



Machine Id  
**731113-310101**  
 Component  
**Hydraulic System**  
 Fluid  
**PETRO CANADA HYDREX MV 46 (--- GAL)**

**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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0124134</b>	GFL0087230	---
Sample Date		Client Info		<b>03 Jul 2024</b>	07 Jul 2023	---
Machine Age	hrs	Client Info		<b>6345</b>	4251	---
Oil Age	hrs	Client Info		<b>0</b>	4251	---
Filter Age	hrs	Client Info		<b>2400</b>	2400	---
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>ATTENTION</b>	ABNORMAL	---

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>4</b>	7	---
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	2	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m	>75	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

**CONTAMINATION**

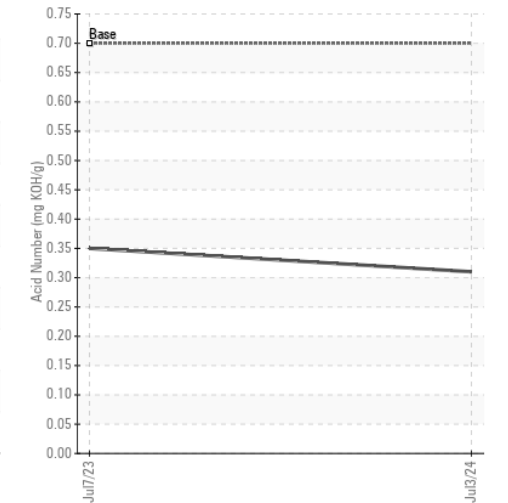
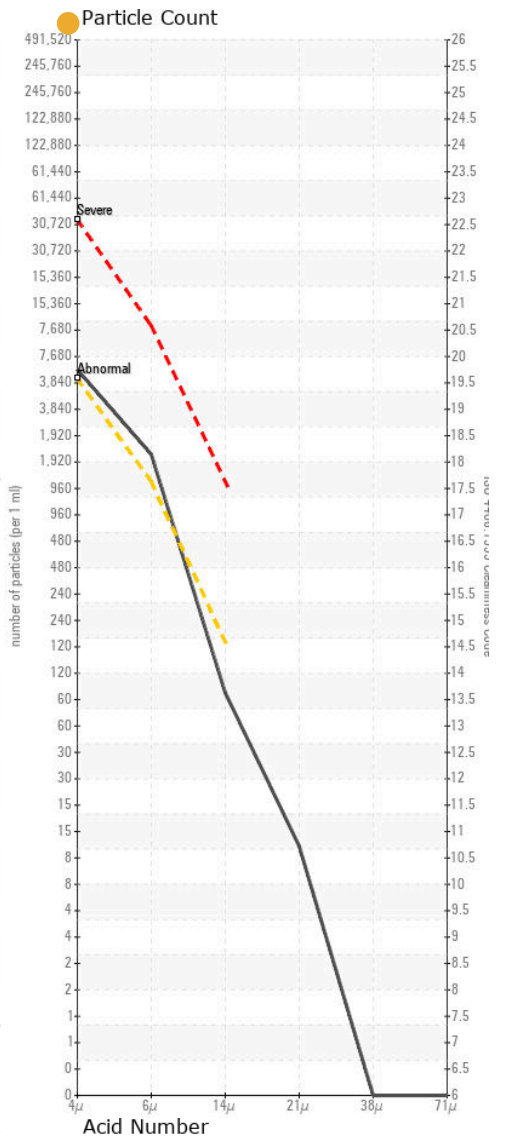
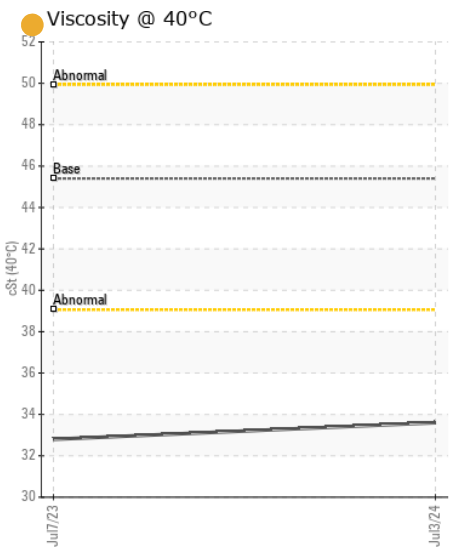
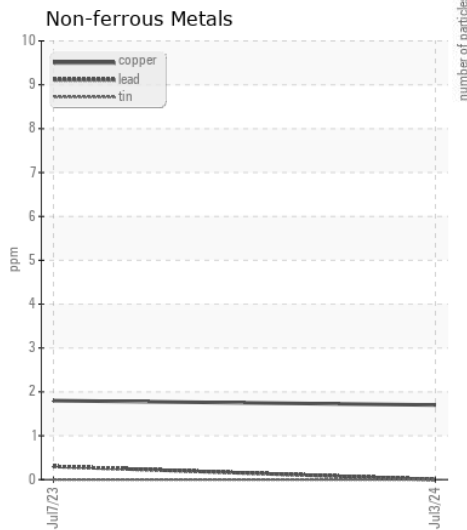
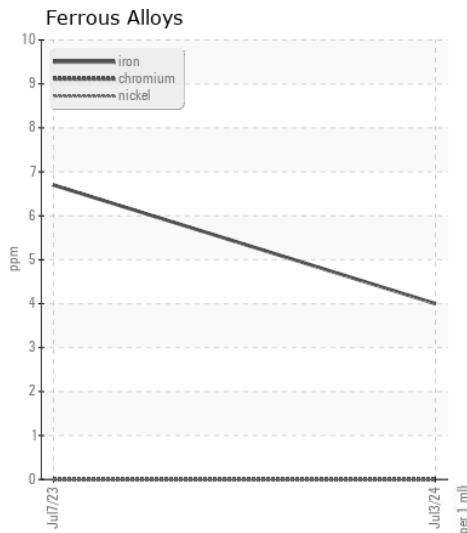
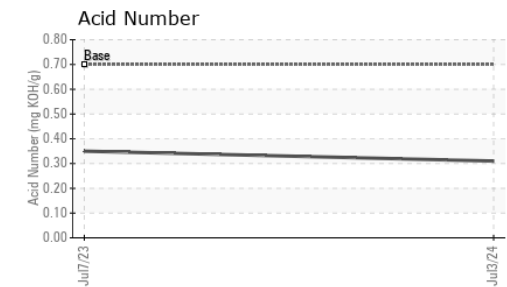
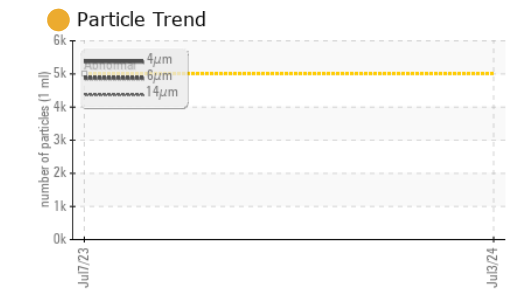
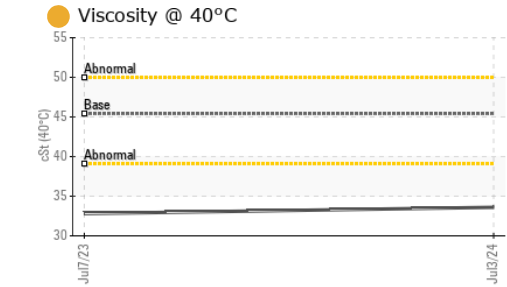
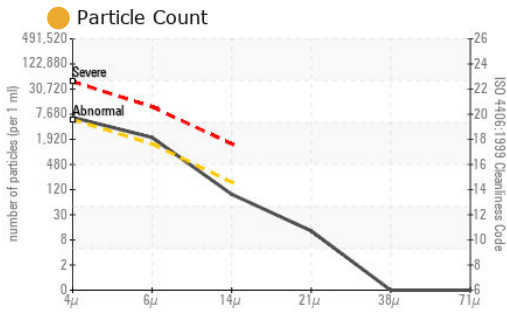
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	8	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	4	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647	>5000	<b>5625</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>1857</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>82</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>11</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>20/18/14</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	● HAZY	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

**FLUID CONDITION**

Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<b>2</b>	2	---
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	1	<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185m	0	<b>&lt;1</b>	2	---
Calcium	ppm	ASTM D5185m	50	<b>37</b>	50	---
Phosphorus	ppm	ASTM D5185m	330	<b>253</b>	291	---
Zinc	ppm	ASTM D5185m	430	<b>292</b>	351	---
Sulfur	ppm	ASTM D5185m	760	<b>820</b>	976	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	<b>0.31</b>	0.35	---
Visc @ 40°C	cSt	ASTM D445	45.4	<b>33.6</b>	● 32.8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0124134

Lab Number : 06230089

Unique Number : 11113582

Test Package : FLEET ( Additional Tests: PrtCount )

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 09 Jul 2024 - Don Baldrige

GFL Environmental - 836 - Kansas City Hauling

7801 East Truman Road

Kansas City, MO

US 64126

Contact: Loyce Stewart

loyce.stewart@gflenv.com

T:

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)