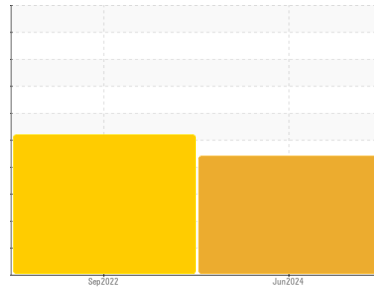




# OIL ANALYSIS REPORT

## Sample Rating Trend



VISUAL METAL



Machine Id  
**411037**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX MV 32 (--- GAL)**

## DIAGNOSIS

### Recommendation

Check seals and/or filters for points of contaminant entry. We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. The fluid was specified as PETRO CANADA HYDREX MV 32, however, a fluid match indicates that this fluid is SAE 75W80 Tractor TDH Fluid. Please confirm the oil type and grade on your next sample.

### Wear

Light concentration of visible metal present.

### Contamination

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

### Fluid Condition

Viscosity of sample indicates oil is within SAE 75W80 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported.

Particle Filter (Magn: 100 x)



## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0119497</b>	GFL0046754	---
Sample Date	Client Info		<b>10 Jun 2024</b>	14 Sep 2022	---
Machine Age	hrs	Client Info	<b>3783</b>	38082	---
Oil Age	hrs	Client Info	<b>3783</b>	20513	---
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	---
Sample Status			<b>SEVERE</b>	SEVERE	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	<b>11</b>	8	---
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>5	<b>2</b>	2	---
Lead	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>15	<b>8</b>	0	---
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>67</b>	109	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	1	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	0	<b>8</b>	13	---
Calcium	ppm	ASTM D5185(m)	50	<b>2080</b>	3648	---
Phosphorus	ppm	ASTM D5185(m)	330	<b>776</b>	1189	---
Zinc	ppm	ASTM D5185(m)	430	<b>917</b>	1267	---
Sulfur	ppm	ASTM D5185(m)	760	<b>1968</b>	2881	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

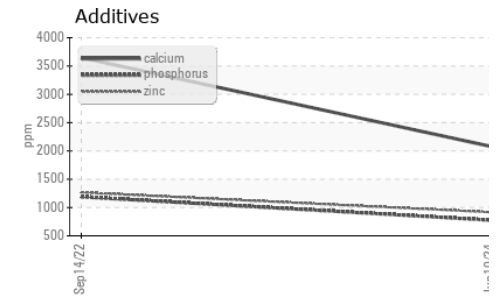
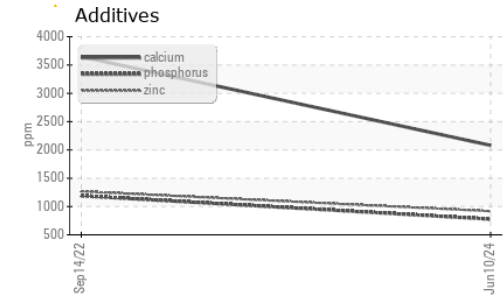
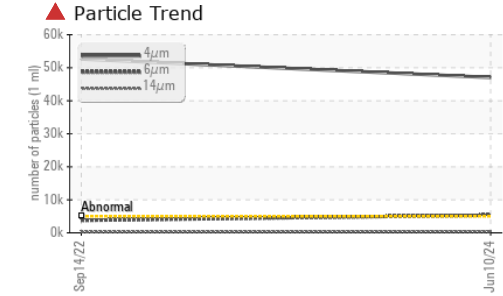
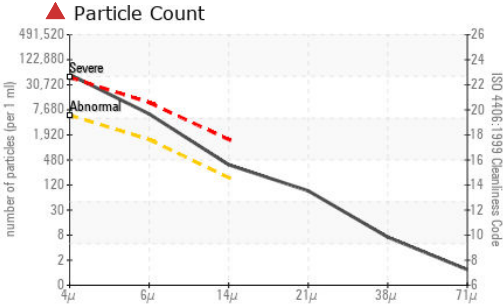
## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	<b>4</b>	9	---
Sodium	ppm	ASTM D5185(m)		<b>2</b>	<1	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	---

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 47047</b>	▲ 52637	---
Particles >6µm	ASTM D7647	>1300	<b>▲ 5336</b>	▲ 3783	---
Particles >14µm	ASTM D7647	>160	<b>▲ 324</b>	▲ 208	---
Particles >21µm	ASTM D7647	>40	<b>▲ 77</b>	▲ 69	---
Particles >38µm	ASTM D7647	>10	<b>6</b>	3	---
Particles >71µm	ASTM D7647	>3	<b>1</b>	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 23/20/16</b>	▲ 23/19/15	---

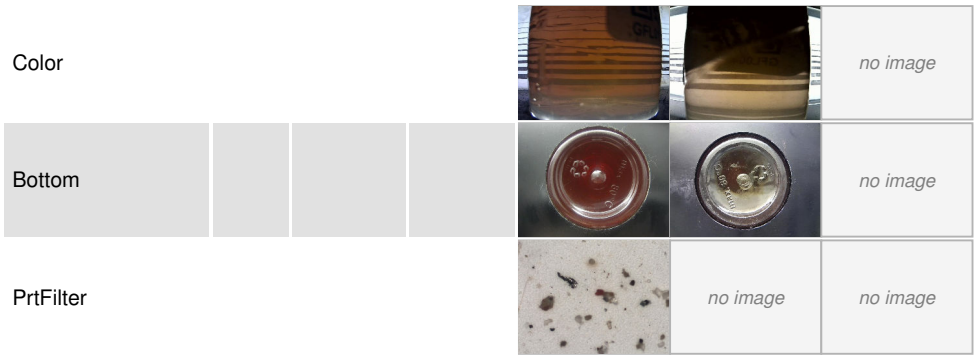
# OIL ANALYSIS REPORT



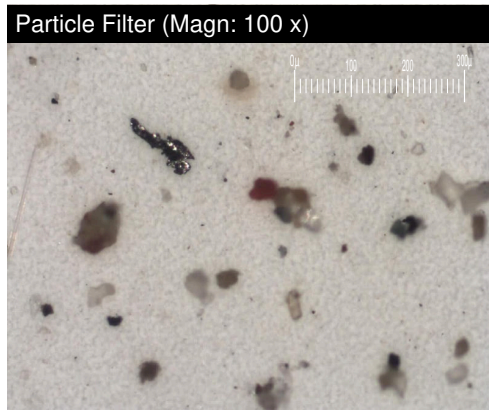
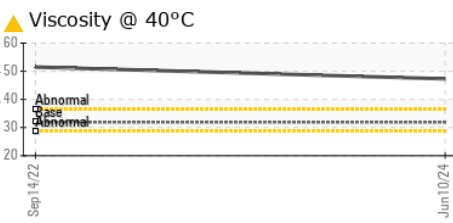
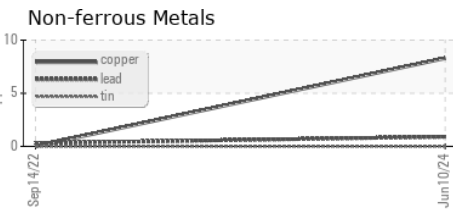
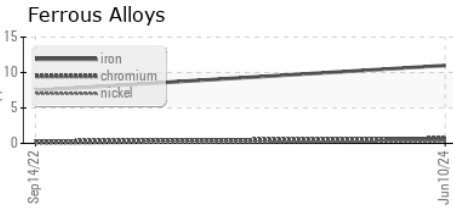
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	▲ 47.3	▲ 51.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9     **GFL Environmental - 582 - Nanaimo**  
**Sample No.** : GFL0119497     **Received** : 02 Jul 2024     3469 Aqua Terra Rd.,  
**Lab Number** : 02644919     **Tested** : 03 Jul 2024     Cassidy, BC  
**Unique Number** : 5802458     **Diagnosed** : 04 Jul 2024 - Kevin Marson     CA V0R 1H0  
**Test Package** : MOB 1 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter )Contact: GFL Tech  
wcgfldemo@gmail.com

To discuss this sample report, contact Customer Service at 1-800-268-2131. T:  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F:  
 Validity of results and interpretation are based on the sample and information as supplied.