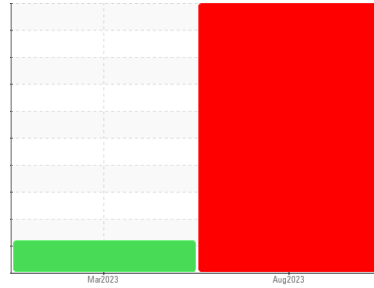




# PROBLEM SUMMARY

Sample Rating Trend

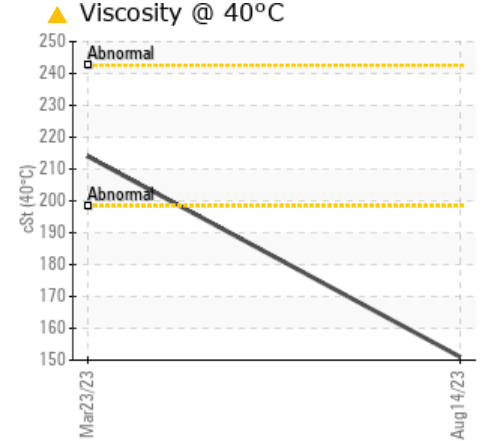
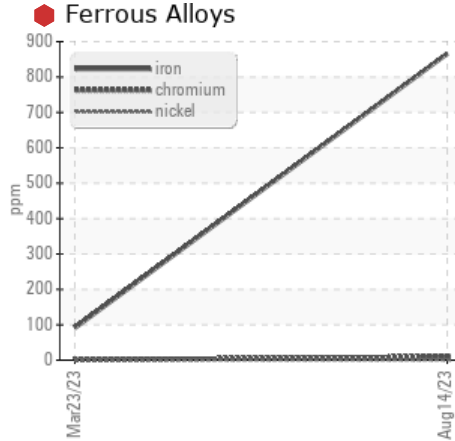
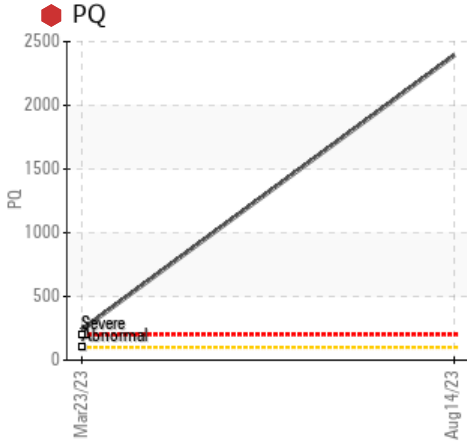


WEAR



Area  
**[89337]**  
 Machine Id  
**SCAN 3**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA 220 (6 LTR)**

## COMPONENT CONDITION SUMMARY



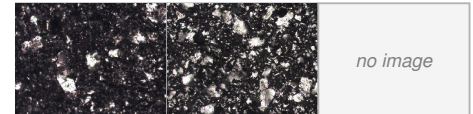
## RECOMMENDATION

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	ABNORMAL	---
PQ		ASTM D8184*	2393	239	---
Iron	ppm	ASTM D5185(m) >200	866	91	---
Chromium	ppm	ASTM D5185(m) >10	10	<1	---
White Metal	scalar	Visual* NONE	MODER	LIGHT	---
Visc @ 40°C	cSt	ASTM D7279(m)	151	214	---

PrtFilter



Customer Id: GRA685CAM  
 Sample No.: WC0829262  
 Lab Number: 02576274  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
[Kevin.Marson@wearcheck.com](mailto:Kevin.Marson@wearcheck.com)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the component make and model with your next sample.
Check For Visual Metal	---	---	?	We advise that you check for visible metal particles in the oil.

## HISTORICAL DIAGNOSIS

**23 Mar 2023 Diag: Kevin Marson**

### VISUAL METAL



We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Moderate concentration of visible metal present. Gear wear is indicated. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**[89337]**  
 Machine Id  
**SCAN 3**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA 220 (6 LTR)**

## DIAGNOSIS

### Recommendation

We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

### Wear

Iron ppm levels are severe. PQ PQ levels are severe. Chromium ppm levels are abnormal. Moderate concentration of visible metal present. Gear wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0829262</b>	WC0789520	---
Sample Date	Client Info		<b>14 Aug 2023</b>	23 Mar 2023	---
Machine Age	mths	Client Info	<b>0</b>	0	---
Oil Age	mths	Client Info	<b>7</b>	2	---
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	---
Sample Status			<b>SEVERE</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>2393</b>	239	---
Iron	ppm	ASTM D5185(m) >200	<b>866</b>	91	---
Chromium	ppm	ASTM D5185(m) >10	<b>10</b>	<1	---
Nickel	ppm	ASTM D5185(m) >10	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m) >25	<b>&lt;1</b>	0	---
Lead	ppm	ASTM D5185(m) >50	<b>0</b>	0	---
Copper	ppm	ASTM D5185(m) >200	<b>2</b>	<1	---
Tin	ppm	ASTM D5185(m) >10	<b>0</b>	0	---
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>1</b>	2	---
Barium	ppm	ASTM D5185(m)	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)	<b>0</b>	0	---
Manganese	ppm	ASTM D5185(m)	<b>8</b>	<1	---
Magnesium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Calcium	ppm	ASTM D5185(m)	<b>2</b>	1	---
Phosphorus	ppm	ASTM D5185(m)	<b>215</b>	497	---
Zinc	ppm	ASTM D5185(m)	<b>6</b>	4	---
Sulfur	ppm	ASTM D5185(m)	<b>709</b>	769	---
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---

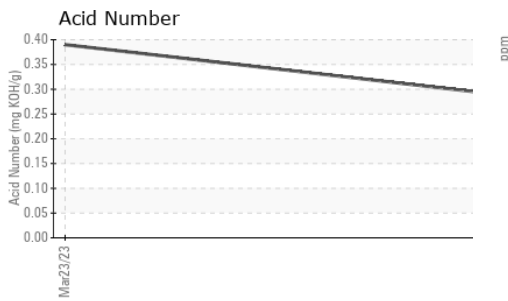
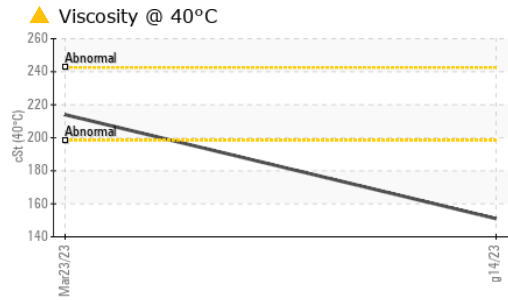
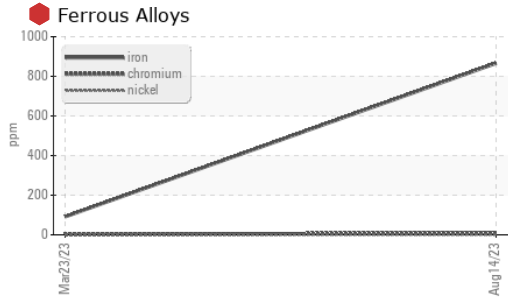
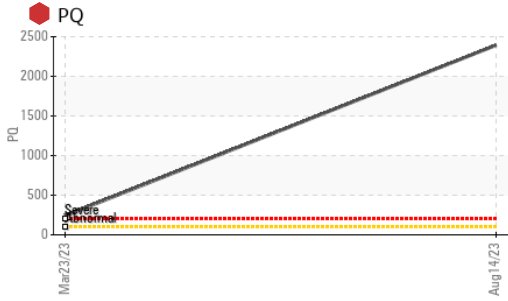
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >50	<b>7</b>	2	---
Sodium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	---
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	<b>0.29</b>	0.39	---

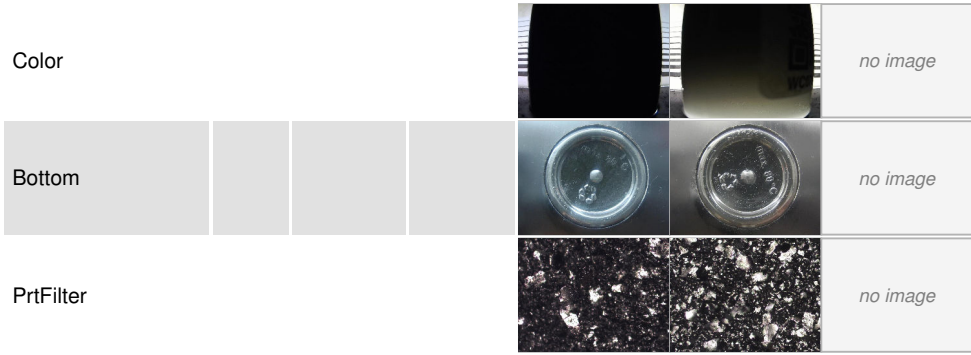
# OIL ANALYSIS REPORT



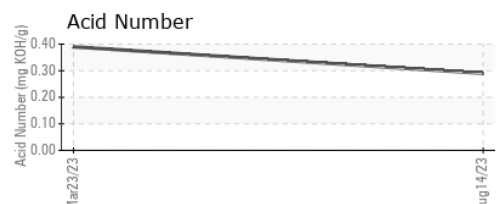
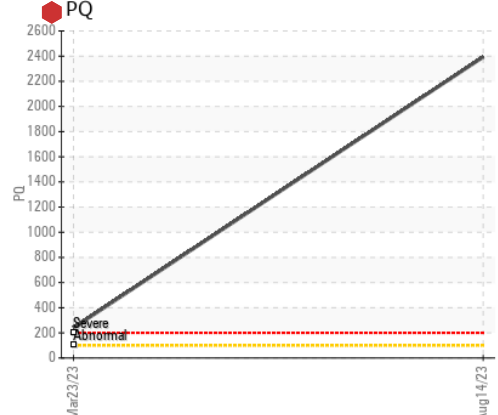
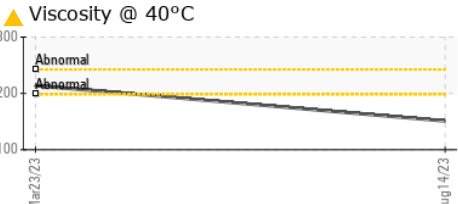
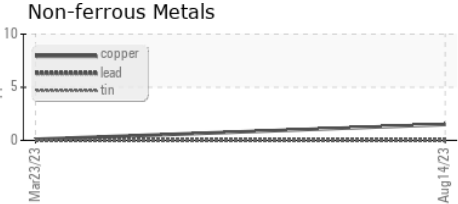
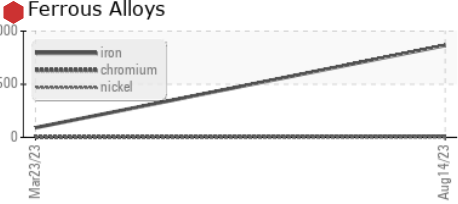
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ MODER	▲ LIGHT
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	LIGHT	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	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)	▲ 151	214	---

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.** : WC0829262      **Received** : 16 Aug 2023  
**Lab Number** : 02576274      **Diagnosed** : 17 Aug 2023  
**Unique Number** : 5629334      **Diagnostician** : Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: Bottom, BottomAnalysis, FilterPatch )

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.

**GRAND RIVER FOODS**  
 190 VONDRAU DRIVE  
 CAMBRIDGE, ON  
 CA N3E 1B8  
 Contact: Dan Jean-Marie  
 djeanmarie@grandriverfoods.com  
 T: (519)653-3577  
 F: