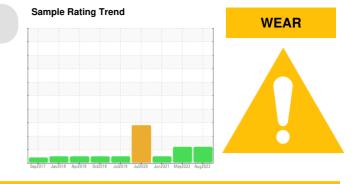
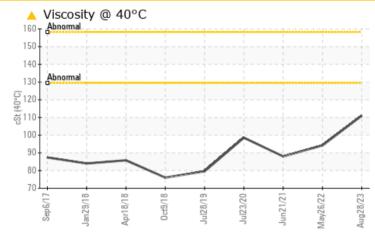


PROBLEM SUMMARY

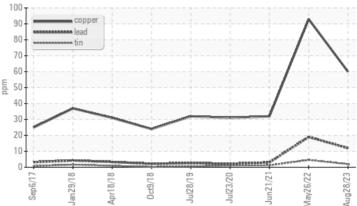


Machine Id PTC P15 Component Gear Lube System Fluid MONARCH GEAR OIL 150 (--- GAL)

COMPONENT CONDITION SUMMARY



▲ Non-ferrous Metals



RECOMMENDATION

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

| PROBLEMATIC TEST RESULTS |
|--------------------------|
| |

| Sample Status | | | ABNORMAL | ABNORMAL | NORMAL | |
|---------------|-----|---------------|----------|----------|---------------|------|
| Copper | ppm | ASTM D5185(m) | >50 | <u> </u> | 9 3 | 32 |
| Visc @ 40°C | cSt | ASTM D7279(m) | | 🔺 111 | 4 94.2 | 88.0 |

Customer Id: ALFVAU Sample No.: AW0003855 Lab Number: 02580030 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 <u>gloria.gonzalez@wearcheck.com</u>

| RECOMMENDED ACTIONS | | | | | | | | |
|----------------------|--------|------|---------|------------------------------------|--|--|--|--|
| Action | Status | Date | Done By | Description | | | | |
| Information Required | | | ? | NOTE: Please p and micron ratio | | | | |

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

HISTORICAL DIAGNOSIS

26 May 2022 Diag: Kevin Marson



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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.Copper ppm levels are abnormal. Bearing and/or bushing wear is indicated. There is no indication of any contamination in the oil. Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



view report

21 Jun 2021 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

23 Jul 2020 Diag: Kevin Marson



We advise that you check for visible metal particles in the oil. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. 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. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.Light concentration of visible metal present. Gear wear is indicated. Light concentration of visible dirt/debris present in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

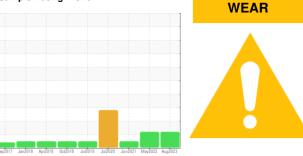






OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id PTC P15 Component Gear Lube System Fluid MONARCH GEAR OIL 150 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

🔺 Wear

Copper ppm levels are noted. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 100 range, advise investigate. The condition of the oil is acceptable for the time in service.

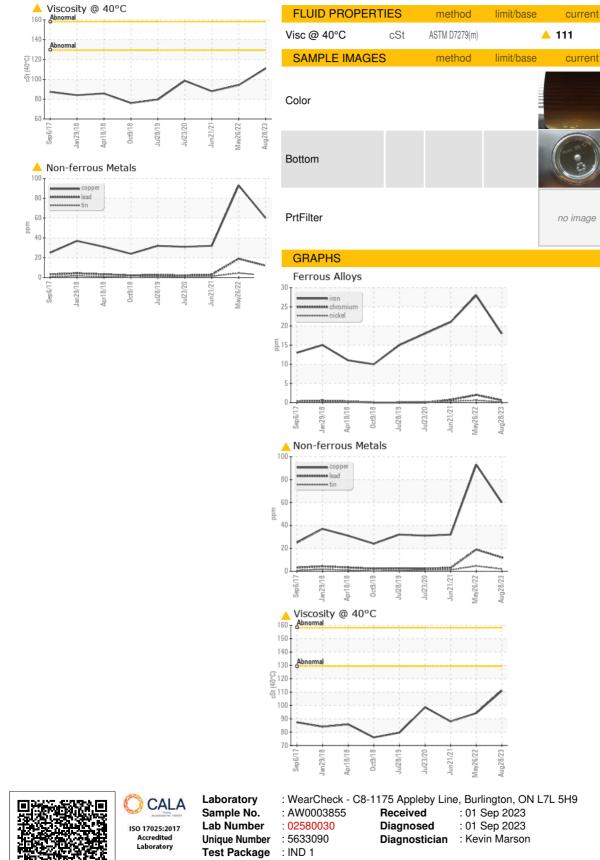
| SAMPLE INFORM | IATION | method | limit/base | current | history1 | history2 |
|--------------------|------------|--------------------------------|-----------------|-----------------|-------------|-------------|
| Sample Number | | Client Info | | AW0003855 | AW0003948 | AW0003849 |
| Sample Date | | Client Info | | 28 Aug 2023 | 26 May 2022 | 21 Jun 2021 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | - Not Changd | N/A | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | NORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >150 | 18 | 28 | 21 |
| Chromium | ppm | ASTM D5185(m) | >10 | <1 | 2 | <1 |
| Nickel | ppm | ASTM D5185(m) | >10 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 1 | 2 | <1 |
| Lead | ppm | ASTM D5185(m) | >100 | 12 | 19 | 3 |
| Copper | ppm | ASTM D5185(m) | | <u> </u> | ▲ 93 | 32 |
| Tin | ppm | ASTM D5185(m) | >10 | 2 | 5 | 1 |
| Antimony | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185(m) | . • | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| ADDITIVES | le le | method | limit/base | current | history1 | history2 |
| Boron | nnm | ASTM D5185(m) | | <1 | 2 | 2 |
| Barium | ppm ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) ASTM D5185(m) | | ۰ <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185(m) | | <1 | 1 | <1 |
| Magnesium | | ASTM D5185(m) | | <1 | 2 | 2 |
| Calcium | ppm | ASTM D5185(m) | | 3 | 10 | 10 |
| | ppm | | | 3 139 | 140 | 118 |
| Phosphorus Zinc | ppm | ASTM D5185(m) | | 139 | 28 | 22 |
| Sulfur | ppm | ASTM D5185(m) | | - | | |
| | ppm | ASTM D5185(m) | | 5780 | 6010 | 5965 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | | <1 | 2 | 1 |
| Sodium | ppm | ASTM D5185(m) | | 2 | 3 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | 1 | <1 |
| VISUAL | | method | limit/base | current | history1 | history2 |
| White Metal | scalar | Visual* | NONE | VLITE | VLITE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | VLITE | NONE |
| Debris | scalar | Visual* | NONE | NONE | VLITE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | VLITE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG | NEG |
| :42:06) Rev: 1 | | | Location: Ken Y | | | |

Report Id: ALFVAU [WCAMIS] 02580030 (Generated: 09/01/2023 17:42:06) Rev: 1

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OIL ANALYSIS REPORT



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. MARTINREA INTERNATIONAL 30 AVIVA PARK DRIVE

history1

history1

no image

A 94.2

history2

history2

no image

88.0

VAUGHAN, ON CA L4L 9C7 Contact: Ken Young ken.young@martinrea.com T: (905)264-0149 F: (416)264-1828