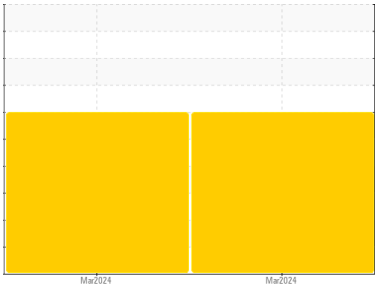
# PROBLEM SUMMARY

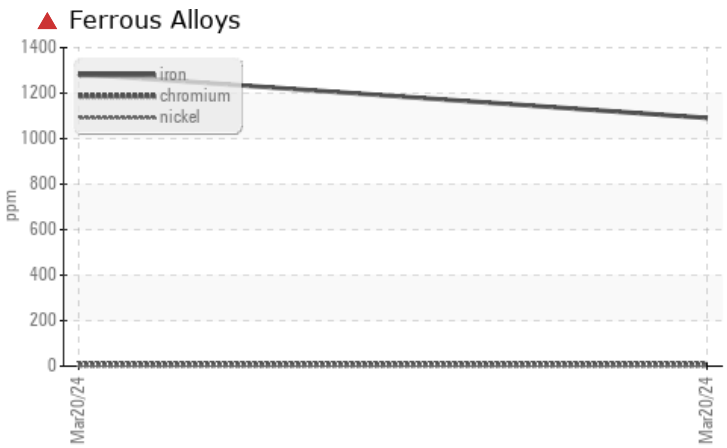
Machine Id
**SR2-1**
Component
**Gearbox**
Fluid
**GEAR OIL ISO 150 (--- LTR)**

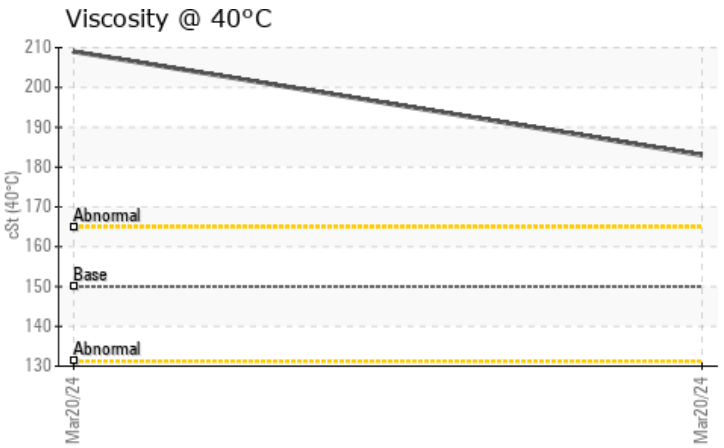
**Sample Rating Trend**




**WEAR**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 150. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

| | | | | | | |
|---|---|---|---|---|---|---|
| Sample Status | | | | **SEVERE** | SEVERE | --- |
| Iron | ppm | ASTM D5185(m) | >200 | ▲ **1284** | ▲ 1091 | --- |


**Customer Id:** EMFMIS
**Sample No.:** WC0909072
**Lab Number:** 02623855
**Test Package:** IND 1

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

*To change component or sample information:*
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Fluid | --- | --- | ? | We recommend that you drain the oil from the component if this has not already been done. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |
| Alert | --- | --- | ? | Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. |
| Information Required | --- | --- | ? | NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. |

## HISTORICAL DIAGNOSIS

**WEAR**

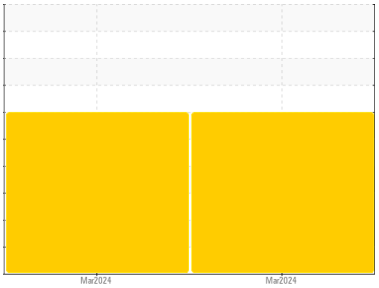
**20 Mar 2024 Diag: Kevin Marson**

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 220. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

**view report**

# OIL ANALYSIS REPORT

Sample Rating Trend




WEAR

Machine Id
**SR2-1**
Component
**Gearbox**
Fluid
**GEAR OIL ISO 150 (--- LTR)**

## DIAGNOSIS

**▲ Recommendation**

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL ISO 150. Please confirm. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

**▲ Wear**

Iron ppm levels are severe. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

**Contamination**

There is no indication of any contamination in the oil.

**Fluid Condition**

The oil viscosity is higher than typical. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0909072** | WC0909082 | --- |
| Sample Date | | Client Info | | **20 Mar 2024** | 20 Mar 2024 | --- |
| Machine Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Changed | | Client Info | | **N/A** | N/A | --- |
| Sample Status | | | | **SEVERE** | SEVERE | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.2 | **NEG** | NEG | --- |

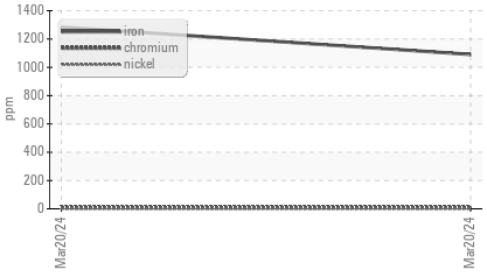
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184* | | **31** | 15 | --- |
| Iron | ppm | ASTM D5185(m) | >200 | ▲ **1284** | ▲ 1091 | --- |
| Chromium | ppm | ASTM D5185(m) | >15 | **8** | 9 | --- |
| Nickel | ppm | ASTM D5185(m) | >15 | **<1** | <1 | --- |
| Titanium | ppm | ASTM D5185(m) | | **0** | 0 | --- |
| Silver | ppm | ASTM D5185(m) | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | **0** | 0 | --- |
| Lead | ppm | ASTM D5185(m) | >100 | **0** | 0 | --- |
| Copper | ppm | ASTM D5185(m) | >200 | **<1** | <1 | --- |
| Tin | ppm | ASTM D5185(m) | >25 | **0** | 0 | --- |
| Antimony | ppm | ASTM D5185(m) | >5 | **0** | 0 | --- |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | --- |
| Beryllium | ppm | ASTM D5185(m) | | **0** | 0 | --- |
| Cadmium | ppm | ASTM D5185(m) | | **0** | 0 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | 50 | **25** | 24 | --- |
| Barium | ppm | ASTM D5185(m) | 15 | **9** | 8 | --- |
| Molybdenum | ppm | ASTM D5185(m) | 15 | **0** | 0 | --- |
| Manganese | ppm | ASTM D5185(m) | | **11** | 9 | --- |
| Magnesium | ppm | ASTM D5185(m) | 50 | **<1** | 2 | --- |
| Calcium | ppm | ASTM D5185(m) | 50 | **9** | 7 | --- |
| Phosphorus | ppm | ASTM D5185(m) | 350 | **333** | 322 | --- |
| Zinc | ppm | ASTM D5185(m) | 100 | **8** | 13 | --- |
| Sulfur | ppm | ASTM D5185(m) | 12500 | **12920** | 11726 | --- |
| Lithium | ppm | ASTM D5185(m) | | **<1** | 2 | --- |

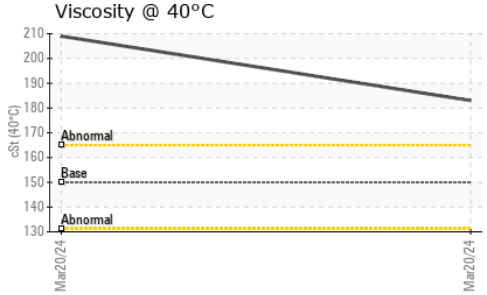
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >50 | **7** | 6 | --- |
| Sodium | ppm | ASTM D5185(m) | | **2** | 3 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | <1 | --- |

# OIL ANALYSIS REPORT

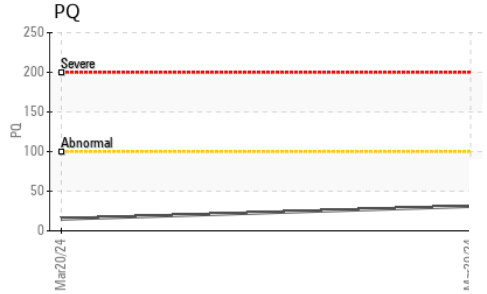
Ferrous Alloys




Viscosity @ 40°C

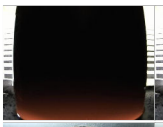
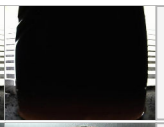



PQ



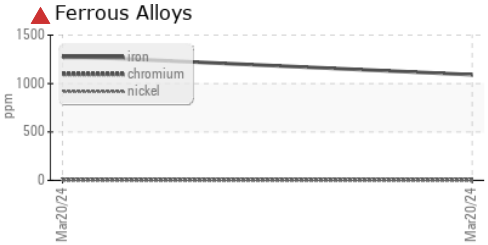

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Silt | 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* | >0.2 | **NEG** | NEG | --- |
| Free Water | scalar | Visual* | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 150 | **183** | 209 | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

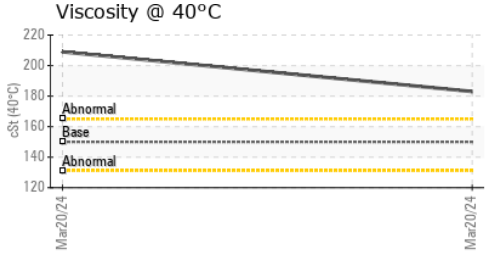
## GRAPHS

Ferrous Alloys

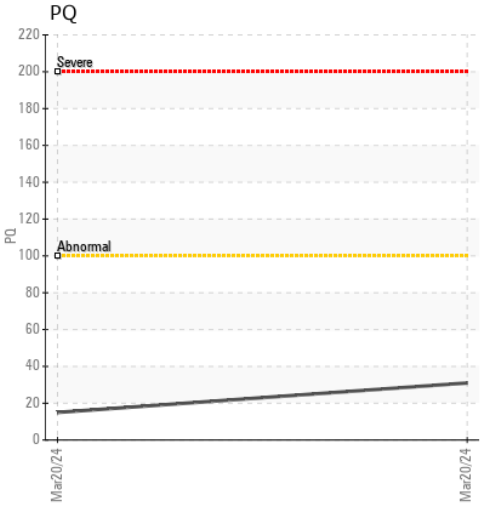



Non-ferrous Metals


Viscosity @ 40°C




PQ




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WC0909072 **Received** : 21 Mar 2024
**Lab Number** : 02623855 **Tested** : 21 Mar 2024
**Unique Number** : 5748974 **Diagnosed** : 21 Mar 2024 - Kevin Marson
**Test Package** : IND 1 ( Additional Tests: PQ )

*To discuss this sample report, contact Customer Service at 1-800-268-2131.*
*Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.*
*Validity of results and interpretation are based on the sample and information as supplied.*

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