<b>6858</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</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>&lt;1</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>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>&lt;1</b>	---	---
Manganese	ppm ASTM D5185m 1	<b>0</b>	---	---
Magnesium	ppm ASTM D5185m 0	<b>6</b>	---	---
Calcium	ppm ASTM D5185m 50	<b>101</b>	---	---
Phosphorus	ppm ASTM D5185m 330	<b>360</b>	---	---
Zinc	ppm ASTM D5185m 430	<b>449</b>	---	---
Sulfur	ppm ASTM D5185m 760	<b>1068</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

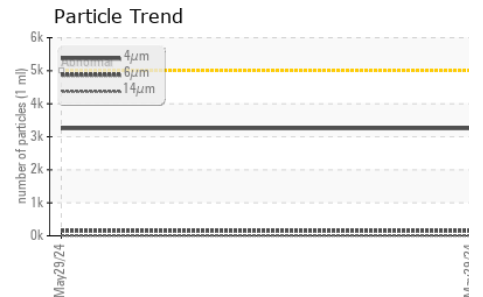
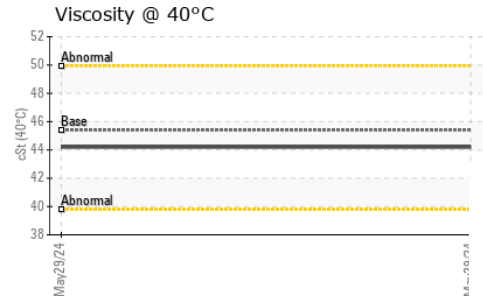
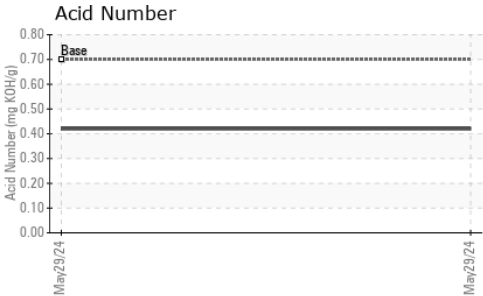
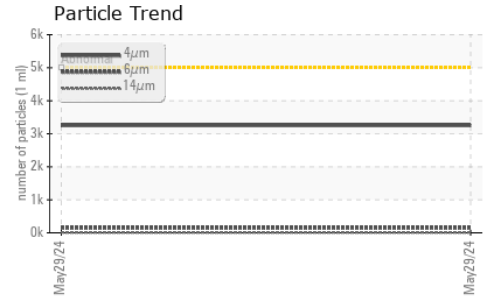
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>3253</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>151</b>	---	---
Particles >14µm	ASTM D7647 >160	<b>9</b>	---	---
Particles >21µm	ASTM D7647 >40	<b>3</b>	---	---
Particles >38µm	ASTM D7647 >10	<b>0</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>19/14/10</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.70	<b>0.42</b>	---	---



# OIL ANALYSIS REPORT



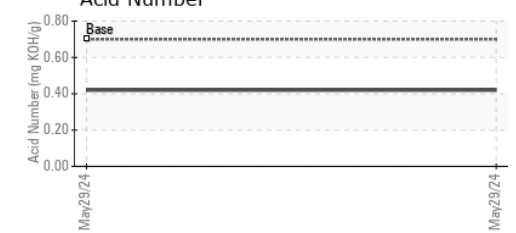
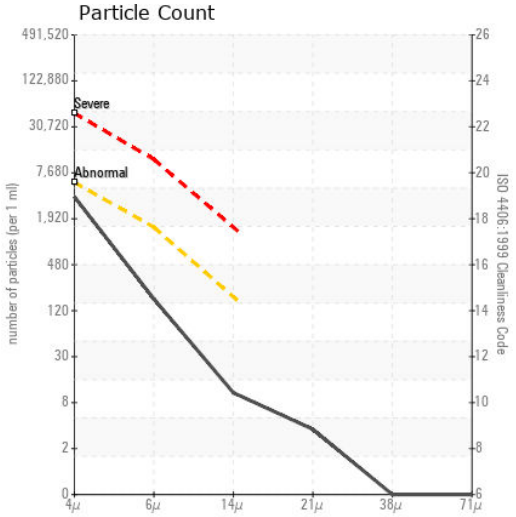
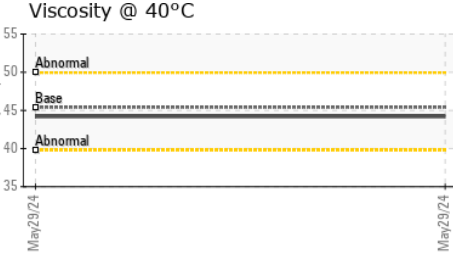
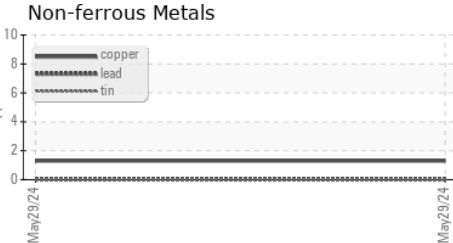
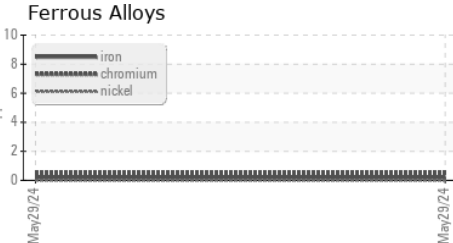
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	<b>44.2</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0122925      **Received** : 03 Jun 2024  
**Lab Number** : 06197577      **Tested** : 04 Jun 2024  
**Unique Number** : 11059700      **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)