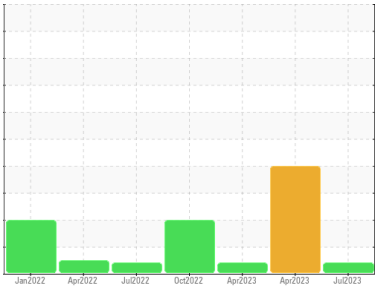
OIL DIAGNOSTICS

# PROBLEM SUMMARY

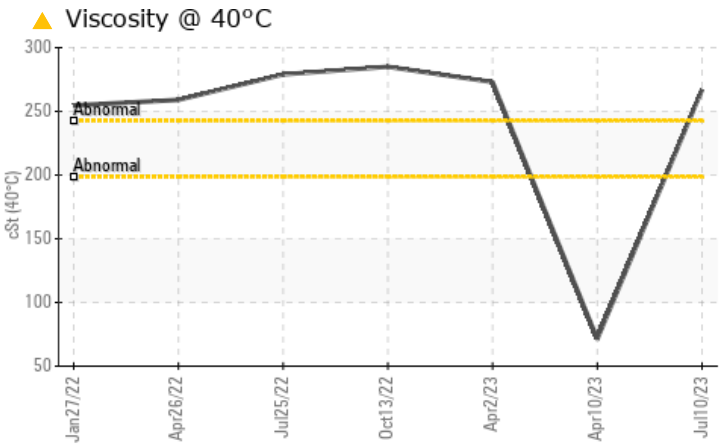
Sample Rating Trend




**VISCOSITY**

Area
**[98272645]**
Machine Id
**KR-GR-003237 - AGITATOR (S/N INJECT B - 11513039)**
Component
**Gearbox**
Fluid
**PETRO CANADA 220 (6 QTS)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

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

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | ATTENTION | ATTENTION | ATTENTION |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | ▲ 267 | ▲ 71.4 | ▲ 273 |

**Customer Id:** KRAKIR
**Sample No.:** PCA0099347
**Lab Number:** 05895428
**Test Package:** IND 1

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Don Baldridge +1
don.b505@comcast.net

*To change component or sample information:*
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

**10 Apr 2023 Diag: Jonathan Hester**

**WATER**

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Appearance is unacceptable There is a trace of moisture present in the oil. The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

**view report**

**02 Apr 2023 Diag: Jonathan Hester**

**VISCOSITY**

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.

**view report**

**13 Oct 2022 Diag: Jonathan Hester**

**WATER**

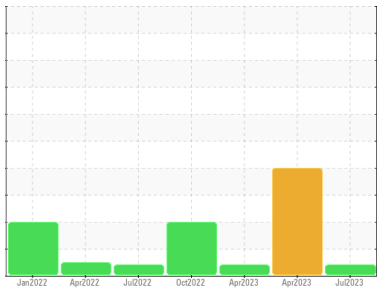
No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a light concentration of water present in the oil. Viscosity of sample indicates oil is within ISO 320 range, advise investigate. Confirm oil type.

**view report**

OIL DIAGNOSTICS

# OIL ANALYSIS REPORT

Sample Rating Trend




**VISCOSITY**

Area
**[98272645]**
Machine Id
**KR-GR-003237 - AGITATOR (S/N INJECT B - 11513039)**
Component
**Gearbox**
Fluid
**PETRO CANADA 220 (6 QTS)**

## DIAGNOSIS

**▲ Recommendation**

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

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the oil.

**▲ Fluid Condition**

The oil viscosity is higher than normal. Confirm oil type. The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PCA0099347** | PCA0096599 | PCA0094736 |
| Sample Date | | Client Info | | **10 Jul 2023** | 10 Apr 2023 | 02 Apr 2023 |
| Machine Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Age | hrs | Client Info | | **0** | 0 | 0 |
| Oil Changed | | Client Info | | **N/A** | N/A | N/A |
| Sample Status | | | | **ATTENTION** | ATTENTION | ATTENTION |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >200 | **4** | 4 | 0 |
| Chromium | ppm | ASTM D5185m | >15 | **0** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >15 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | **<1** | 0 | 0 |
| Lead | ppm | ASTM D5185m | >100 | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >200 | **0** | 2 | <1 |
| Tin | ppm | ASTM D5185m | >25 | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

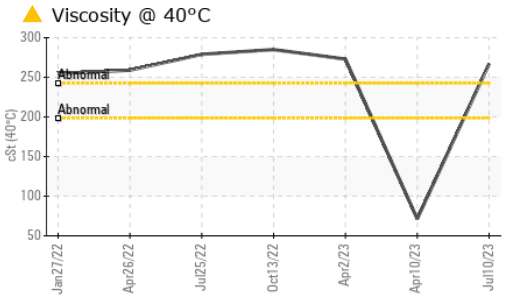
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **0** | 0 | 1 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | <1 | 2 |
| Manganese | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | | **0** | 1 | 0 |
| Calcium | ppm | ASTM D5185m | | **8** | ▲ 28 | 5 |
| Phosphorus | ppm | ASTM D5185m | | **299** | 468 | 303 |
| Zinc | ppm | ASTM D5185m | | **0** | ▲ 194 | 2 |
| Sulfur | ppm | ASTM D5185m | | **13423** | ▲ 1837 | 10432 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >50 | **1** | 4 | 3 |
| Sodium | ppm | ASTM D5185m | | **2** | 4 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | <1 | 0 |

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Appearance | scalar | *Visual | NORML | **NORML** | ▲ HAZY | NORML |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | **NEG** | 0.2% | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

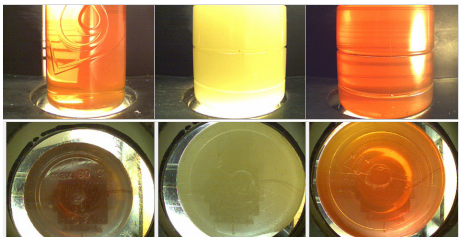
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | | ▲ **267** | ▲ 71.4 | ▲ 273 |

# OIL ANALYSIS REPORT

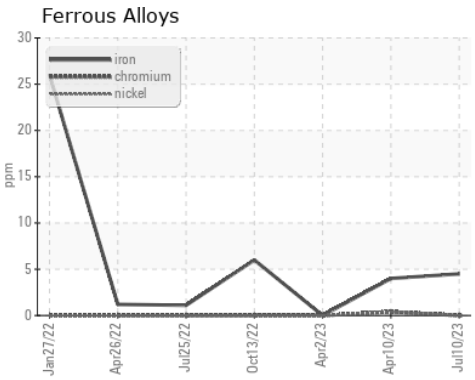


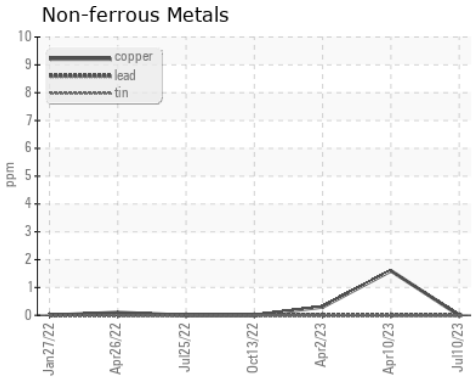

## SAMPLE IMAGES

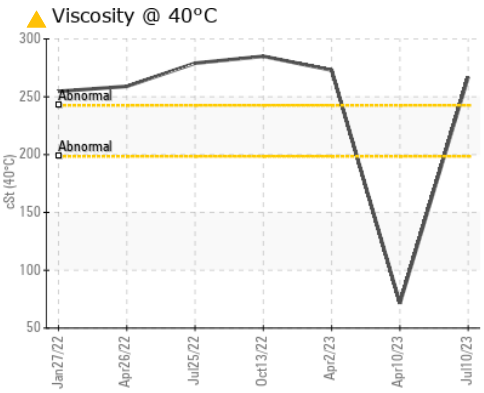
| | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |



## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : PCA0099347
**Lab Number** : 05895428
**Unique Number** : 10551238
**Test Package** : IND 1

**Received** : 11 Jul 2023
**Diagnosed** : 13 Jul 2023
**Diagnostician** : Don Baldridge

*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)*

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