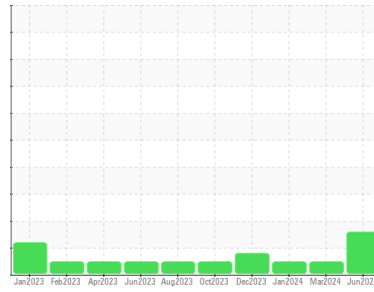




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

**MP-103**

Machine Id

**B72335 - VACUUM PUMP BUSCH (630) STACK PACK B72335**

Component

**Vacuum Pump**

Fluid

**PETRO CANADA PURITY FG SYNTHETIC 100 (15 LTR)**

## 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 a moderate amount of silt (particulates < 14 microns in size) present in the oil.

### 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>WC0921406</b>   | WC0907992   | WC0885408   |
| Sample Date   | Client Info |             | <b>04 Jun 2024</b> | 30 Mar 2024 | 29 Jan 2024 |
| 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      | NORMAL      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >.1        | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

|          | method | limit/base      | current      | history1 | history2 |
|----------|--------|-----------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | <1       |
| Chromium | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | 0        | 0        |
| Titanium | ppm    | ASTM D5185m     | <b>0</b>     | <1       | 0        |
| Silver   | ppm    | ASTM D5185m     | <b>0</b>     | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | 2        | <1       |
| Lead     | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Copper   | ppm    | ASTM D5185m >20 | <b>0</b>     | 0        | 0        |
| Tin      | ppm    | ASTM D5185m >20 | <b>&lt;1</b> | <1       | 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>     | 0        | 0        |
| Barium     | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | 0        |
| Calcium    | ppm    | ASTM D5185m | <b>3</b>     | 0        | 0        |
| Phosphorus | ppm    | ASTM D5185m | <b>545</b>   | 580      | 283      |
| Zinc       | ppm    | ASTM D5185m | <b>9</b>     | 0        | 0        |
| Sulfur     | ppm    | ASTM D5185m | <b>1577</b>  | 1694     | 752      |

## CONTAMINANTS

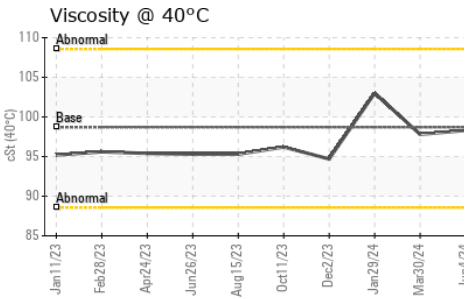
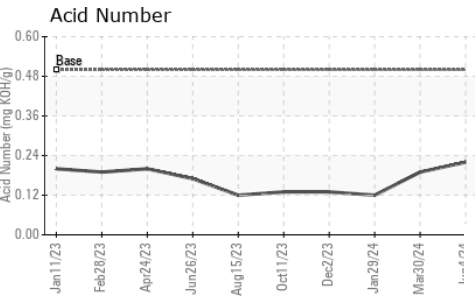
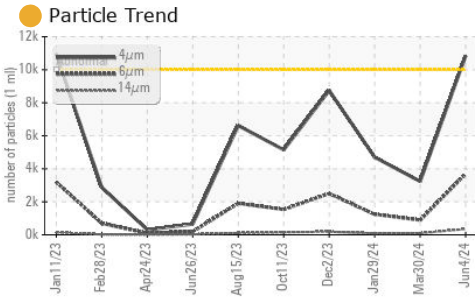
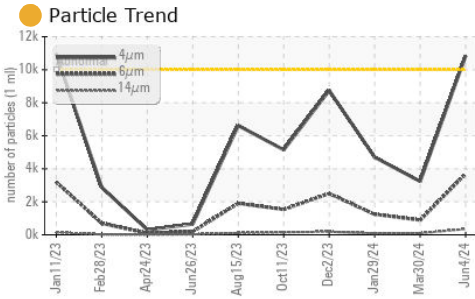
|           | method | limit/base      | current  | history1 | history2 |
|-----------|--------|-----------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >15 | <b>3</b> | 4        | 5        |
| Sodium    | ppm    | ASTM D5185m     | <b>3</b> | 3        | 3        |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b> | <1       | 0        |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >10000     | <b>10831</b>    | 3237     | 4702     |
| Particles >6µm  | ASTM D7647   | >2500      | <b>3692</b>     | 890      | 1239     |
| Particles >14µm | ASTM D7647   | >320       | <b>350</b>      | 95       | 88       |
| Particles >21µm | ASTM D7647   | >80        | <b>88</b>       | 29       | 17       |
| Particles >38µm | ASTM D7647   | >20        | <b>5</b>        | 2        | 0        |
| Particles >71µm | ASTM D7647   | >4         | <b>1</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15  | <b>21/19/16</b> | 19/17/14 | 19/17/14 |

## FLUID DEGRADATION

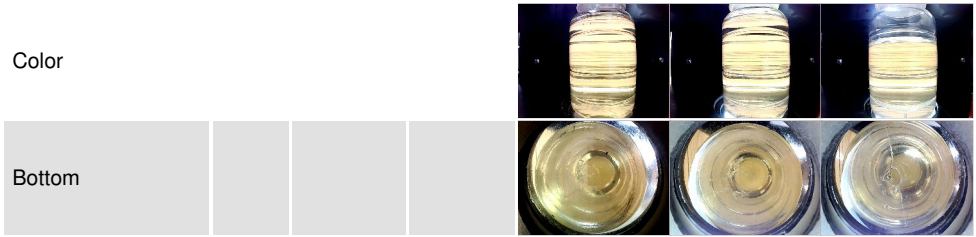
|                  | method   | limit/base     | current     | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.5 | <b>0.22</b> | 0.19     | 0.12     |



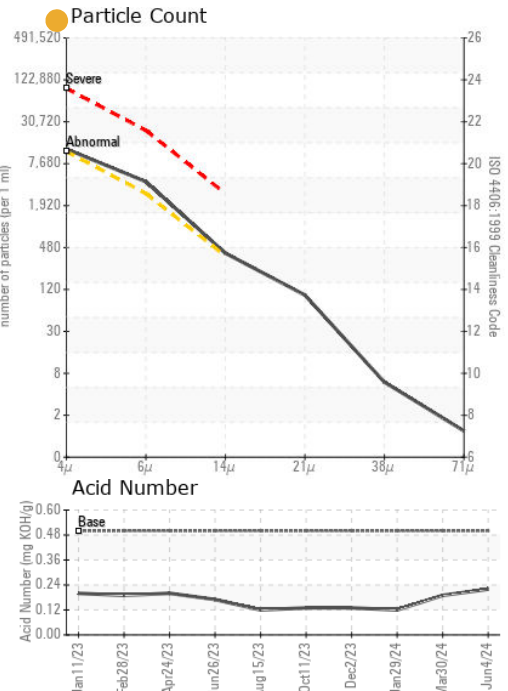
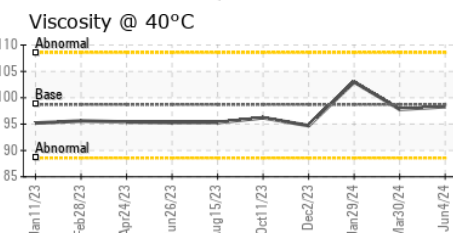
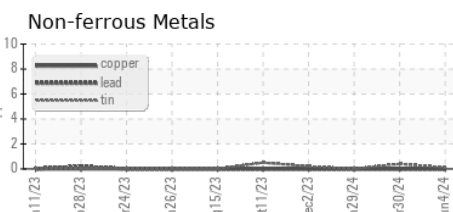
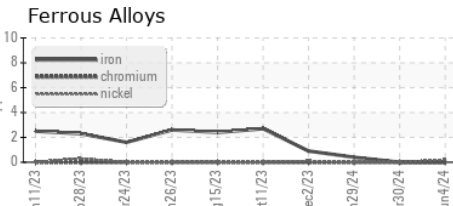
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >.1     | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 98.7    | 98.3     | 97.8     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0921406 **Received** : 10 Jun 2024  
**Lab Number** : 06204550 **Tested** : 12 Jun 2024  
**Unique Number** : 11072011 **Diagnosed** : 12 Jun 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

**HORMEL FOODS - AUSTIN**  
 1101 NORTH MAIN ST  
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 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)