



# PROBLEM SUMMARY

Sample Rating Trend



VISCOSITY



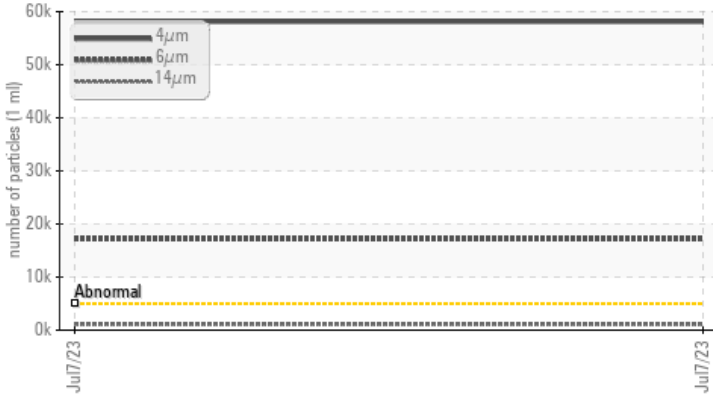
Machine Id  
**731125**

Component  
**Hydraulic System**

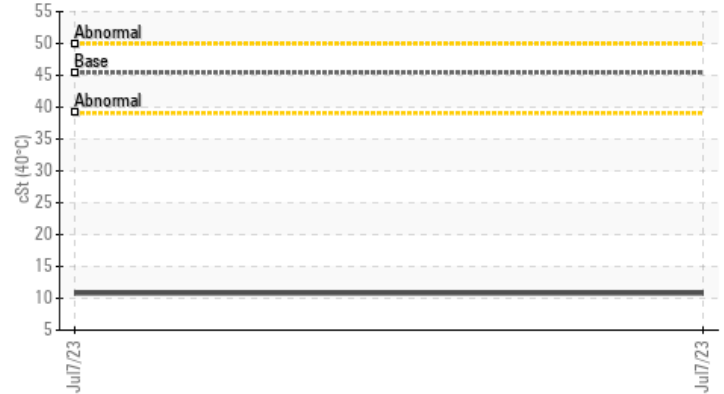
Fluid  
**PETRO CANADA HYDREX MV 46 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



### ▲ Viscosity @ 40°C



## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	---	---
Particles >4µm	ASTM D7647	>5000	▲ <b>58112</b>	---	---
Particles >6µm	ASTM D7647	>1300	▲ <b>17164</b>	---	---
Particles >14µm	ASTM D7647	>160	▲ <b>1086</b>	---	---
Particles >21µm	ASTM D7647	>40	▲ <b>287</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ <b>23/21/17</b>	---	---
Visc @ 40°C	cSt ASTM D445	45.4	▲ <b>10.8</b>	---	---

Customer Id: GFL836  
Sample No.: GFL0083747  
Lab Number: 05896096  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Jonathan Hester +1 919-379-4092 x4092  
[jhester@wearcheckusa.com](mailto:jhester@wearcheckusa.com)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

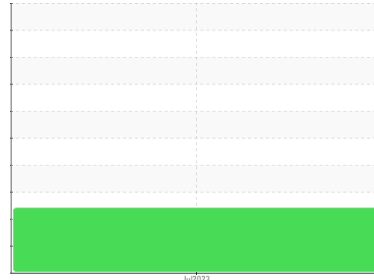
Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id  
**731125**

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 high amount of particulates present in the oil.

### ▲ Fluid Condition

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

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0083747</b>	---	---
Sample Date	Client Info	<b>07 Jul 2023</b>	---	---
Machine Age	hrs	Client Info	<b>5633</b>	---
Oil Age	hrs	Client Info	<b>5633</b>	---
Oil Changed	Client Info	<b>Not Chngd</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>3</b>	---
Chromium	ppm	ASTM D5185m >10	<b>0</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>&lt;1</b>	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	---
Copper	ppm	ASTM D5185m >75	<b>2</b>	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>&lt;1</b>	---
Calcium	ppm	ASTM D5185m 50	<b>40</b>	---
Phosphorus	ppm	ASTM D5185m 330	<b>288</b>	---
Zinc	ppm	ASTM D5185m 430	<b>333</b>	---
Sulfur	ppm	ASTM D5185m 760	<b>919</b>	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>3</b>	---
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	---

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 58112</b>	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 17164</b>	---
Particles >14µm	ASTM D7647	>160	<b>▲ 1086</b>	---
Particles >21µm	ASTM D7647	>40	<b>▲ 287</b>	---
Particles >38µm	ASTM D7647	>10	<b>5</b>	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 23/21/17</b>	---

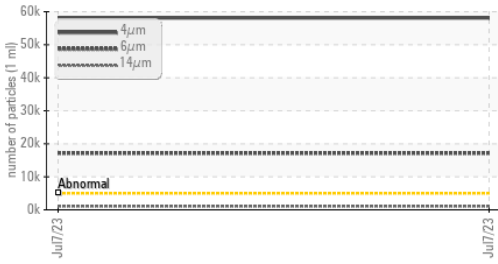
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.70	<b>0.35</b>	---

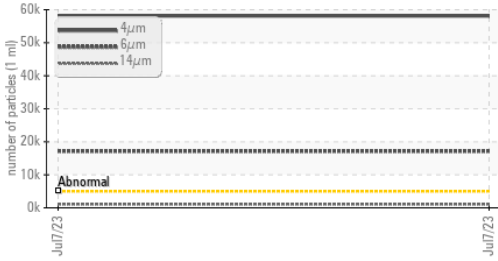


# OIL ANALYSIS REPORT

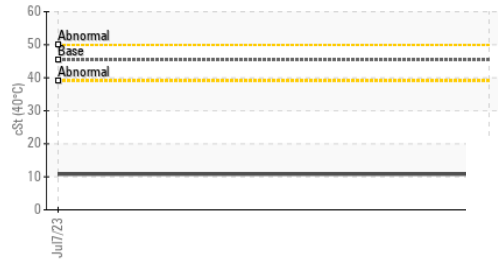
## Particle Trend



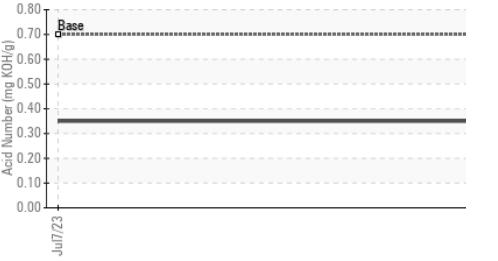
## Particle Trend



## Viscosity @ 40°C



## Acid Number



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	LIGHT	---
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 ▲ 10.8	---	---

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

## GRAPHS

### Ferrous Alloys

### Non-ferrous Metals

### Viscosity @ 40°C

### Particle Count

### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : GFL0083747 Received : 12 Jul 2023  
 Lab Number : 05896096 Diagnosed : 17 Jul 2023  
 Unique Number : 10551906 Diagnostician : Jonathan Hester  
 Test Package : FLEET ( Additional Tests: PrtCount )

GFL Environmental - 836 - Kansas City Hauling  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Robert Hart  
 rhart@gflenv.com  
 T: (580)461-1509  
 F:

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)