



# OIL ANALYSIS REPORT

Sample Rating Trend

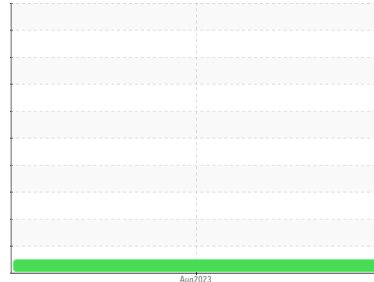
**NORMAL**



Machine Id  
**AF12-510-2925-1100 FINISHED BOARD STACKING LIFT TABLE HYDRAULICS WEST CENTER**

Component  
**Hydraulic System**

Fluid  
**MOBIL DTE 10 EXCEL 46 (--- 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>WC0824146</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>18 Aug 2023</b> | ---      | ---      |
| Machine Age   | yrs         | Client Info | <b>5</b>           | ---      | ---      |
| Oil Age       | yrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>N/A</b>         | ---      | ---      |
| Sample Status |             |             | <b>NORMAL</b>      | ---      | ---      |

## WEAR METALS

|          | method     | limit/base      | current      | history1 | history2 |
|----------|------------|-----------------|--------------|----------|----------|
| PQ       | ASTM D8184 |                 | <b>13</b>    | ---      | ---      |
| Iron     | ppm        | ASTM D5185m >20 | <b>&lt;1</b> | ---      | ---      |
| Chromium | ppm        | ASTM D5185m >20 | <b>1</b>     | ---      | ---      |
| Nickel   | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      | ---      |
| Titanium | ppm        | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Silver   | ppm        | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Aluminum | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      | ---      |
| Lead     | ppm        | ASTM D5185m >20 | <b>2</b>     | ---      | ---      |
| Copper   | ppm        | ASTM D5185m >20 | <b>&lt;1</b> | ---      | ---      |
| Tin      | ppm        | ASTM D5185m >20 | <b>0</b>     | ---      | ---      |
| Vanadium | ppm        | ASTM D5185m     | <b>0</b>     | ---      | ---      |
| Cadmium  | ppm        | ASTM D5185m     | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base  | current      | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185m | <b>0</b>     | ---      | ---      |
| Calcium    | ppm    | ASTM D5185m | <b>42</b>    | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185m | <b>156</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185m | <b>111</b>   | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185m | <b>10842</b> | ---      | ---      |

## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >15  | <b>1</b>     | ---      | ---      |
| Sodium    | ppm    | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Potassium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | ---      | ---      |
| Water     | %      | ASTM D6304 >0.05 | <b>0.001</b> | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >500  | <b>1.5</b>   | ---      | ---      |

## FLUID CLEANLINESS

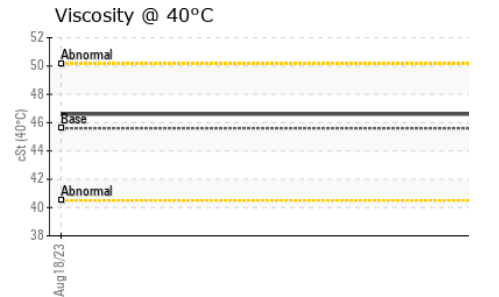
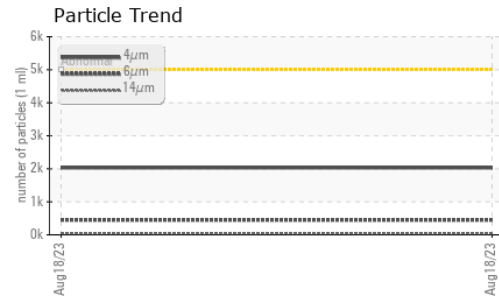
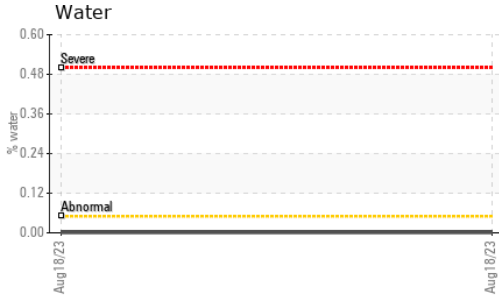
|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >5000      | <b>2031</b>     | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >1300      | <b>449</b>      | ---      | ---      |
| Particles >14µm | ASTM D7647   | >160       | <b>45</b>       | ---      | ---      |
| Particles >21µm | ASTM D7647   | >40        | <b>11</b>       | ---      | ---      |
| Particles >38µm | ASTM D7647   | >10        | <b>0</b>        | ---      | ---      |
| Particles >71µm | ASTM D7647   | >3         | <b>0</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14  | <b>18/16/13</b> | ---      | ---      |

## FLUID DEGRADATION

|                  | method   | limit/base | current     | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | <b>0.17</b> | ---      | ---      |



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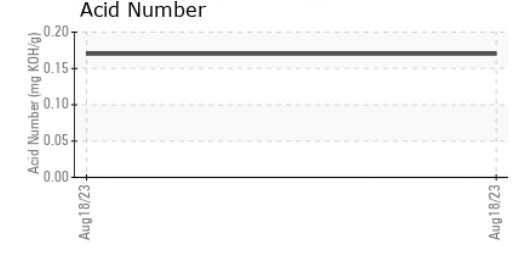
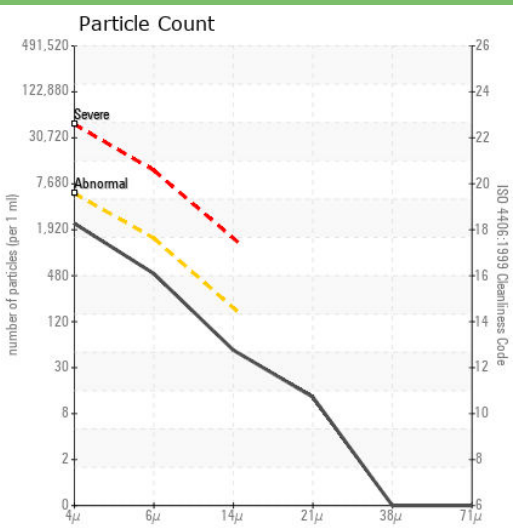
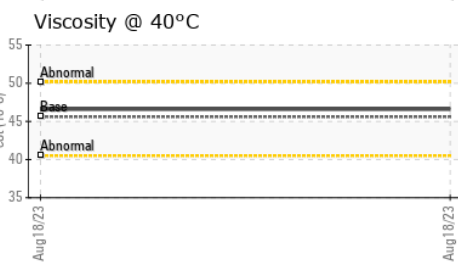
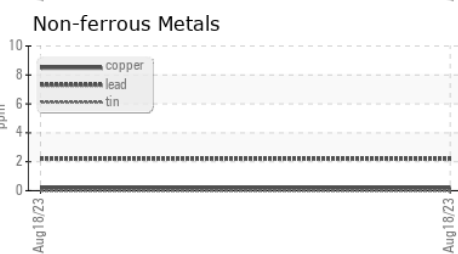
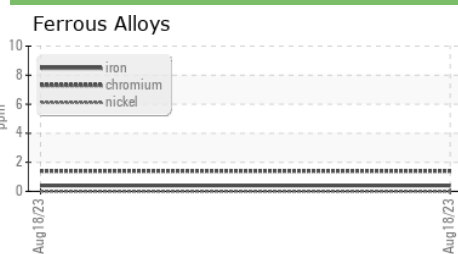
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | ---      |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | ---      |
| Silt             | scalar | *Visual    | NONE    | NONE     | ---      |
| Debris           | scalar | *Visual    | NONE    | NONE     | ---      |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | ---      |
| Appearance       | scalar | *Visual    | NORML   | NORML    | ---      |
| Odor             | scalar | *Visual    | NORML   | NORML    | ---      |
| Emulsified Water | scalar | *Visual    | >0.05   | NEG      | ---      |
| Free Water       | scalar | *Visual    |         | NEG      | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445  | 45.6    | 46.6     | ---      |

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

|        |  |          |          |
|--------|--|----------|----------|
| Color  |  | no image | no image |
| Bottom |  | no image | no image |

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0824146 **Received** : 24 Aug 2023  
**Lab Number** : 05934336 **Diagnosed** : 28 Aug 2023  
**Unique Number** : 10619607 **Diagnostician** : Jonathan Hester  
**Test Package** : PLANT

**ARAUCO - GRAYLING**  
 5851 ARAUCO ROAD  
 GRAYLING, MI  
 US 49738  
 Contact: JOSEPH GREEN  
 joseph.green@arauco.com  
 T:  
 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)