



# OIL ANALYSIS REPORT

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

Machine Id  
**911**  
 Component  
**3 Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (--- GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>DC0029433</b>   | DC0017349   | ---      |
| Sample Date    |     | Client Info |           | <b>11 Jan 2024</b> | 14 Jan 2022 | ---      |
| Machine Age    | mls | Client Info |           | <b>128273</b>      | 86337       | ---      |
| Oil Age        | mls | Client Info |           | <b>0</b>           | 0           | ---      |
| Filter Age     | mls | Client Info |           | <b>0</b>           | 0           | ---      |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | N/A         | ---      |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | ---      |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | NORMAL      | ---      |

## WEAR

Bearing and/or bushing wear is indicated.

|              |        |             |      |              |       |     |
|--------------|--------|-------------|------|--------------|-------|-----|
| Iron         | ppm    | ASTM D5185m | >500 | <b>169</b>   | 109   | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <b>1</b>     | <1    | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0     | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0     | --- |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 3     | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | <b>&lt;1</b> | 3     | --- |
| Lead         | ppm    | ASTM D5185m | >25  | <b>0</b>     | <1    | --- |
| Copper       | ppm    | ASTM D5185m | >100 | <b>▲ 256</b> | 7     | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>3</b>     | <1    | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0     | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | VLITE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | --- |

## CONTAMINATION

There is no indication of any contamination in the oil.

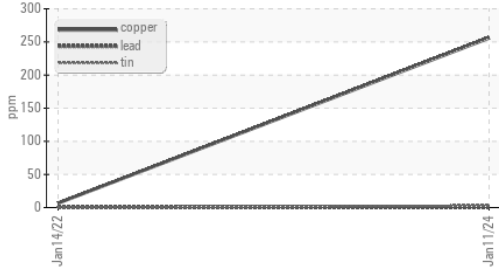
|                  |        |             |       |              |       |     |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >75   | <b>42</b>    | 24    | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | 1     | --- |
| Water            |        | WC Method   | >.2   | <b>NEG</b>   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Debris           | scalar | *Visual     | NONE  | <b>LIGHT</b> | LIGHT | --- |
| 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     | >.2   | <b>NEG</b>   | NEG   | --- |

## FLUID CONDITION

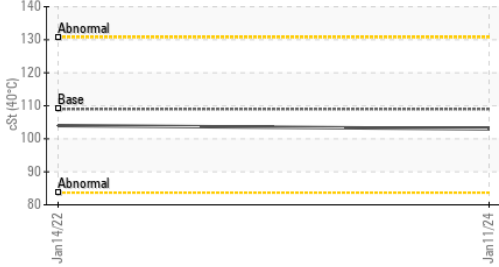
The condition of the oil is acceptable for the time in service.

|             |     |             |       |              |       |     |
|-------------|-----|-------------|-------|--------------|-------|-----|
| Sodium      | ppm | ASTM D5185m |       | <b>3</b>     | 0     | --- |
| Boron       | ppm | ASTM D5185m | 400   | <b>299</b>   | 321   | --- |
| Barium      | ppm | ASTM D5185m | 200   | <b>0</b>     | 0     | --- |
| Molybdenum  | ppm | ASTM D5185m | 12    | <b>&lt;1</b> | <1    | --- |
| Manganese   | ppm | ASTM D5185m |       | <b>17</b>    | 12    | --- |
| Magnesium   | ppm | ASTM D5185m | 12    | <b>1</b>     | <1    | --- |
| Calcium     | ppm | ASTM D5185m | 150   | <b>11</b>    | 8     | --- |
| Phosphorus  | ppm | ASTM D5185m | 1650  | <b>1400</b>  | 1468  | --- |
| Zinc        | ppm | ASTM D5185m | 125   | <b>&lt;1</b> | 0     | --- |
| Sulfur      | ppm | ASTM D5185m | 22500 | <b>25550</b> | 20720 | --- |
| Visc @ 40°C | cSt | ASTM D445   | 109   | <b>103</b>   | 104   | --- |

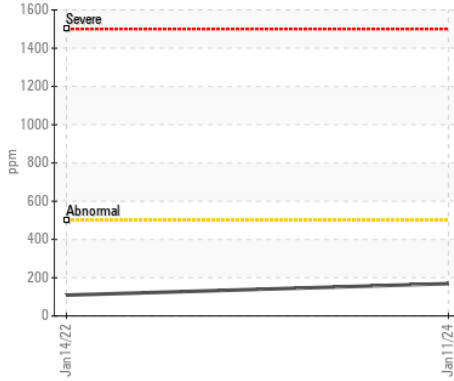
▲ Non-ferrous Metals



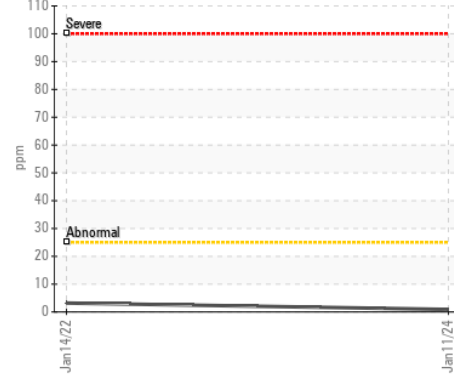
Viscosity @ 40°C



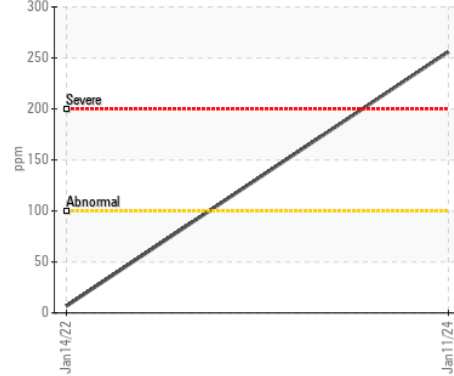
Iron (ppm)



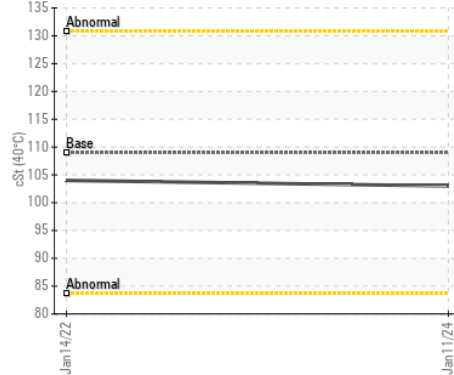
Aluminum (ppm)



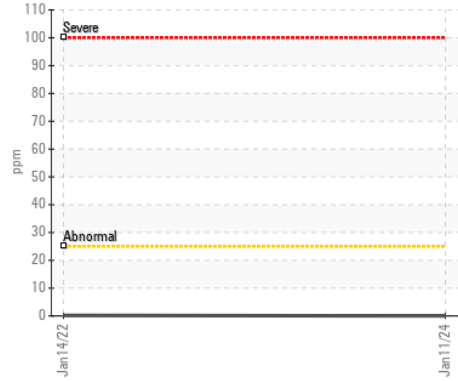
▲ Copper (ppm)



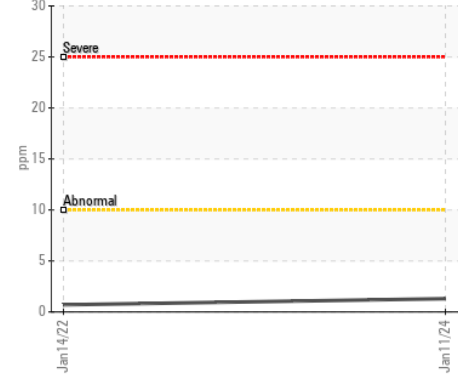
Viscosity @ 40°C



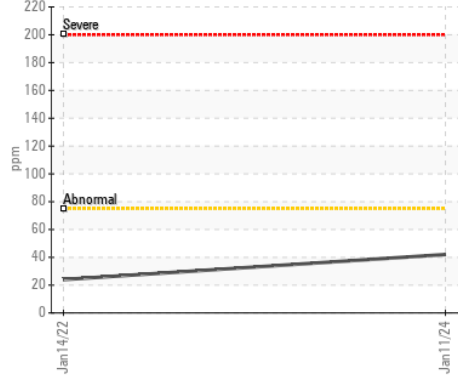
Lead (ppm)



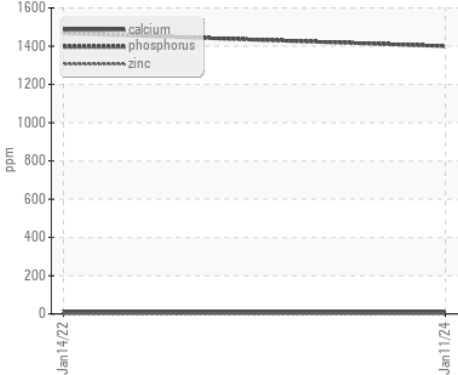
Chromium (ppm)



Silicon (ppm)



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : DC0029433  
 Lab Number : 06075173  
 Unique Number : 10857264  
 Test Package : MOB 1  
 Recieved : 30 Jan 2024  
 Diagnosed : 01 Feb 2024  
 Diagnostician : Don Baldrige

**FRANCIS O DAY**  
 14900 SOUTHLAWN LN  
 ROCKVILLE, MD  
 US 20850  
 Contact: JAMIE FORESTER

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)

T:  
F: