



# OIL ANALYSIS REPORT

Machine Id  
**834047**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX MV 46 (--- GAL)**

## Sample Rating Trend



## VISCOSITY



### 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 silt (particulates < 14 microns in size) present in the oil.

#### Fluid Condition

The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0122869</b>	---	---
Sample Date	Client Info		<b>10 Jul 2024</b>	---	---
Machine Age	hrs	Client Info	<b>1903</b>	---	---
Oil Age	hrs	Client Info	<b>1903</b>	---	---
Oil Changed	Client Info		<b>Not Chngd</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 >50	<b>19</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >5	<b>1</b>	---	---
Lead	ppm	ASTM D5185m >4	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >15	<b>1</b>	---	---
Tin	ppm	ASTM D5185m >4	<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>0</b>	---	---
Manganese	ppm	ASTM D5185m 1	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m 0	<b>4</b>	---	---
Calcium	ppm	ASTM D5185m 50	<b>52</b>	---	---
Phosphorus	ppm	ASTM D5185m 330	<b>362</b>	---	---
Zinc	ppm	ASTM D5185m 430	<b>436</b>	---	---
Sulfur	ppm	ASTM D5185m 760	<b>1015</b>	---	---

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>4</b>	---	---
Sodium	ppm	ASTM D5185m	<b>6</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>3</b>	---	---

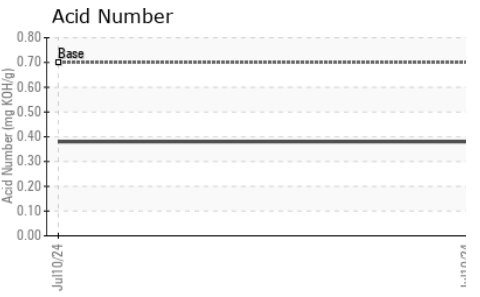
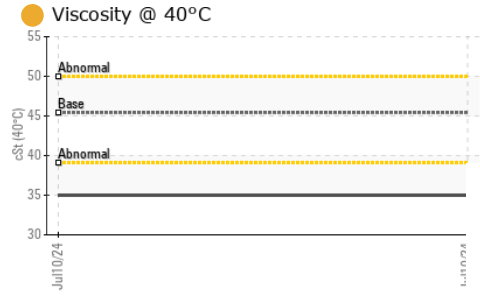
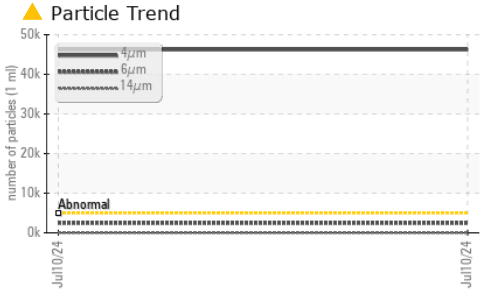
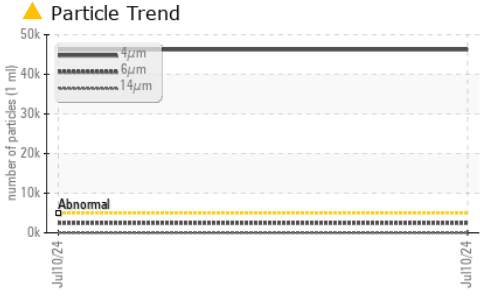
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 46218</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>● 2463</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>14</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>▲ 23/18/11</b>	---	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.70	<b>0.38</b>	---	---

# OIL ANALYSIS REPORT



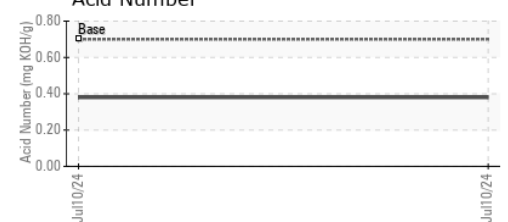
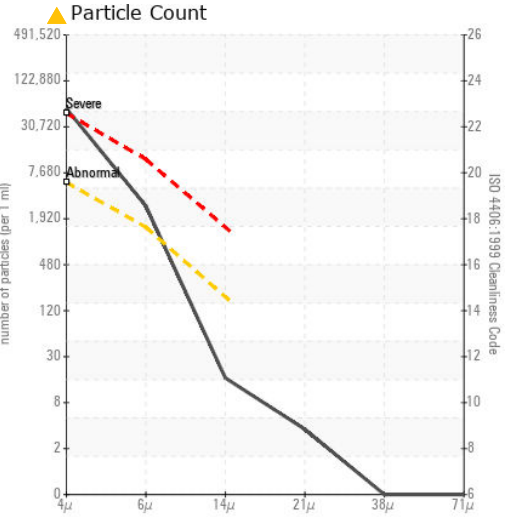
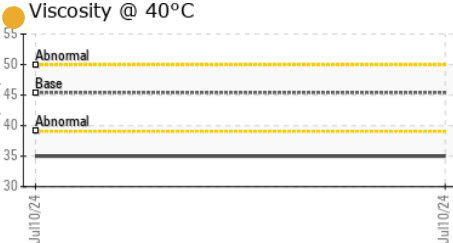
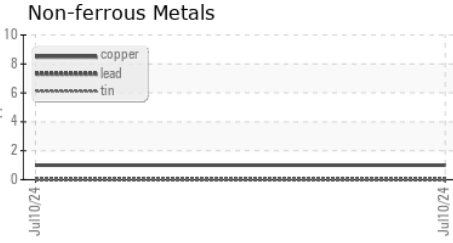
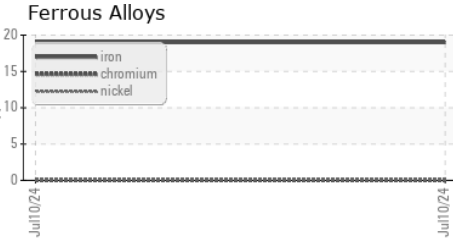
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	35.0	---	---

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.** : GFL0122869      **Received** : 16 Jul 2024  
**Lab Number** : 06238357      **Tested** : 17 Jul 2024  
**Unique Number** : 11127191      **Diagnosed** : 18 Jul 2024 - Don Baldrige  
**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)