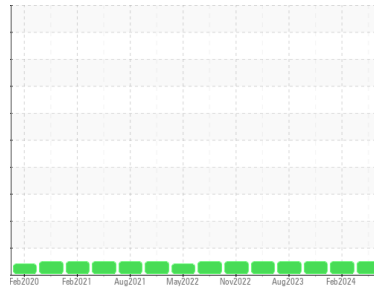




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id

## B44379 - COLUMBIA PALLETIZER

Component

### Hydraulic System

Fluid

### PETRO CANADA PURITY FG AW HYDRAULIC 46 (--- GAL)

#### DIAGNOSIS

##### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.

##### Wear

All component wear rates are normal.

##### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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>WC0880633</b>   | WC0872462   | WC0866711   |
| Sample Date   | Client Info | <b>08 May 2024</b> | 05 Feb 2024 | 06 Nov 2023 |
| Machine Age   | hrs         | <b>0</b>           | 0           | 0           |
| Oil Age       | hrs         | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

#### CONTAMINATION

| method | limit/base     | current    | history1 | history2 |
|--------|----------------|------------|----------|----------|
| Water  | WC Method >0.1 | <b>NEG</b> | NEG      | NEG      |

#### WEAR METALS

| method   | limit/base | current         | history1 | history2 |    |
|----------|------------|-----------------|----------|----------|----|
| Iron     | ppm        | ASTM D5185m >20 | <b>0</b> | 0        | 0  |
| Chromium | ppm        | ASTM D5185m >10 | <b>0</b> | 0        | 0  |
| Nickel   | ppm        | ASTM D5185m >10 | <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 >10 | <b>0</b> | 0        | 0  |
| Lead     | ppm        | ASTM D5185m >10 | <b>0</b> | 0        | 0  |
| Copper   | ppm        | ASTM D5185m >75 | <b>0</b> | 0        | <1 |
| Tin      | ppm        | ASTM D5185m >10 | <b>0</b> | 0        | 0  |
| Vanadium | ppm        | ASTM D5185m     | <b>0</b> | 0        | <1 |
| Cadmium  | ppm        | ASTM D5185m     | <b>0</b> | 0        | 0  |

#### ADDITIVES

| method     | limit/base | current     | history1   | history2 |     |
|------------|------------|-------------|------------|----------|-----|
| Boron      | ppm        | ASTM D5185m | <b>0</b>   | 0        | 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>   | 0        | <1  |
| Magnesium  | ppm        | ASTM D5185m | <b>1</b>   | 0        | 0   |
| Calcium    | ppm        | ASTM D5185m | <b>15</b>  | 0        | 0   |
| Phosphorus | ppm        | ASTM D5185m | <b>430</b> | 443      | 473 |
| Zinc       | ppm        | ASTM D5185m | <b>8</b>   | 0        | 2   |
| Sulfur     | ppm        | ASTM D5185m | <b>586</b> | 542      | 555 |

#### CONTAMINANTS

| method    | limit/base | current         | history1 | history2 |    |
|-----------|------------|-----------------|----------|----------|----|
| Silicon   | ppm        | ASTM D5185m >20 | <b>6</b> | 6        | 7  |
| Sodium    | ppm        | ASTM D5185m     | <b>0</b> | <1       | <1 |
| Potassium | ppm        | ASTM D5185m >20 | <b>0</b> | 0        | 0  |

#### FLUID CLEANLINESS

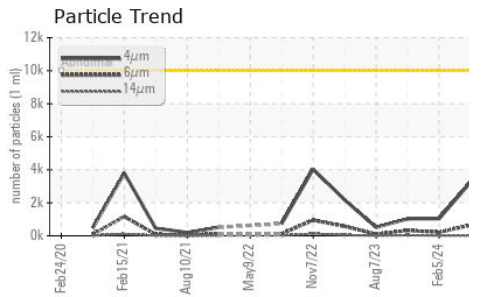
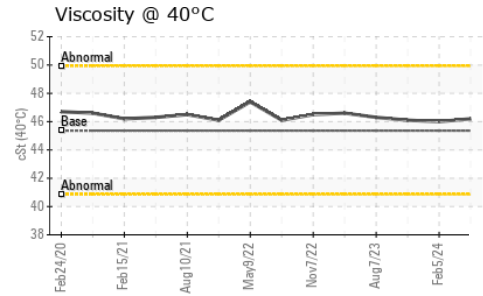
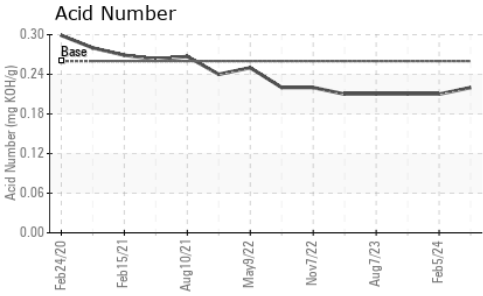
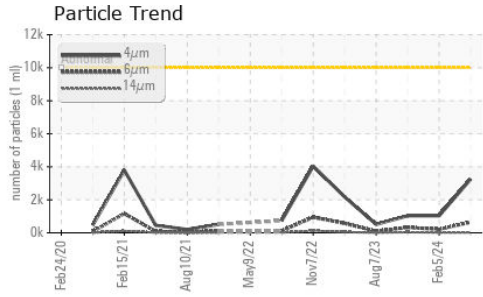
| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647 >10000      | <b>3252</b>     | 1033     | 1033     |
| Particles >6µm  | ASTM D7647 >1300       | <b>644</b>      | 209      | 322      |
| Particles >14µm | ASTM D7647 >160        | <b>18</b>       | 12       | 38       |
| Particles >21µm | ASTM D7647 >40         | <b>2</b>        | 4        | 10       |
| Particles >38µm | ASTM D7647 >10         | <b>0</b>        | 0        | 0        |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >20/17/14 | <b>19/17/11</b> | 17/15/11 | 17/16/12 |

#### FLUID DEGRADATION

| method           | limit/base | current         | history1    | history2 |      |
|------------------|------------|-----------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 0.26 | <b>0.22</b> | 0.21     | 0.21 |



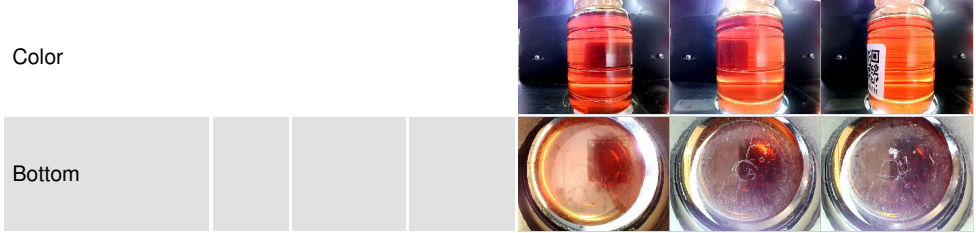
# OIL ANALYSIS REPORT



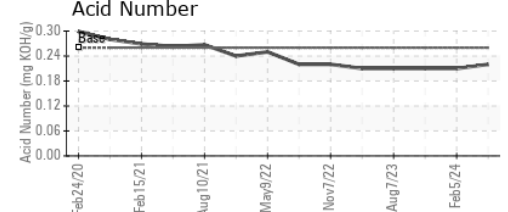
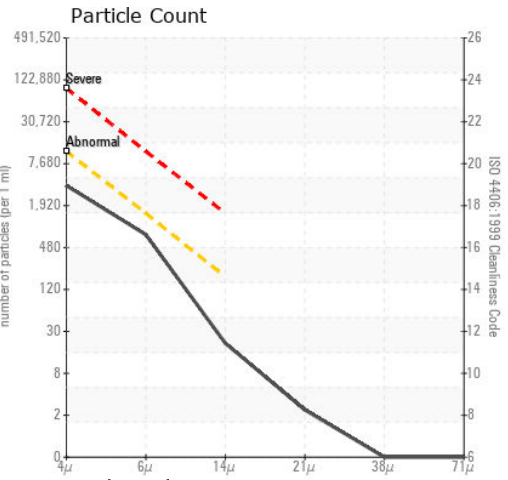
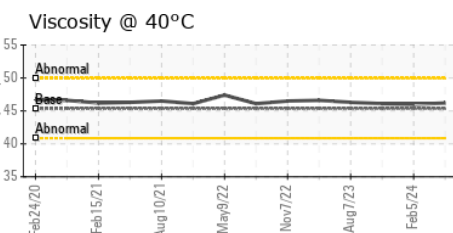
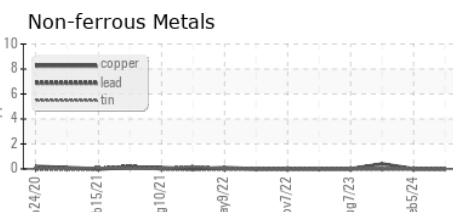
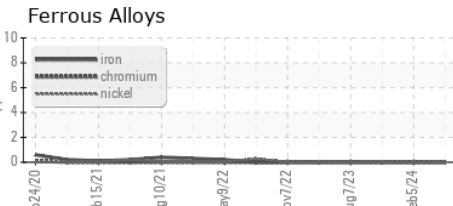
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.1    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 45.36   | 46.2     | 46.0     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0880633      **Received** : 20 May 2024  
**Lab Number** : 06184265      **Tested** : 21 May 2024  
**Unique Number** : 11035591      **Diagnosed** : 21 May 2024 - Wes Davis  
**Test Package** : IND 2

**Rochelle Foods - PRE**  
 1001 South Main, P.O. Box 45  
 Rochelle, IL  
 US 61068  
 Contact: JAMES ROBINSON III  
 jrobinson3@hormel.com

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)      F: (815)562-4147