



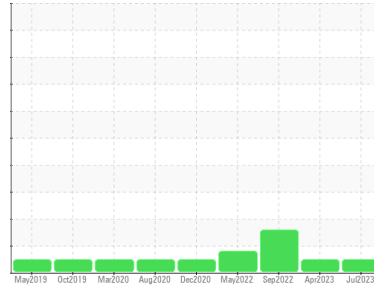
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**ENGINE ROOM**  
 Machine Id  
**FRICK ROTARY SCREW C03-4 (S/N 10241D84979021)**  
 Component  
**Refrigeration Compressor**  
 Fluid  
**FRICK COMPRESSOR OIL #11 (--- PNT)**



## 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>USP0000528</b>  | USP218703   | USP242998   |
| Sample Date        | Client Info |             |            | <b>22 Jul 2023</b> | 12 Apr 2023 | 06 Sep 2022 |
| Machine Age        | hrs         | Client Info |            | <b>30549</b>       | 8279        | 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>NORMAL</b>      | NORMAL      | ABNORMAL    |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >8         | <b>0</b>     | 0        | 0        |
| Chromium    | ppm | ASTM D5185m | >2         | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>0</b>     | 0        | <1       |
| Aluminum    | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | <1       |
| Lead        | ppm | ASTM D5185m | >2         | <b>0</b>     | 0        | <1       |
| Copper      | ppm | ASTM D5185m | >8         | <b>0</b>     | 0        | <1       |
| Tin         | ppm | ASTM D5185m | >4         | <b>0</b>     | 0        | <1       |
| 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>     | 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        | 0        |
| Magnesium  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | <1       |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Sulfur     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

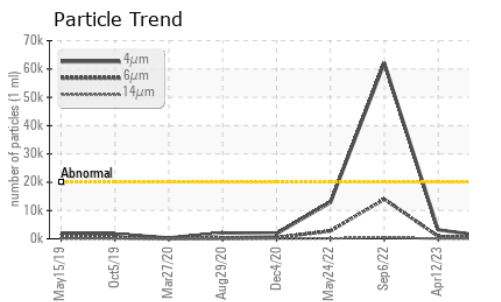
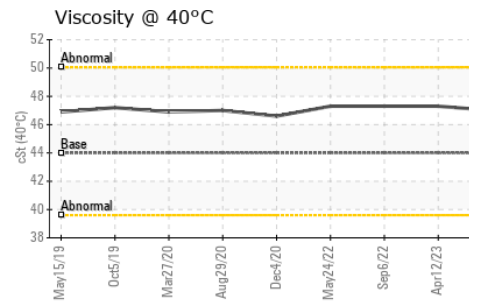
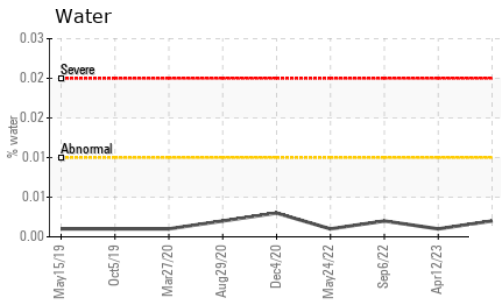
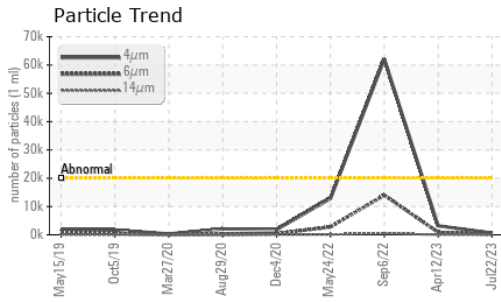
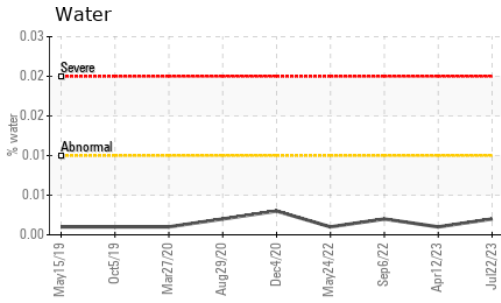
| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | 1        |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | 1        |
| Water        | %   | ASTM D6304  | >0.01      | <b>0.002</b> | 0.001    | 0.002    |
| ppm Water    | ppm | ASTM D6304  | >100       | <b>18.1</b>  | 2.3      | 23.6     |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2   |
|-------------------|--|--------------|------------|-----------------|----------|------------|
| Particles >4µm    |  | ASTM D7647   | >20000     | <b>627</b>      | 3163     | ▲ 62096    |
| Particles >6µm    |  | ASTM D7647   | >2500      | <b>163</b>      | 867      | ▲ 14020    |
| Particles >14µm   |  | ASTM D7647   | >320       | <b>18</b>       | 46       | ▲ 451      |
| Particles >21µm   |  | ASTM D7647   | >80        | <b>6</b>        | 8        | 43         |
| Particles >38µm   |  | ASTM D7647   | >20        | <b>0</b>        | 1        | 1          |
| Particles >71µm   |  | ASTM D7647   | >4         | <b>0</b>        | 0        | 0          |
| Oil Cleanliness   |  | ISO 4406 (c) | >21/18/15  | <b>16/15/11</b> | 19/17/13 | ▲ 23/21/16 |

| FLUID DEGRADATION |          | method    | limit/base | current      | history1 | history2 |
|-------------------|----------|-----------|------------|--------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D974 |            | <b>0.013</b> | 0.014    | 0.014    |



# OIL ANALYSIS REPORT



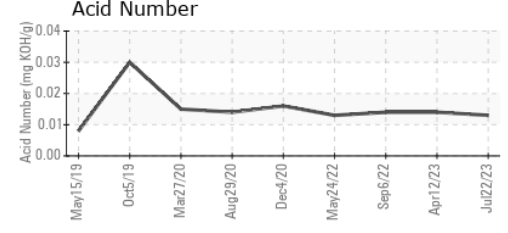
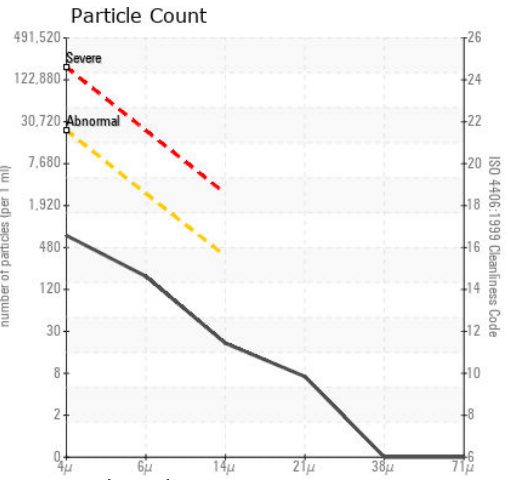
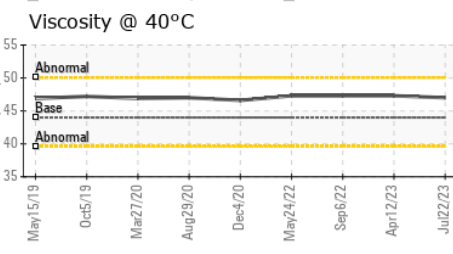
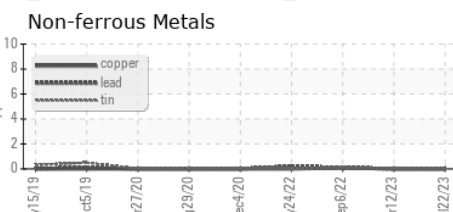
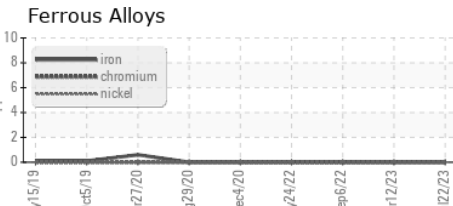
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | LIGHT    | LIGHT    |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.01   | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 44.0    | 47.0     | 47.3     |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : USP0000528 **Received** : 21 Aug 2023  
**Lab Number** : 05929639 **Diagnosed** : 22 Aug 2023  
**Unique Number** : 10609586 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2

**PERDUE FARMS INC**  
 250 GEORGIA HWY 247 SPUR  
 PERRY, GA  
 US 31069  
 Contact: JAMES EAST  
 james.east@perdue.com  
 T: (478)988-6048  
 F:

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)