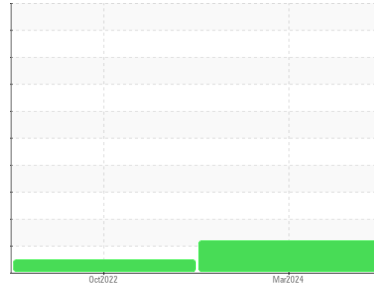




# OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id  
**TCM-2**

Component  
**Gearbox**

Fluid  
**PETRO CANADA PURITY FG EP GEAR OIL 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within ISO 460 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0811923</b>	WC0750972	---
Sample Date	Client Info		<b>24 Mar 2024</b>	25 Oct 2022	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>Not Changed</b>	N/A	---
Sample Status			<b>ABNORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>83</b>	17	---
Iron	ppm	ASTM D5185(m) >200	<b>0</b>	18	---
Chromium	ppm	ASTM D5185(m) >15	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m) >15	<b>0</b>	0	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >25	<b>0</b>	<1	---
Lead	ppm	ASTM D5185(m) >100	<b>0</b>	5	---
Copper	ppm	ASTM D5185(m) >200	<b>0</b>	128	---
Tin	ppm	ASTM D5185(m) >25	<b>0</b>	<1	---
Antimony	ppm	ASTM D5185(m) >5	<b>0</b>	<1	---
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)	<b>&lt;1</b>	1	---
Barium	ppm	ASTM D5185(m)	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	<b>0</b>	4	---
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	1	---
Calcium	ppm	ASTM D5185(m)	<b>4</b>	3	---
Phosphorus	ppm	ASTM D5185(m) 135	<b>&lt;1</b>	339	---
Zinc	ppm	ASTM D5185(m)	<b>2</b>	78	---
Sulfur	ppm	ASTM D5185(m) 660	<b>90</b>	441	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	4	---

## CONTAMINANTS

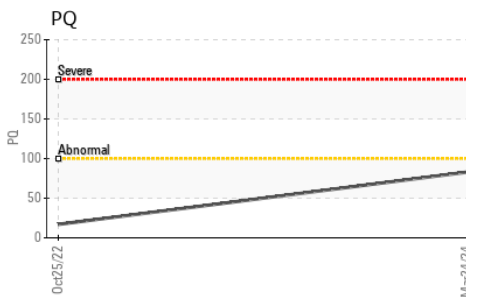
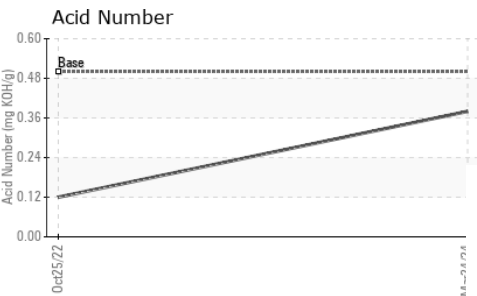
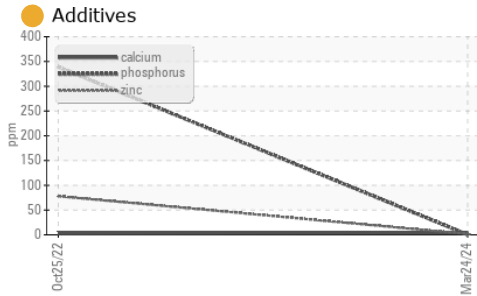
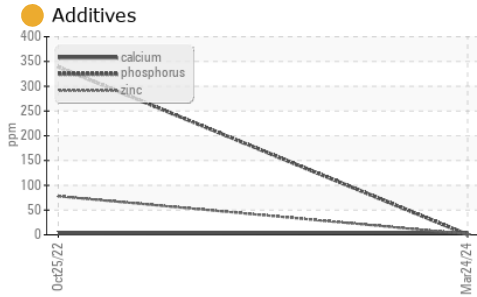
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>0</b>	5	---
Sodium	ppm	ASTM D5185(m)	<b>1</b>	1	---
Potassium	ppm	ASTM D5185(m) >20	<b>0</b>	<1	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.50	<b>0.38</b>	0.12	---



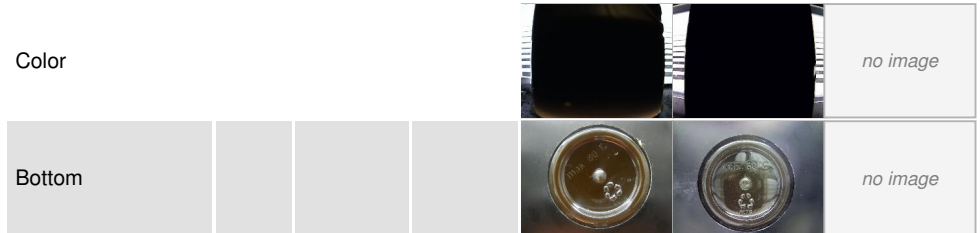
# OIL ANALYSIS REPORT



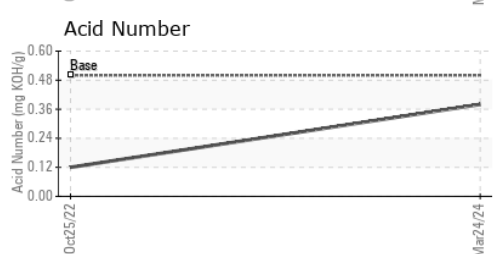
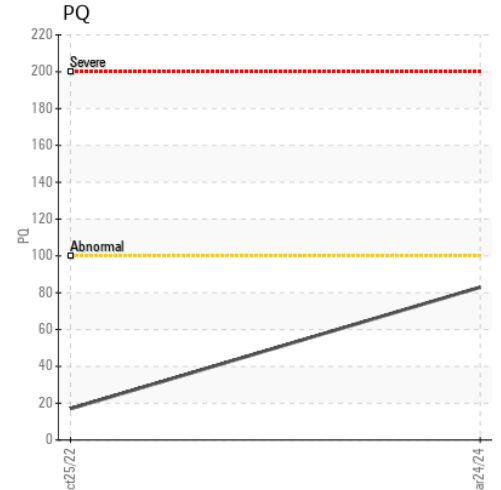
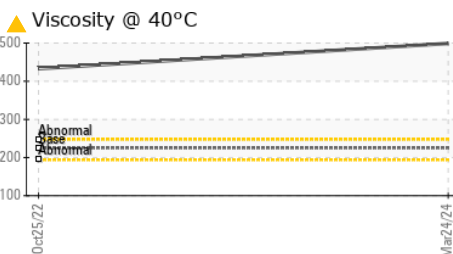
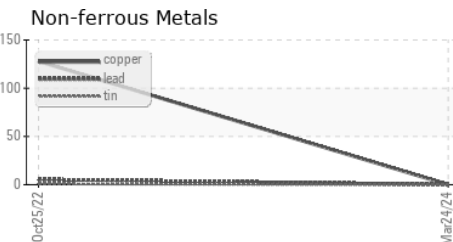
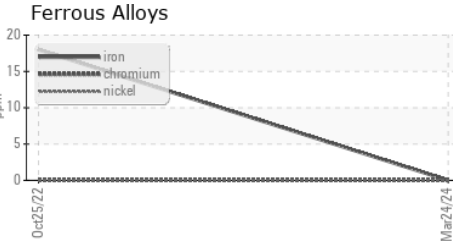
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	VLITE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	225.1 ▲ 499	433	---

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0811923 **Received** : 02 Apr 2024  
**Lab Number** : 02626179 **Tested** : 03 Apr 2024  
**Unique Number** : 5759311 **Diagnosed** : 03 Apr 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

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

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