

# **PROBLEM SUMMARY**

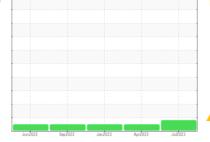
Sample Rating Trend

SEDIMENT

Machine Id B85 RIB CV BOTTOM (S/N 5584534)

Component **Pump** Fluid

**USPI MAX FG VAC 100 (--- GAL)** 



SEDIMENT

**COMPONENT CONDITION SUMMARY** 

No relevant graphs to display

#### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

| PROBLEMATIC T | EST RE | SULTS   |      |          |        |        |
|---------------|--------|---------|------|----------|--------|--------|
| Sample Status |        |         |      | ABNORMAL | NORMAL | NORMAL |
| Silt          | scalar | *Visual | NONE | ▲ MODER  | NONE   | NONE   |

Customer Id: FARDEN Sample No.: USPM5905492 Lab Number: 05905492 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

#### **RECOMMENDED ACTIONS**

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Filter |        |      | ?       | We recommend you service the filters on this component.   |
| Alert         |        |      | ?       | We were unable to perform a particle count due to a high concentration of particles present in this sample. |

#### HISTORICAL DIAGNOSIS

#### 09 Apr 2023 Diag: Doug Bogart

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



#### 05 Jan 2023 Diag: Jonathan Hester

#### NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

# view report

#### 28 Sep 2022 Diag: Doug Bogart

#### NORMAL



Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





# **OIL ANALYSIS REPORT**

Sample Rating Trend

**SEDIMENT** 

# **B85 RIB CV BOTTOM (S/N 5584534)**

**Pump** 

**USPI MAX FG VAC 100 (--- GAL)** 

#### **DIAGNOSIS**

#### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of visible silt present in the sample.

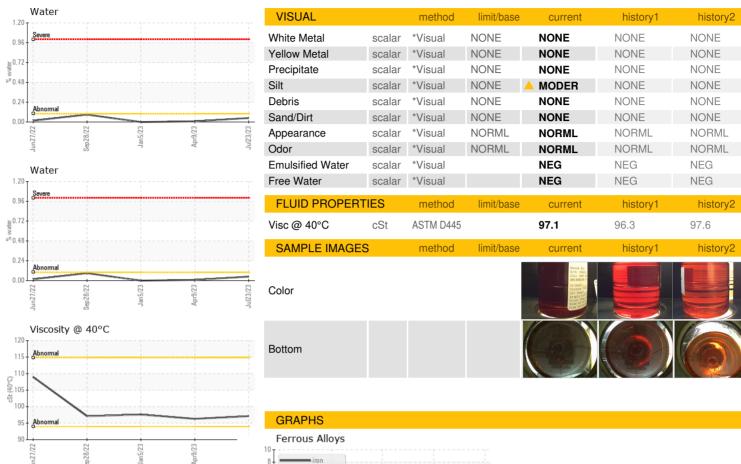
#### **Fluid Condition**

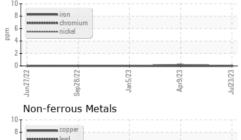
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION   method   limit/base   current   history1   history2  |   |              | Jun 2022    | Sep2022    | Jan2023 Apr2023 | Jul2023     |             |          |
|---|---|--------------|-------------|------------|-----------------|-------------|-------------|----------|
| Sample Date   | SAMPLE INFORM   | MATION       | method      | limit/base | current         | history1    | history2    |          |
| Machine Age         hrs         Client Info         0         0         0           Oil Age         hrs         Client Info         0         0         0           Oil Changed         Client Info         N/A         N/A         N/A           Sample Status         BANORMAL         NORMAL         NORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >55         0         0         0           Nickel         ppm         ASTM D5185m         >55         0         <1  | Sample Number   |              | Client Info |            | USPM5905492     | USPM28616   | USPM26087   |          |
| Oil Age<br>Oil Changed<br>Sample Status         hrs         Client Info<br>Client Info         N/A<br>N/A<br>N/A<br>ABNORMAL         N/A<br>N/A<br>NORMAL         N/A<br>NORMAL           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         0           Silver         ppm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >7         0         0         0           Aluminum         ppm         ASTM D5185m         >7         0         0         0           Lead         ppm         ASTM D5185m         >9         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0         0           Tin         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0  | Sample Date   |              | Client Info |            | 23 Jul 2023     | 09 Apr 2023 | 05 Jan 2023 |          |
| Oil Changed Satus         Client Info         N/A         N/A         N/A         N/A           WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         0           Titanium         ppm         ASTM D5185m         >5         0         0         0           Aluminum         ppm         ASTM D5185m         >3         •1         0         0           Aluminum         ppm         ASTM D5185m         >3         •1         0         0           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >30         0         <1   | Machine Age   | hrs          | Client Info |            | 0               | 0           | 0           |          |
| MEAR METALS   | Oil Age   | hrs          | Client Info |            | 0               | 0           | 0           |          |
| WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >90         0         0         0           Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         0         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Aluminum         ppm         ASTM D5185m         >3         -1         0         0           Aluminum         ppm         ASTM D5185m         >12         0         0         0           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadium         ppm         ASTM D5185m         0         0         0         0 <th>Oil Changed</th> <th></th> <th>Client Info</th> <th></th> <th>N/A</th> <th>N/A</th> <th>N/A</th>       | Oil Changed   |              | Client Info |            | N/A             | N/A         | N/A         |          |
| Iron  | Sample Status   |              |             |            | ABNORMAL        | NORMAL      | NORMAL      |          |
| Chromium         ppm         ASTM D5185m         >5         0         0         0           Nickel         ppm         ASTM D5185m         >5         0         <1         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >3         <1         0         0           Aluminum         ppm         ASTM D5185m         >12         0         0         0           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0 <th>WEAR METALS</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>        | WEAR METALS   |              | method      | limit/base | current         | history1    | history2    |          |
| Nickel         ppm         ASTM D5185m         >5         0         <1         0           Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >3         <1   | Iron  | ppm          | ASTM D5185m | >90        | 0               | 0           | 0           |          |
| Titanium         ppm         ASTM D5185m         >3         0         0         0           Silver         ppm         ASTM D5185m         >3         <1  | Chromium  | ppm          | ASTM D5185m | >5         | 0               | 0           | 0           |          |
| Silver         ppm         ASTM D5185m         >3         <1         0         0           Aluminum         ppm         ASTM D5185m         >7         0         0         0           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Magnessium         ppm         ASTM D5185m         0         0         0         0  | Nickel  | ppm          | ASTM D5185m | >5         | 0               | <1          | 0           |          |
| Aluminum         ppm         ASTM D5185m         >7         0         0         0           Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         >9         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0  | Titanium  | ppm          | ASTM D5185m | >3         | 0               | 0           | 0           |          |
| Lead         ppm         ASTM D5185m         >12         0         0         0           Copper         ppm         ASTM D5185m         >30         0         <1         0           Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0         0           Boron         ppm         ASTM D5185m         0         0         0         0           Barium         ppm         ASTM D5185m         0         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0         1           Calcium         ppm         ASTM D5185m         0         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42  | Silver  | ppm          | ASTM D5185m | >3         | <1              | 0           | 0           |          |
| Copper         ppm         ASTM D5185m         >30         0         <1         0           Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sodium  | Aluminum  | ppm          | ASTM D5185m | >7         | 0               | 0           | 0           |          |
| Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sodium   | Lead  | ppm          | ASTM D5185m | >12        | 0               | 0           | 0           |          |
| Tin         ppm         ASTM D5185m         >9         0         0         0           Vanadium         ppm         ASTM D5185m         0         0         0           Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         0         0         0           Sodium   | Copper  | ppm          | ASTM D5185m | >30        | 0               | <1          | 0           |          |
| Cadmium         ppm         ASTM D5185m         0         0         0           ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         0         0         0           Barium         ppm         ASTM D5185m         0         0         0           Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         60         20 <t< th=""><th></th><th>ppm</th><th>ASTM D5185m</th><th>&gt;9</th><th>0</th><th>0</th><th>0</th></t<> |   | ppm          | ASTM D5185m | >9         | 0               | 0           | 0           |          |
| ADDITIVES   | Vanadium  | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Boron   ppm   ASTM D5185m   Q   | Cadmium   | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Barium  | ADDITIVES   |              | method      | limit/base | current         | history1    | history2    |          |
| Molybdenum         ppm         ASTM D5185m         0         0         0           Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         0           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0         0           Vater         ppm         ASTM D5185m         0         0         0         0           Vater         %         ASTM D5185m         0         0         0         0           Water         %         ASTM D5185m         0         0   | Boron   | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0         0           Vater         %         ASTM D5185m         >20         <1         <1         1         0           Water         %         ASTM D5185m         >20         <1         <1         0         0         0           Particles >4µm </td <th>Barium</th> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <th>&lt;1</th> <td>1</td> <td>0</td>    | Barium  | ppm          | ASTM D5185m |            | <1              | 1           | 0           |          |
| Manganese         ppm         ASTM D5185m         0         0         0           Magnesium         ppm         ASTM D5185m         0         0         <1           Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         >20         <1  | Molybdenum  | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Calcium         ppm         ASTM D5185m         0         0         0           Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1  |   | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Phosphorus         ppm         ASTM D5185m         25         35         42           Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         >.1         485.8         87.4         0.00           FLUID CLEA  | Magnesium   | ppm          | ASTM D5185m |            | 0               | 0           | <1          |          |
| Zinc         ppm         ASTM D5185m         0         0         0           Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1  | Calcium   | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Sulfur         ppm         ASTM D5185m         41         40         0           CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1   | Phosphorus  | ppm          | ASTM D5185m |            | 25              | 35          | 42          |          |
| CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1  | Zinc  | ppm          | ASTM D5185m |            | 0               | 0           | 0           |          |
| Silicon         ppm         ASTM D5185m         >60         20         21         9           Sodium         ppm         ASTM D5185m         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1   | Sulfur  | ppm          | ASTM D5185m |            | 41              | 40          | 0           |          |
| Sodium         ppm         ASTM D5185m         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1         <1         0           Water         %         ASTM D6304         0.048         0.008         0.00           ppm Water         ppm         ASTM D6304         >.1         485.8         87.4         0.00           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000          1744         900           Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >3          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12 <td colspan<="" th=""><th>CONTAMINANTS</th><th>3</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td>              | <th>CONTAMINANTS</th> <th>3</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th> | CONTAMINANTS | 3           | method     | limit/base      | current     | history1    | history2 |
| Sodium         ppm         ASTM D5185m         0         0         0           Potassium         ppm         ASTM D5185m         >20         <1   | Silicon   | ppm          | ASTM D5185m | >60        | 20              | 21          | 9           |          |
| Water         %         ASTM D6304         0.048         0.008         0.00           ppm Water         ppm         ASTM D6304         >.1         485.8         87.4         0.00           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000          1744         900           Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2   | Sodium  |              | ASTM D5185m |            | 0               | 0           | 0           |          |
| Water         %         ASTM D6304         0.048         0.008         0.00           ppm Water         ppm         ASTM D6304         >.1         485.8         87.4         0.00           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000          1744         900           Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2   | Potassium   | ppm          | ASTM D5185m | >20        | <1              | <1          | 0           |          |
| ppm Water         ppm         ASTM D6304         >.1         485.8         87.4         0.00           FLUID CLEANLINESS         method         limit/base         current         history1         history2           Particles >4μm         ASTM D7647         >5000          1744         900           Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2   | Water   |              | ASTM D6304  |            | 0.048           | 0.008       | 0.00        |          |
| Particles >4μm         ASTM D7647         >5000          1744         900           Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2  | ppm Water   | ppm          |             |            |                 |             |             |          |
| Particles >6μm         ASTM D7647         >1300          543         270           Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2  | FLUID CLEANLIN  | IESS         | method      | limit/base | current         | history1    | history2    |          |
| Particles >14μm         ASTM D7647         >160          41         26           Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2   | Particles >4µm  |              | ASTM D7647  | >5000      |                 | 1744        | 900         |          |
| Particles >21μm         ASTM D7647         >40          8         5           Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2  | Particles >6µm  |              | ASTM D7647  | >1300      |                 | 543         | 270         |          |
| Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2  | Particles >14µm   |              | ASTM D7647  | >160       |                 | 41          | 26          |          |
| Particles >38μm         ASTM D7647         >10          0         1           Particles >71μm         ASTM D7647         >3          0         0           Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2  | •   |              | ASTM D7647  | >40        |                 | 8           | 5           |          |
| Particles >71μmASTM D7647>300Oil CleanlinessISO 4406 (c)>19/17/1418/16/1317/15/12FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2   | •   |              |             | >10        |                 | 0           | 1           |          |
| Oil Cleanliness         ISO 4406 (c)         >19/17/14          18/16/13         17/15/12           FLUID DEGRADATION         method         limit/base         current         history1         history2   |   |              |             | >3         |                 | 0           | 0           |          |
|   | ·   |              |             | >19/17/14  |                 | 18/16/13    | 17/15/12    |          |
| Acid Number (AN) mg KOH/g ASTM D8045 0.157 0.141 0.058  | FLUID DEGRADA   | ATION        | method      | limit/base | current         | history1    | history2    |          |
|   |   |              |             |            |                 |             |             |          |

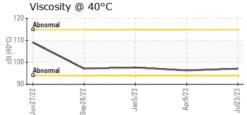


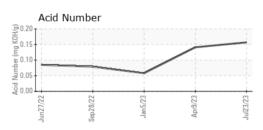
## **OIL ANALYSIS REPORT**















Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** Test Package

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : USPM5905492 : 05905492

Received : 10566848

: 24 Jul 2023 Diagnosed : 25 Jul 2023 Diagnostician : Doug Bogart **SMITHFIELD - DENISON - SMIDENIOW** 

800 INDUSTRIAL ROAD DENISON, IA US 51442

Contact: SERVICE MANAGER

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: IND 2

\* - 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: (712)263-7314 Contact/Location: SERVICE MANAGER - FARDEN

T: (712)263-7414