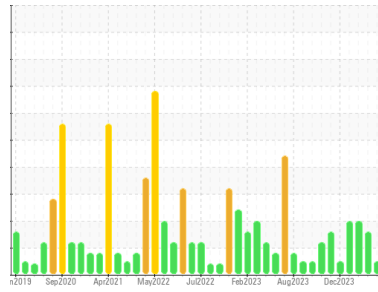




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**FP-007**

Machine Id

**B23507 - FAT PURIFIER WESTFALIA (S/N 1668-481)**

Component

**Gearbox**

Fluid

**PETRO CANADA HYDREX AW 46 (--- GAL)**

## 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. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

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>WC0907999</b>   | WC0885398   | WC0894928   |
| Sample Date   | Client Info | <b>06 Apr 2024</b> | 12 Feb 2024 | 11 Feb 2024 |
| 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         | N/A         |
| Sample Status |             | <b>NORMAL</b>      | ABNORMAL    | ATTENTION   |

## CONTAMINATION

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

## WEAR METALS

| method   | limit/base | current          | history1     | history2 |    |
|----------|------------|------------------|--------------|----------|----|
| Iron     | ppm        | ASTM D5185m >200 | <b>&lt;1</b> | 3        | 2  |
| Chromium | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | 0        | 0  |
| Nickel   | ppm        | ASTM D5185m >15  | <b>&lt;1</b> | 0        | <1 |
| Titanium | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0  |
| Silver   | ppm        | ASTM D5185m      | <b>0</b>     | 0        | 0  |
| Aluminum | ppm        | ASTM D5185m >25  | <b>1</b>     | 0        | 0  |
| Lead     | ppm        | ASTM D5185m >100 | <b>1</b>     | <1       | 2  |
| Copper   | ppm        | ASTM D5185m >200 | <b>2</b>     | 57       | 52 |
| Tin      | ppm        | ASTM D5185m >25  | <b>1</b>     | 0        | 0  |
| Vanadium | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | <1 |
| Cadmium  | ppm        | ASTM D5185m      | <b>&lt;1</b> | 0        | 0  |

## ADDITIVES

| method     | limit/base | current         | history1     | history2 |     |
|------------|------------|-----------------|--------------|----------|-----|
| Boron      | ppm        | ASTM D5185m 0   | <b>0</b>     | 0        | 0   |
| Barium     | ppm        | ASTM D5185m 0   | <b>0</b>     | 0        | 0   |
| Molybdenum | ppm        | ASTM D5185m 0   | <b>&lt;1</b> | 0        | 0   |
| Manganese  | ppm        | ASTM D5185m 0   | <b>&lt;1</b> | 0        | 0   |
| Magnesium  | ppm        | ASTM D5185m 0   | <b>&lt;1</b> | 0        | 0   |
| Calcium    | ppm        | ASTM D5185m 50  | <b>6</b>     | 0        | 0   |
| Phosphorus | ppm        | ASTM D5185m 330 | <b>478</b>   | 456      | 450 |
| Zinc       | ppm        | ASTM D5185m 430 | <b>3</b>     | 41       | 41  |
| Sulfur     | ppm        | ASTM D5185m 760 | <b>533</b>   | 527      | 592 |

## CONTAMINANTS

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

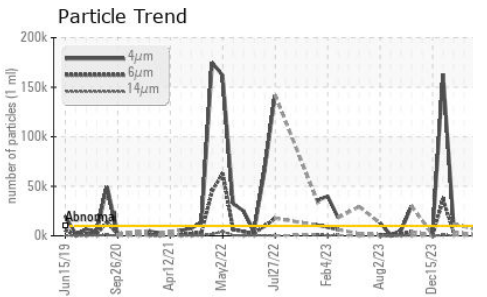
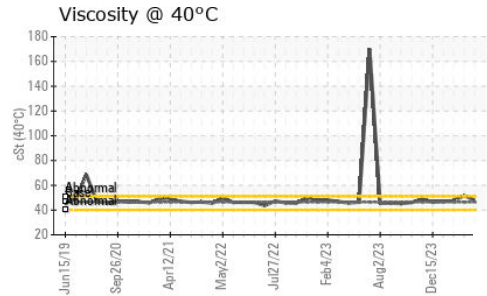
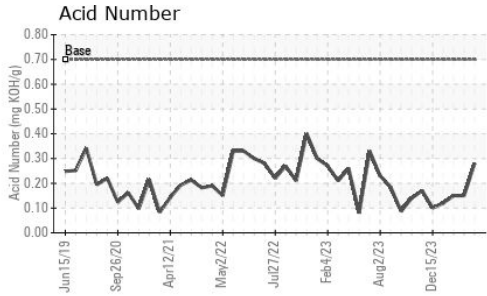
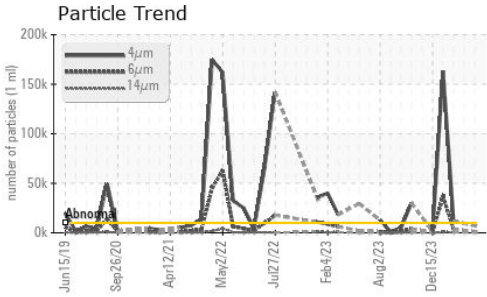
## FLUID CLEANLINESS

| method          | limit/base             | current         | history1 | history2   |
|-----------------|------------------------|-----------------|----------|------------|
| Particles >4µm  | ASTM D7647 >10000      | <b>7244</b>     | ---      | ● 11645    |
| Particles >6µm  | ASTM D7647 >2500       | <b>1321</b>     | ---      | ● 3739     |
| Particles >14µm | ASTM D7647 >320        | <b>79</b>       | ---      | ● 491      |
| Particles >21µm | ASTM D7647 >80         | <b>22</b>       | ---      | ● 174      |
| Particles >38µm | ASTM D7647 >20         | <b>2</b>        | ---      | ● 17       |
| Particles >71µm | ASTM D7647 >4          | <b>0</b>        | ---      | ● 3        |
| Oil Cleanliness | ISO 4406 (c) >20/18/15 | <b>20/18/13</b> | ---      | ● 21/19/16 |

## FLUID DEGRADATION

| method           | limit/base | current         | history1    | history2 |      |
|------------------|------------|-----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.70 | <b>0.28</b> | 0.15     | 0.15 |

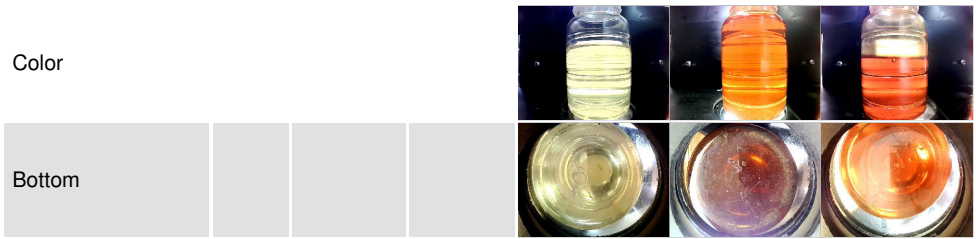
# OIL ANALYSIS REPORT



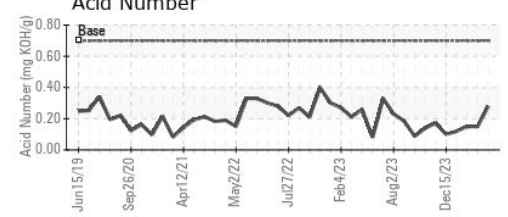
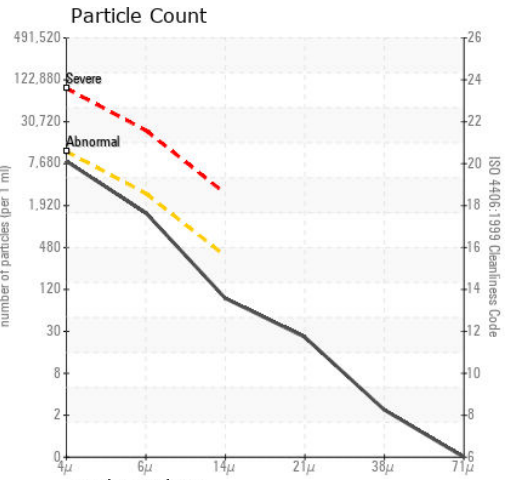
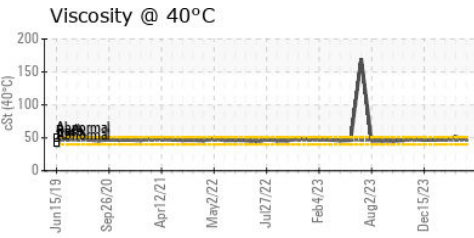
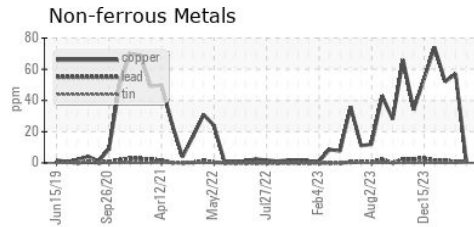
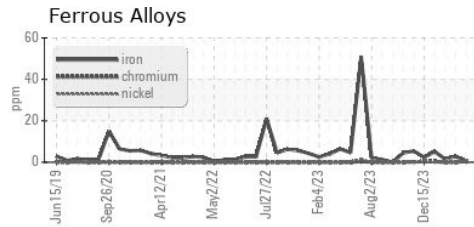
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | ▲ MODER  | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | ▲ MODER  | 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  | 46.4    | 48.0     | 51.6     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0907999      **Received** : 12 Apr 2024  
**Lab Number** : 06147284      **Tested** : 15 Apr 2024  
**Unique Number** : 10977362      **Diagnosed** : 16 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**HORMEL FOODS - AUSTIN**  
 1101 NORTH MAIN ST  
 AUSTIN, MN  
 US 55912  
 Contact: RYAN LOWE  
 rslowe@hormel.com  
 T: (507)437-5674  
 F: (507)437-9805

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)