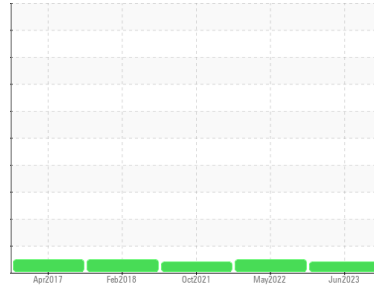


# PROBLEM SUMMARY

Area  
**LINE 3**  
 Machine Id  
**[LINE 3] L3 SAPAL 11 L3 SAPAL 11**  
 Component  
**Main Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG EP GEAR OIL 220 (35 LTR)**

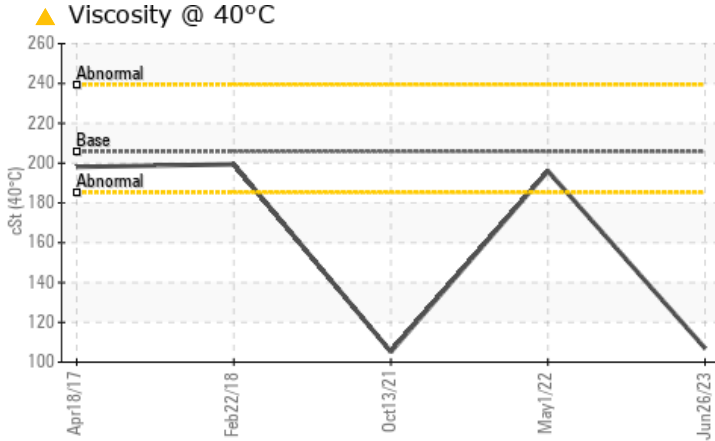
Sample Rating Trend



## VISCOSITY



### COMPONENT CONDITION SUMMARY



### RECOMMENDATION

Resample at the next service interval to monitor.

### PROBLEMATIC TEST RESULTS

| Sample Status |     |           |       | ATTENTION | NORMAL | ATTENTION |
|---------------|-----|-----------|-------|-----------|--------|-----------|
| Visc @ 40°C   | cSt | ASTM D445 | 205.8 | ▲ 107     | 196    | ▲ 105.2   |

Customer Id: HERHER  
 Sample No.: PCA0098842  
 Lab Number: 05883457  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Angela Borella +1 800-237-1369  
[angela.borella@wearcheckusa.com](mailto:angela.borella@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 01 May 2022 Diag: Wes Davis

NORMAL



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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 13 Oct 2021 Diag: Doug Bogart

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

view report



### 22 Feb 2018 Diag: Don Baldrige

NORMAL



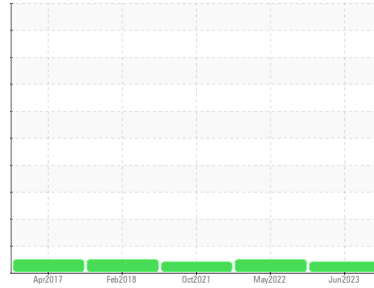
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



# OIL ANALYSIS REPORT

## Sample Rating Trend



## VISCOSITY



Area  
**LINE 3**  
 Machine Id  
**[LINE 3] L3 SAPAL 11 L3 SAPAL 11**  
 Component  
**Main Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG EP GEAR OIL 220 (35 LTR)**

### DIAGNOSIS

#### ▲ Recommendation

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

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

### SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>PCA0098842</b>  | PCA0051687  | PCA0056228  |
| Sample Date   | Client Info |             | <b>26 Jun 2023</b> | 01 May 2022 | 13 Oct 2021 |
| Machine Age   | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             |             | <b>ATTENTION</b>   | NORMAL      | ATTENTION   |

### WEAR METALS

|          | method     | limit/base       | current    | history1 | history2 |
|----------|------------|------------------|------------|----------|----------|
| PQ       | ASTM D8184 |                  | <b>19</b>  | 17       | 52       |
| Iron     | ppm        | ASTM D5185m >200 | <b>24</b>  | 14       | 40       |
| Chromium | ppm        | ASTM D5185m >15  | <b>0</b>   | 4        | <1       |
| Nickel   | ppm        | ASTM D5185m >15  | <b>0</b>   | 0        | 0        |
| Titanium | ppm        | ASTM D5185m      | <b>0</b>   | 0        | 0        |
| Silver   | ppm        | ASTM D5185m      | <b>0</b>   | 0        | 0        |
| Aluminum | ppm        | ASTM D5185m >25  | <b>0</b>   | <1       | <1       |
| Lead     | ppm        | ASTM D5185m >100 | <b>0</b>   | <1       | 0        |
| Copper   | ppm        | ASTM D5185m >200 | <b>2</b>   | 2        | 0        |
| Tin      | ppm        | ASTM D5185m >25  | <b>0</b>   | 0        | 0        |
| Antimony | ppm        | ASTM D5185m >5   | <b>---</b> | ---      | 0        |
| Vanadium | ppm        | ASTM D5185m      | <b>0</b>   | 0        | 0        |
| Cadmium  | ppm        | ASTM D5185m      | <b>0</b>   | 0        | 0        |

### ADDITIVES

|            | method | limit/base  | current    | history1 | history2 |
|------------|--------|-------------|------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>   | <1       | 0        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>   | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>   | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>   | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>   | 2        | 0        |
| Calcium    | ppm    | ASTM D5185m | <b>1</b>   | 1        | 0        |
| Phosphorus | ppm    | ASTM D5185m | <b>251</b> | 572      | 232      |
| Zinc       | ppm    | ASTM D5185m | <b>8</b>   | 11       | 0        |
| Sulfur     | ppm    | ASTM D5185m | <b>229</b> | 1042     | 82       |

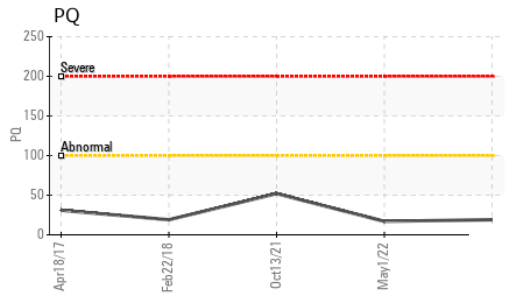
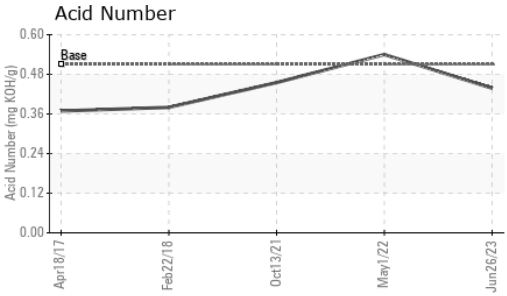
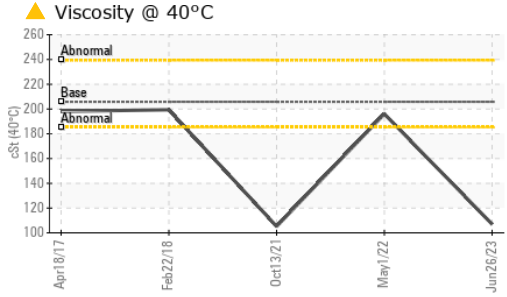
### CONTAMINANTS

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

### FLUID DEGRADATION

|                  | method   | limit/base      | current      | history1 | history2 |
|------------------|----------|-----------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.51 | <b>0.438</b> | 0.54     | 0.455    |

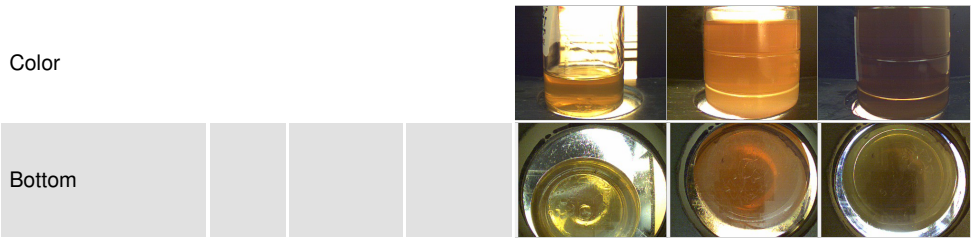
# OIL ANALYSIS REPORT



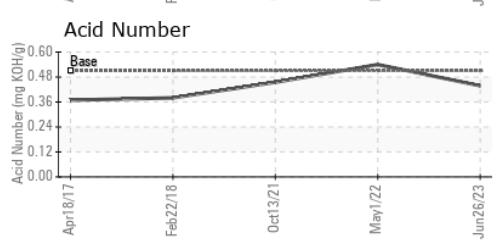
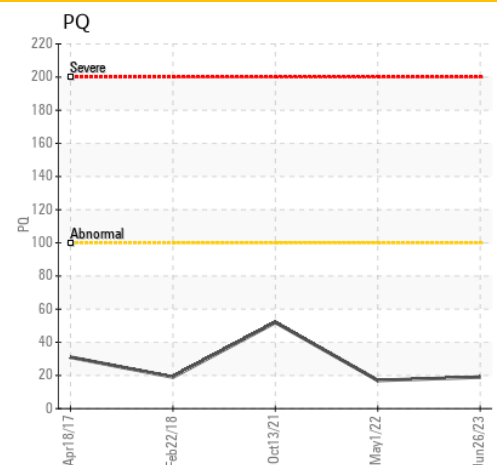
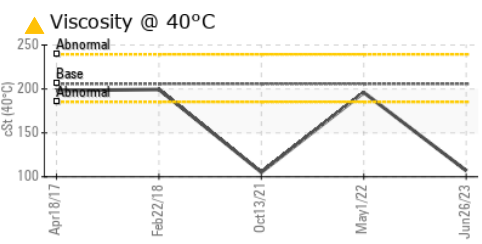
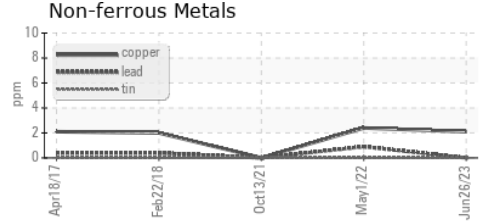
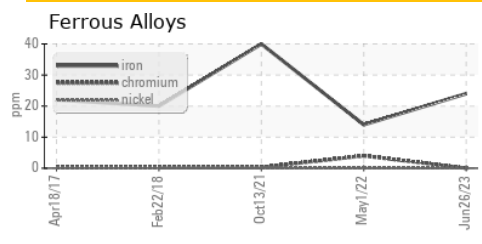
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | 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 D445  | 205.8   | ▲ 107    | 196      | ▲ 105.2 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0098842 **Received** : 26 Jun 2023  
**Lab Number** : 05883457 **Diagnosed** : 29 Jun 2023  
**Unique Number** : 10533940 **Diagnostician** : Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PQ )

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