



|                 |                 |
|-----------------|-----------------|
| WEAR            | <b>ABNORMAL</b> |
| CONTAMINATION   | <b>ABNORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b>   |

Machine Id  
**C220E310190**  
Component  
**Hydraulic System**  
Fluid  
**{not provided} (--- GAL)**

### 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.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>JR0216007</b>   | JR0177447   | ---      |
| Sample Date    |     | Client Info |           | <b>28 May 2024</b> | 09 Aug 2023 | ---      |
| Machine Age    | hrs | Client Info |           | <b>7482</b>        | 7482        | ---      |
| Oil Age        | hrs | Client Info |           | <b>7482</b>        | 7482        | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | Not Changd  | ---      |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | Not Changd  | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | ABNORMAL    | ---      |

### WEAR

The iron level is abnormal. All other component wear rates are normal.

| Test         | UOM    | Method      | Limit/Abn | Current      | History1 | History2 |
|--------------|--------|-------------|-----------|--------------|----------|----------|
| PQ           |        | ASTM D8184  |           | <b>40</b>    | 12       | ---      |
| Iron         | ppm    | ASTM D5185m | >20       | <b>▲ 46</b>  | 28       | ---      |
| Chromium     | ppm    | ASTM D5185m | >10       | <b>&lt;1</b> | <1       | ---      |
| Nickel       | ppm    | ASTM D5185m | >10       | <b>0</b>     | 0        | ---      |
| Titanium     | ppm    | ASTM D5185m |           | <b>0</b>     | <1       | ---      |
| Silver       | ppm    | ASTM D5185m |           | <b>0</b>     | <1       | ---      |
| Aluminum     | ppm    | ASTM D5185m | >10       | <b>7</b>     | 6        | ---      |
| Lead         | ppm    | ASTM D5185m | >10       | <b>0</b>     | 0        | ---      |
| Copper       | ppm    | ASTM D5185m | >75       | <b>9</b>     | 9        | ---      |
| Tin          | ppm    | ASTM D5185m | >10       | <b>0</b>     | <1       | ---      |
| Vanadium     | ppm    | ASTM D5185m |           | <b>&lt;1</b> | <1       | ---      |
| White Metal  | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | ---      |
| Yellow Metal | scalar | *Visual     | NONE      | <b>NONE</b>  | NONE     | ---      |

### CONTAMINATION

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

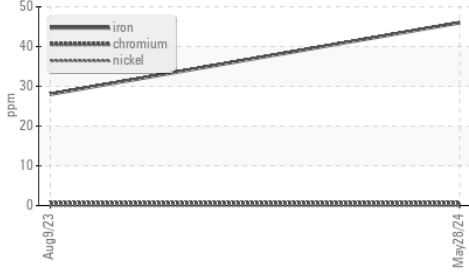
|                  |        |              |           |                |                   |     |
|------------------|--------|--------------|-----------|----------------|-------------------|-----|
| Silicon          | ppm    | ASTM D5185m  | >20       | <b>16</b>      | 11                | --- |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>&lt;1</b>   | <1                | --- |
| Water            |        | WC Method    | >0.1      | <b>NEG</b>     | NEG               | --- |
| Particles >4µm   |        | ASTM D7647   | >5000     | <b>---</b>     | <b>▲ 46824</b>    | --- |
| Particles >6µm   |        | ASTM D7647   | >1300     | <b>---</b>     | <b>▲ 5266</b>     | --- |
| Particles >14µm  |        | ASTM D7647   | >160      | <b>---</b>     | <b>▲ 281</b>      | --- |
| Particles >21µm  |        | ASTM D7647   | >40       | <b>---</b>     | <b>▲ 67</b>       | --- |
| Particles >38µm  |        | ASTM D7647   | >10       | <b>---</b>     | <b>1</b>          | --- |
| Particles >71µm  |        | ASTM D7647   | >3        | <b>---</b>     | <b>0</b>          | --- |
| Oil Cleanliness  |        | ISO 4406 (c) | >19/17/14 | <b>---</b>     | <b>▲ 23/20/15</b> | --- |
| Silt             | scalar | *Visual      | NONE      | <b>▲ MODER</b> | NONE              | --- |
| Debris           | scalar | *Visual      | NONE      | <b>NONE</b>    | NONE              | --- |
| Sand/Dirt        | scalar | *Visual      | NONE      | <b>NONE</b>    | NONE              | --- |
| Appearance       | scalar | *Visual      | NORML     | <b>NORML</b>   | NORML             | --- |
| Odor             | scalar | *Visual      | NORML     | <b>NORML</b>   | NORML             | --- |
| Emulsified Water | scalar | *Visual      | >0.1      | <b>NEG</b>     | NEG               | --- |

### FLUID CONDITION

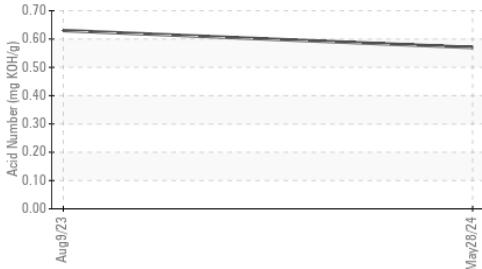
The AN level is acceptable for this fluid.

|                  |          |             |  |              |      |     |
|------------------|----------|-------------|--|--------------|------|-----|
| Sodium           | ppm      | ASTM D5185m |  | <b>1</b>     | 2    | --- |
| Boron            | ppm      | ASTM D5185m |  | <b>16</b>    | 26   | --- |
| Barium           | ppm      | ASTM D5185m |  | <b>0</b>     | 1    | --- |
| Molybdenum       | ppm      | ASTM D5185m |  | <b>2</b>     | 3    | --- |
| Manganese        | ppm      | ASTM D5185m |  | <b>&lt;1</b> | <1   | --- |
| Magnesium        | ppm      | ASTM D5185m |  | <b>8</b>     | 14   | --- |
| Calcium          | ppm      | ASTM D5185m |  | <b>1016</b>  | 703  | --- |
| Phosphorus       | ppm      | ASTM D5185m |  | <b>538</b>   | 410  | --- |
| Zinc             | ppm      | ASTM D5185m |  | <b>592</b>   | 456  | --- |
| Sulfur           | ppm      | ASTM D5185m |  | <b>2010</b>  | 1566 | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |  | <b>0.57</b>  | 0.63 | --- |
| Visc @ 40°C      | cSt      | ASTM D445   |  | <b>44.1</b>  | 44.4 | --- |

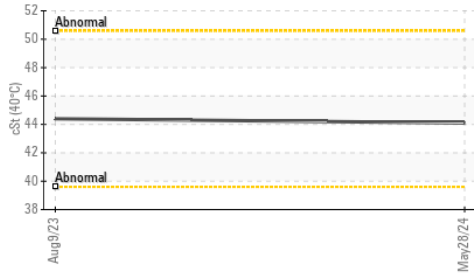
▲ Ferrous Alloys



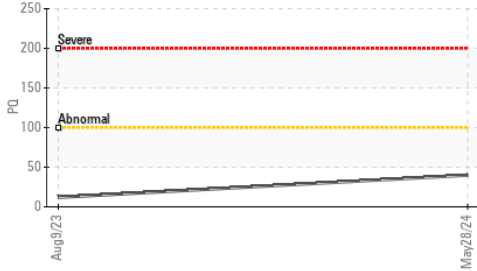
Acid Number



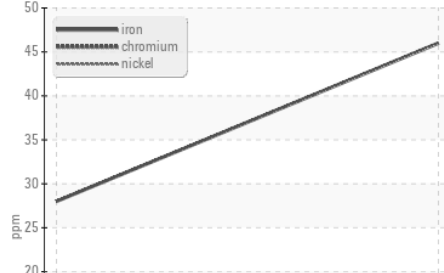
Viscosity @ 40°C



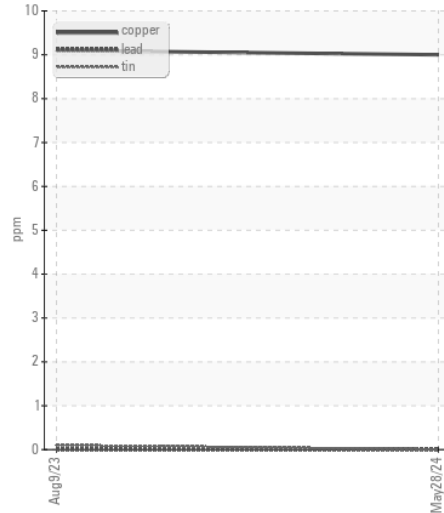
PQ



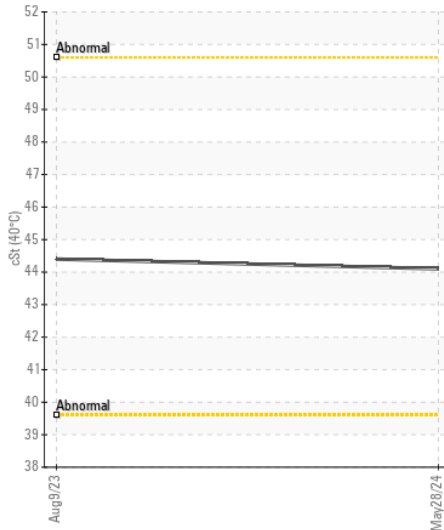
▲ Ferrous Alloys



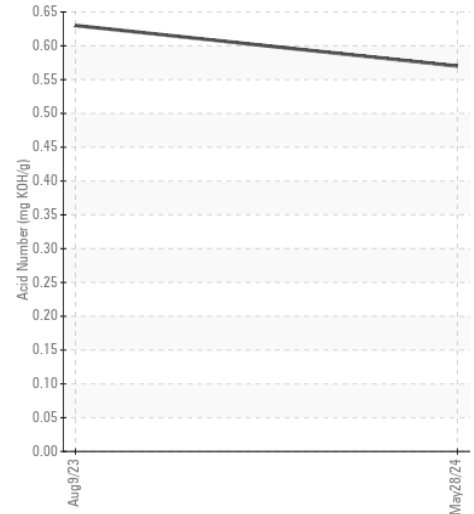
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : JR0216007 **Received** : 29 May 2024  
**Lab Number** : 06193879 **Tested** : 31 May 2024  
**Unique Number** : 11056002 **Diagnosed** : 31 May 2024 - Angela Borella  
**Test Package** : CONST ( Additional Tests: PQ )

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)

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