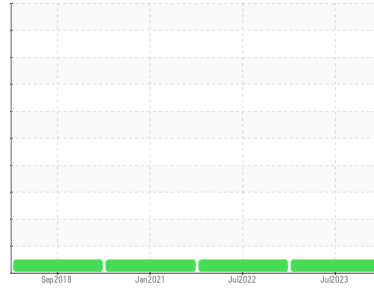




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**P3 MAIN POWER PACK**

Component  
**Compressor**

Fluid  
**PETRO CANADA PURITY FG AW HYDRAULIC 46 (60 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>USP05904375</b> | USP233327   | USP217412   |
| Sample Date   | Client Info | <b>17 Jul 2023</b> | 08 Jul 2022 | 05 Jan 2021 |
| Machine Age   | hrs         | Client Info        | <b>0</b>    | 0           |
| Oil Age       | hrs         | Client Info        | <b>0</b>    | 0           |
| Oil Changed   | Client Info | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |             | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR METALS

| method   | limit/base | current     | history1 | history2     |     |    |
|----------|------------|-------------|----------|--------------|-----|----|
| Iron     | ppm        | ASTM D5185m | >50      | <b>0</b>     | <1  | 0  |
| Chromium | ppm        | ASTM D5185m | >10      | <b>0</b>     | 0   | 0  |
| Nickel   | ppm        | ASTM D5185m |          | <b>0</b>     | <1  | 0  |
| Titanium | ppm        | ASTM D5185m |          | <b>&lt;1</b> | 0   | 0  |
| Silver   | ppm        | ASTM D5185m |          | <b>0</b>     | <1  | 0  |
| Aluminum | ppm        | ASTM D5185m | >25      | <b>&lt;1</b> | 1   | <1 |
| Lead     | ppm        | ASTM D5185m | >25      | <b>0</b>     | 0   | 0  |
| Copper   | ppm        | ASTM D5185m | >50      | <b>&lt;1</b> | <1  | 0  |
| Tin      | ppm        | ASTM D5185m | >15      | <b>0</b>     | <1  | 0  |
| Antimony | ppm        | ASTM D5185m |          | <b>---</b>   | --- | 0  |
| Vanadium | ppm        | ASTM D5185m |          | <b>&lt;1</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>&lt;1</b> | 0   | 0   |
| Magnesium  | ppm        | ASTM D5185m |          | <b>&lt;1</b> | 0   | 0   |
| Calcium    | ppm        | ASTM D5185m |          | <b>0</b>     | 0   | 0   |
| Phosphorus | ppm        | ASTM D5185m |          | <b>472</b>   | 410 | 420 |
| Zinc       | ppm        | ASTM D5185m |          | <b>1</b>     | <1  | 0   |
| Sulfur     | ppm        | ASTM D5185m |          | <b>580</b>   | 627 | 384 |

## CONTAMINANTS

| method    | limit/base | current     | history1 | history2     |       |       |
|-----------|------------|-------------|----------|--------------|-------|-------|
| Silicon   | ppm        | ASTM D5185m | >25      | <b>&lt;1</b> | 2     | 2     |
| Sodium    | ppm        | ASTM D5185m |          | <b>1</b>     | 0     | <1    |
| Potassium | ppm        | ASTM D5185m | >20      | <b>0</b>     | 0     | 0     |
| Water     | %          | ASTM D6304  | >0.1     | <b>0.002</b> | 0.005 | 0.002 |
| ppm Water | ppm        | ASTM D6304  | >1000    | <b>18.6</b>  | 53.3  | 22.9  |

## FLUID CLEANLINESS

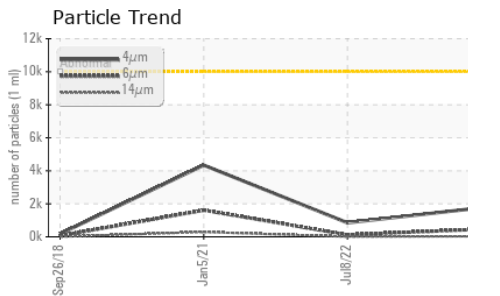
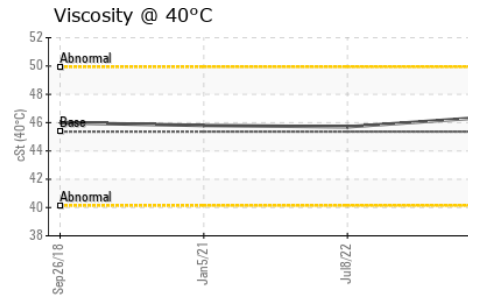
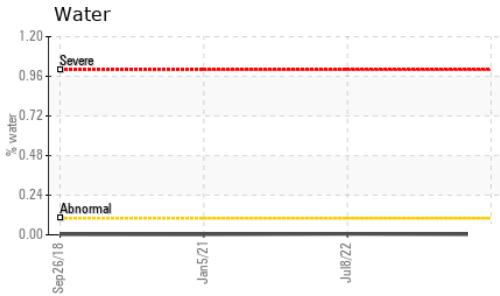
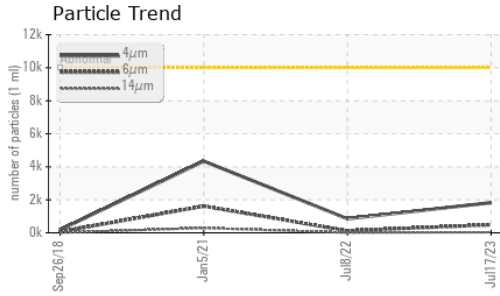
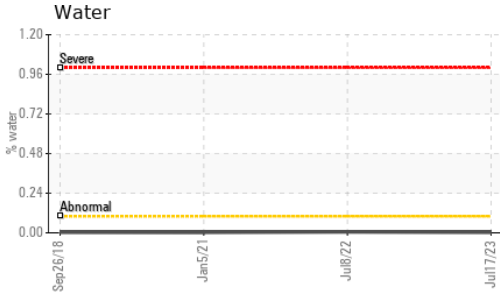
| method          | limit/base   | current   | history1        | history2 |          |
|-----------------|--------------|-----------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >10000    | <b>1827</b>     | 851      | 4341     |
| Particles >6µm  | ASTM D7647   | >2500     | <b>487</b>      | 120      | 1614     |
| Particles >14µm | ASTM D7647   | >320      | <b>33</b>       | 9        | 293      |
| Particles >21µm | ASTM D7647   | >80       | <b>8</b>        | 2        | 112      |
| Particles >38µm | ASTM D7647   | >20       | <b>0</b>        | 0        | 9        |
| Particles >71µm | ASTM D7647   | >4        | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | <b>18/16/12</b> | 17/14/10 | 19/18/15 |

## FLUID DEGRADATION

| method           | limit/base | current    | history1 | history2    |      |       |
|------------------|------------|------------|----------|-------------|------|-------|
| Acid Number (AN) | mg KOH/g   | ASTM D8045 | 0.26     | <b>0.21</b> | 0.24 | 0.186 |



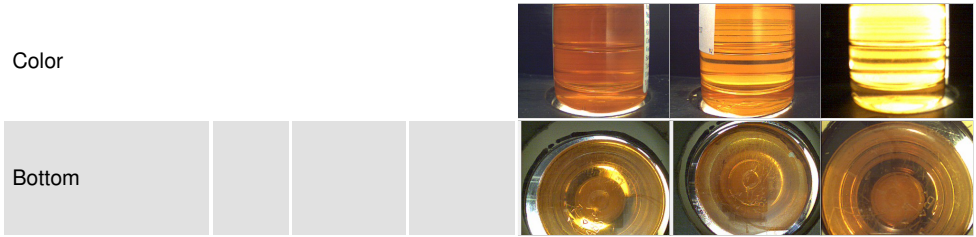
# OIL ANALYSIS REPORT



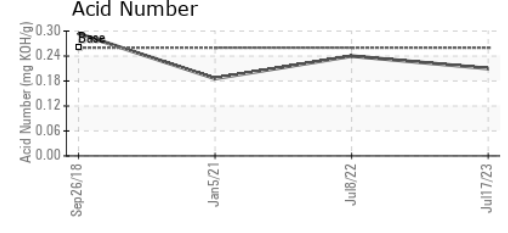
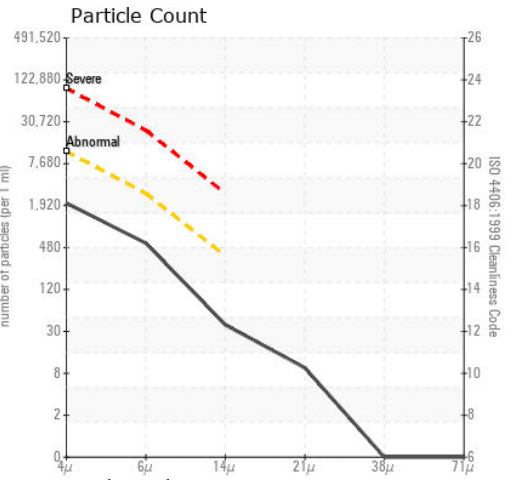
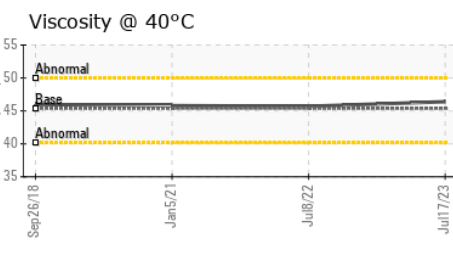
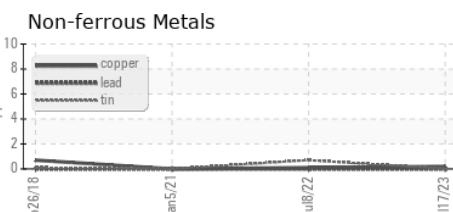
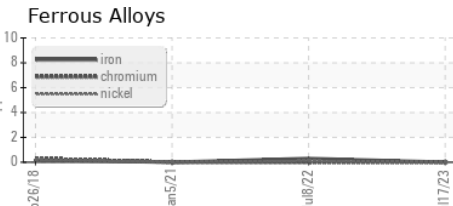
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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   | <b>46.4</b> | 45.7     | 45.8 |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP05904375 **Received** : 21 Jul 2023  
**Lab Number** : **05904375** **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10565731 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**CONAGRA FOODS - COUNCIL BLUFFS**  
 1023 4TH ST  
 COUNCIL BLUFFS, IA  
 US 51503  
 Contact:

Certificate L2367  
 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)

T:  
F: