



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>ATTENTION</b>
FLUID CONDITION	<b>ATTENTION</b>

Machine Id  
**731119**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX MV 46 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120143</b>	GFL0083730	GFL0050590
Sample Date		Client Info		<b>24 May 2024</b>	06 Jun 2023	25 Jul 2022
Machine Age	hrs	Client Info		<b>7526</b>	5704	3625
Oil Age	hrs	Client Info		<b>0</b>	5704	3625
Filter Age	hrs	Client Info		<b>2400</b>	2400	1350
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>7</b>	5	3
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>75	<b>3</b>	2	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

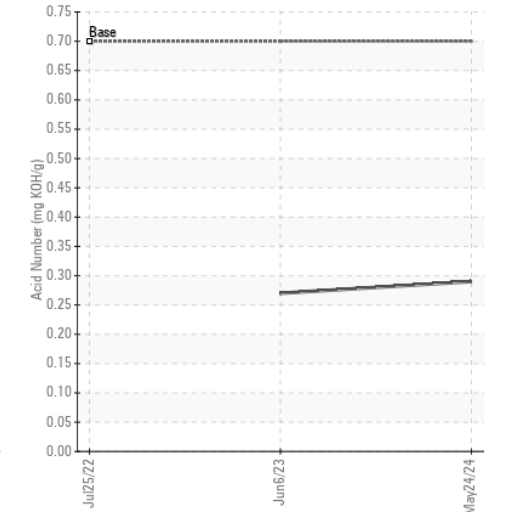
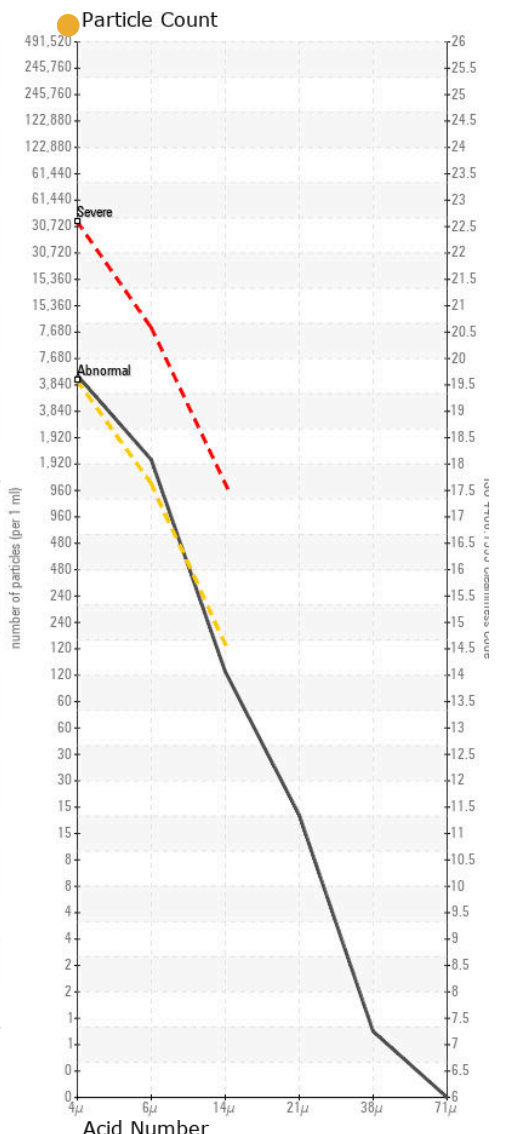
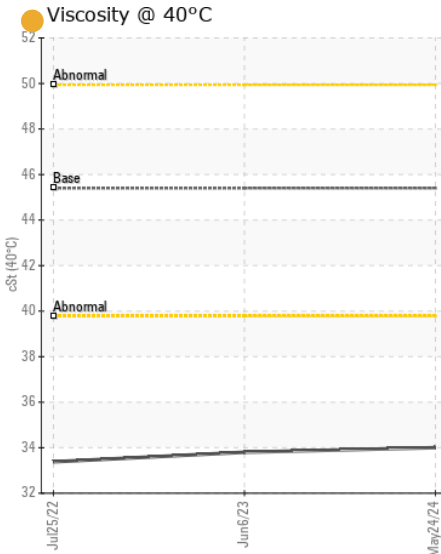
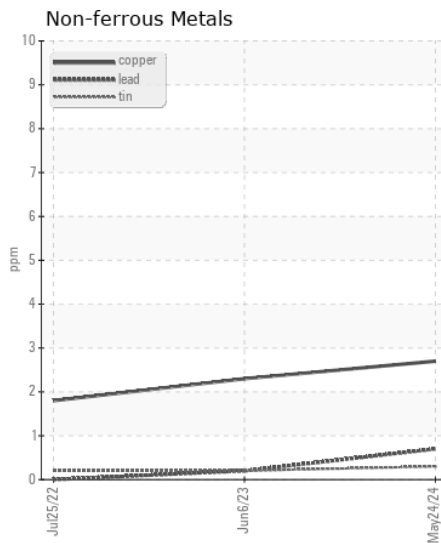
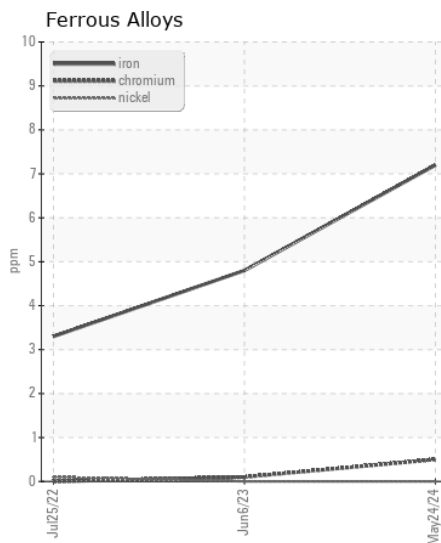
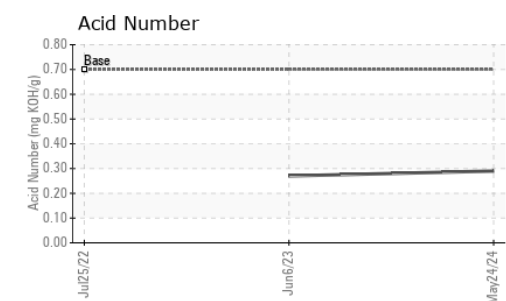
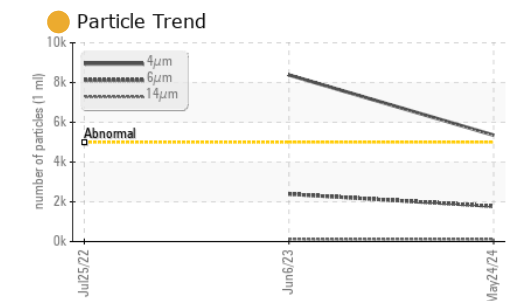
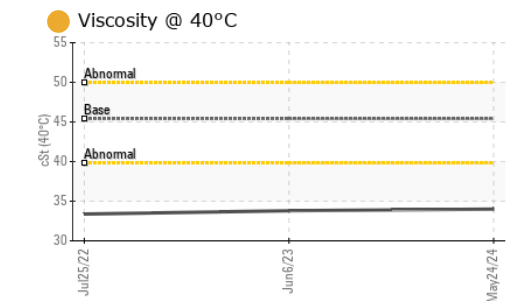
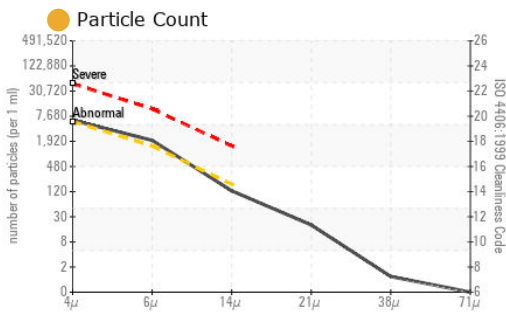
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>5354</b>	8381	---
Particles >6µm		ASTM D7647	>1300	<b>1776</b>	2390	---
Particles >14µm		ASTM D7647	>160	<b>111</b>	112	---
Particles >21µm		ASTM D7647	>40	<b>17</b>	17	---
Particles >38µm		ASTM D7647	>10	<b>1</b>	1	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>20/18/14</b>	20/18/14	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	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>4</b>	0	0
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	<1	0
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m	0	<b>3</b>	3	<1
Calcium	ppm	ASTM D5185m	50	<b>53</b>	46	35
Phosphorus	ppm	ASTM D5185m	330	<b>302</b>	284	280
Zinc	ppm	ASTM D5185m	430	<b>352</b>	353	321
Sulfur	ppm	ASTM D5185m	760	<b>982</b>	946	921
Acid Number (AN)	mg KOH/g	ASTM D8045	0.70	<b>0.29</b>	0.27	---
Visc @ 40°C	cSt	ASTM D445	45.4	<b>34.0</b>	33.8	33.38



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0120143 **Received** : 29 May 2024  
**Lab Number** : 06193935 **Tested** : 30 May 2024  
**Unique Number** : 11056058 **Diagnosed** : 31 May 2024 - Angela Borella  
**Test Package** : FLEET ( Additional Tests: PrtCount )

**GFL Environmental - 836 - Kansas City Hauling**  
 7801 East Truman Road  
 Kansas City, MO  
 US 64126  
 Contact: Loyce Stewart  
 loyce.stewart@gflenv.com

Certificate L2367  
 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)