



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

Machine Id

**22**

Component

**Differential**

Fluid

**GEAR OIL SAE 75W90 (--- GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

**WEAR**

All component wear rates are normal.

**CONTAMINATION**

Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

**FLUID CONDITION**

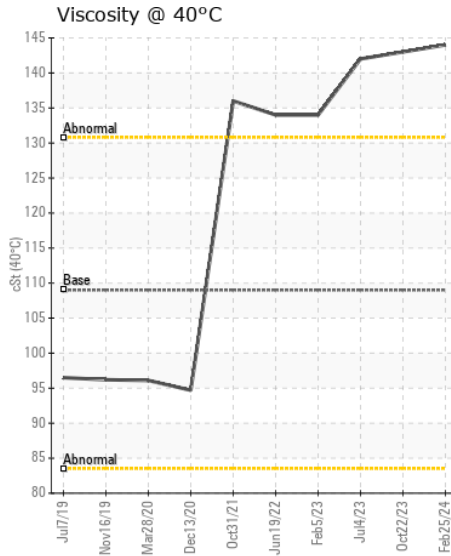
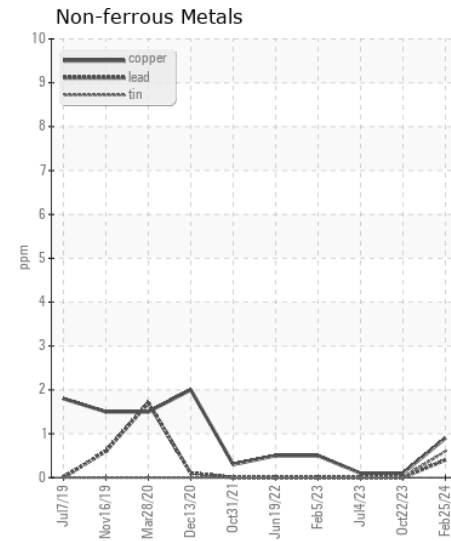
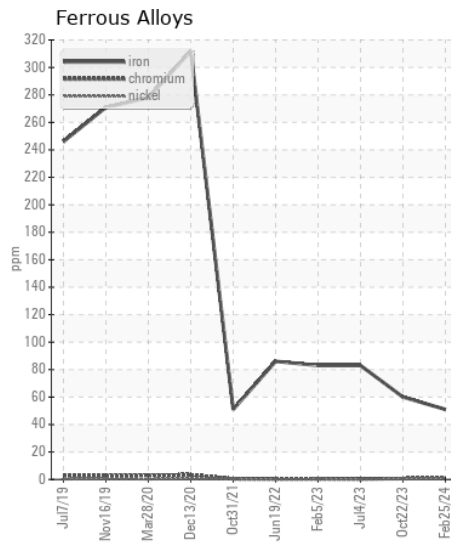
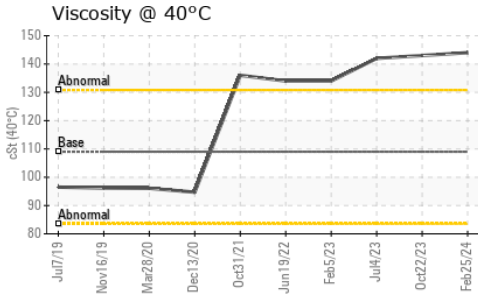
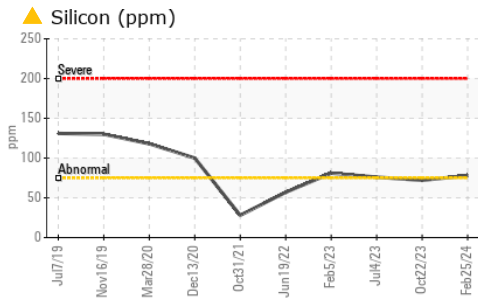
The condition of the oil is acceptable for the time in service.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>CL0005207</b>   | CL0004839   | CL0004451   |
| Sample Date    |     | Client Info |           | <b>25 Feb 2024</b> | 22 Oct 2023 | 04 Jul 2023 |
| Machine Age    | mls | Client Info |           | <b>330345</b>      | 317625      | 307690      |
| Oil Age        | mls | Client Info |           | <b>330345</b>      | 0           | 0           |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | Not Changd  |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ABNORMAL    |

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >500 | <b>51</b>    | 60   | 83   |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | <1   | <1   |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | <1   | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>1</b>     | <1   | 1    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>6</b>     | 7    | 9    |
| Lead         | ppm    | ASTM D5185m | >25  | <b>&lt;1</b> | 0    | 0    |
| Copper       | ppm    | ASTM D5185m | >100 | <b>&lt;1</b> | <1   | <1   |
| Tin          | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0    | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

|                  |        |             |       |              |       |         |
|------------------|--------|-------------|-------|--------------|-------|---------|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>▲ 78</b>  | 72    | ▲ 76    |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>3</b>     | 3     | <1      |
| Water            |        | WC Method   | >.2   | <b>NEG</b>   | NEG   | NEG     |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE    |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | ▲ MODER |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE    |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML | NORML   |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML | NORML   |
| Emulsified Water | scalar | *Visual     | >.2   | <b>NEG</b>   | NEG   | NEG     |

|             |     |             |       |              |       |       |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m |       | <b>0</b>     | 3     | 3     |
| Boron       | ppm | ASTM D5185m | 400   | <b>12</b>    | 10    | 21    |
| Barium      | ppm | ASTM D5185m | 200   | <b>1</b>     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m | 12    | <b>2</b>     | 1     | 1     |
| Manganese   | ppm | ASTM D5185m |       | <b>2</b>     | <1    | <1    |
| Magnesium   | ppm | ASTM D5185m | 12    | <b>4</b>     | 6     | 8     |
| Calcium     | ppm | ASTM D5185m | 150   | <b>33</b>    | 27    | 53    |
| Phosphorus  | ppm | ASTM D5185m | 1650  | <b>551</b>   | 564   | 603   |
| Zinc        | ppm | ASTM D5185m | 125   | <b>10</b>    | 10    | 26    |
| Sulfur      | ppm | ASTM D5185m | 22500 | <b>16367</b> | 14608 | 17502 |
| Visc @ 40°C | cSt | ASTM D445   | 109   | <b>144</b>   | 143   | 142   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0005207  
**Lab Number** : 06103921  
**Unique Number** : 10902151  
**Test Package** : CONST  
**Received** : 28 Feb 2024  
**Tested** : 29 Feb 2024  
**Diagnosed** : 01 Mar 2024 - Don Baldrige

**RACE CITY STEEL**  
 4052 N HWY 16  
 DENVER, NC  
 US 28037  
 Contact: SERVICE MANAGER

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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F: