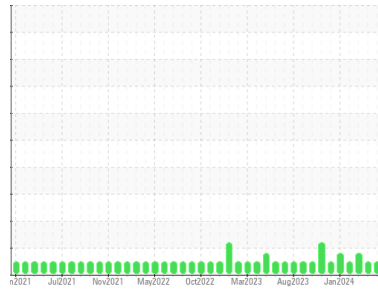




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**Environmental**  
 Machine Id  
**RTO 2 Hydraulic Unit (S/N EN222)**  
 Component  
**Hydraulic System**  
 Fluid  
**DEXRON III (30 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DEXRON III. Please confirm.

### 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>WC0895138</b>   | WC0895061   | WC0895009   |
| Sample Date        | Client Info |             |            | <b>30 May 2024</b> | 23 Apr 2024 | 28 Mar 2024 |
| Machine Age        | mths        | Client Info |            | <b>0</b>           | 0           | 0           |
| Oil Age            | mths        | 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    |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.05      | <b>NEG</b> | NEG      | NEG      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >20        | <b>4</b>     | 5        | 6        |
| Chromium    | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | <1       |
| Nickel      | ppm | ASTM D5185m | >20        | <b>0</b>     | 0        | <1       |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 2        |
| Lead        | ppm | ASTM D5185m | >20        | <b>1</b>     | 1        | 3        |
| Copper      | ppm | ASTM D5185m | >20        | <b>16</b>    | 15       | 16       |
| Tin         | ppm | ASTM D5185m | >20        | <b>1</b>     | 0        | 2        |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>119</b>   | 101      | 104      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | <1       |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | 0        | <1       |
| Calcium    | ppm | ASTM D5185m |            | <b>84</b>    | 81       | 86       |
| Phosphorus | ppm | ASTM D5185m |            | <b>242</b>   | 229      | 261      |
| Zinc       | ppm | ASTM D5185m |            | <b>5</b>     | 5        | 3        |
| Sulfur     | ppm | ASTM D5185m |            | <b>960</b>   | 954      | 949      |

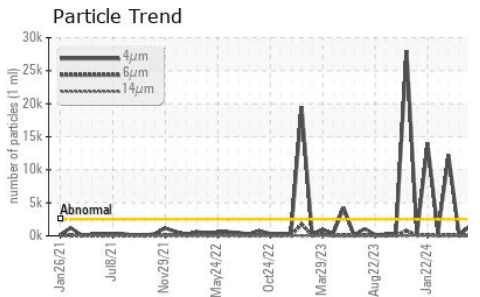
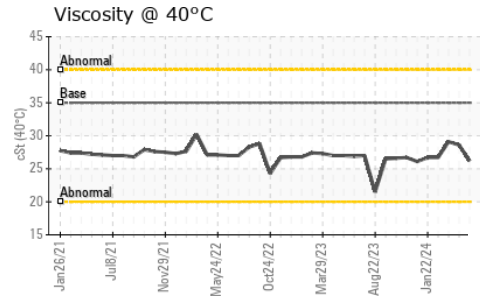
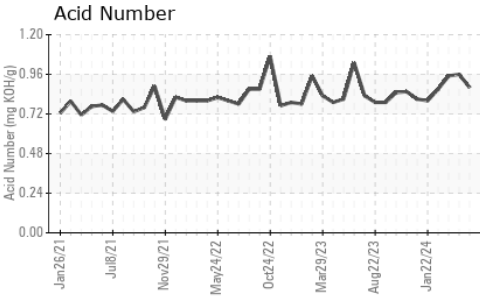
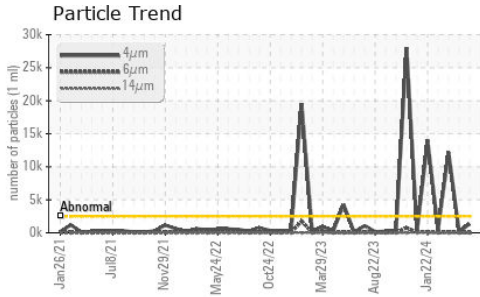
| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >15        | <b>2</b> | 2        | 2        |
| Sodium       | ppm | ASTM D5185m |            | <b>2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

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2  |
|-------------------|--|--------------|------------|-----------------|----------|-----------|
| Particles >4µm    |  | ASTM D7647   | >2500      | <b>1342</b>     | 170      | ▲ 12209   |
| Particles >6µm    |  | ASTM D7647   | >640       | <b>32</b>       | 33       | 123       |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>10</b>       | 2        | 4         |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>8</b>        | 1        | 1         |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>6</b>        | 0        | 0         |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>5</b>        | 0        | 0         |
| Oil Cleanliness   |  | ISO 4406 (c) | >18/16/13  | <b>18/12/10</b> | 15/12/9  | ▲ 21/14/9 |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>0.88</b> | 0.96     | 0.95     |



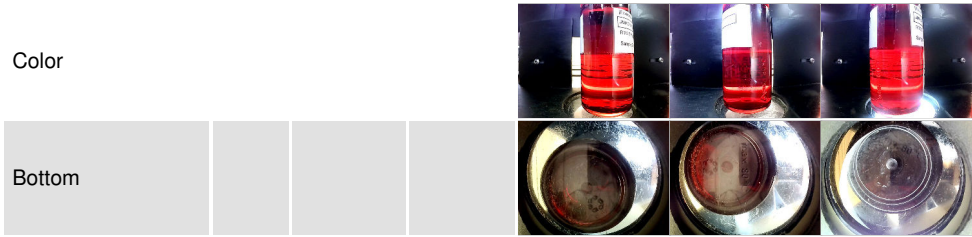
# OIL ANALYSIS REPORT



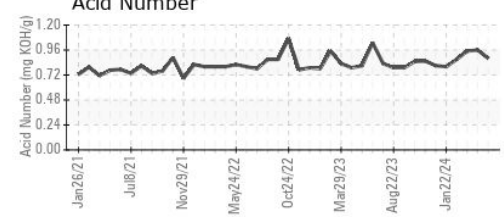
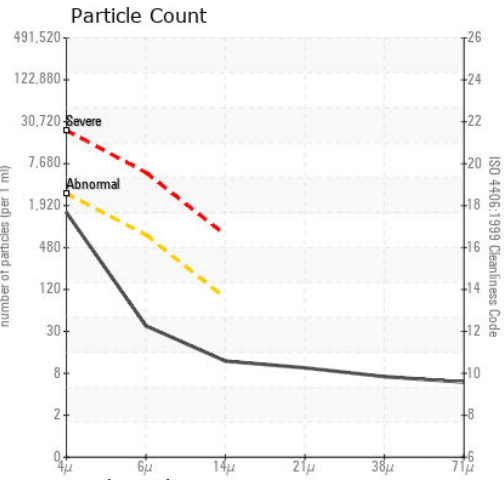
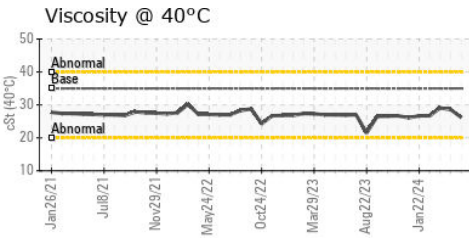
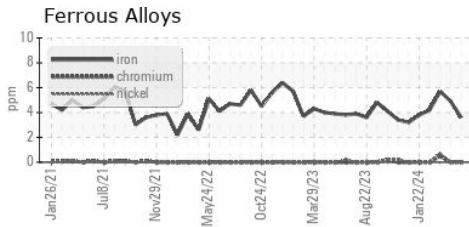
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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    | >0.05   | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |      |
|------------------|--------|------------|---------|----------|----------|------|
| Visc @ 40°C      | cSt    | ASTM D445  | 35.0    | 26.2     | 28.6     | 29.1 |

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



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0895138  
**Lab Number** : 06200095  
**Unique Number** : 11062218  
**Test Package** : IND 2  
**Received** : 05 Jun 2024  
**Tested** : 06 Jun 2024  
**Diagnosed** : 06 Jun 2024 - Wes Davis

**J.M. Huber Corporation**  
 PO BOX 38  
 CRYSTAL HILL, VA  
 US 24539  
 Contact: Ted Hudson  
 ted.hudson@huber.com  
 T: (434)476-6628  
 F: (434)476-8133

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)