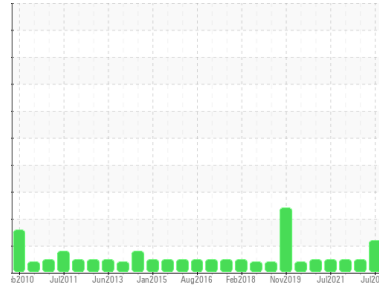




PROBLEM SUMMARY

Sample Rating Trend

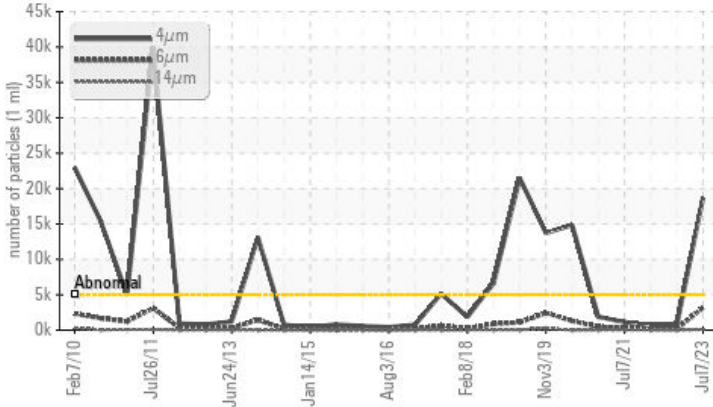
ISO



Area
Final Finishing Dept
 Machine Id
FVM07
 Component
Hydraulic System
 Fluid
SHELL TELLUS S3 M 32 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | NORMAL | NORMAL |
|-----------------|--------------|-----------|------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | ▲ 18688 | 676 | 667 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 3177 | 196 | 200 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 21/19/14 | 17/15/11 | 17/15/12 |

Customer Id: GOONAP
 Sample No.: WC0831820
 Lab Number: 02576741
 Test Package: IND 2



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 Filter | --- | --- | ? | We recommend you service the filters on this component. |
| Resample | --- | --- | ? | We recommend an early resample to monitor this condition. |
| Information Required | --- | --- | ? | NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. |

HISTORICAL DIAGNOSIS

07 Jan 2023 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. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Jan 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



07 Jul 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report





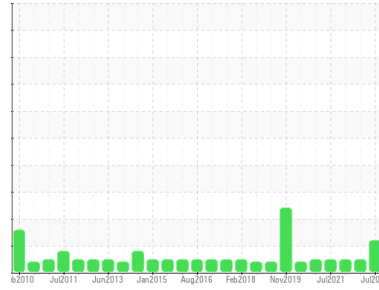
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Area
Final Finishing Dept
 Machine Id
FVM07
 Component
Hydraulic System
 Fluid
SHELL TELLUS S3 M 32 (--- GAL)



DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0831820 | WC0774109 | WC0655668 |
| Sample Date | Client Info | | 07 Jul 2023 | 07 Jan 2023 | 07 Jan 2022 |
| Machine Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | | N/A | N/A | N/A |
| Sample Status | | | ABNORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >20 | 1 | 2 | 7 |
| Chromium | ppm | ASTM D5185(m) >20 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185(m) >20 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >20 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) >20 | 2 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) >20 | 1 | <1 | 1 |
| Tin | ppm | ASTM D5185(m) >20 | 0 | 0 | <1 |
| Antimony | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| 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

| | method | limit/base | current | history1 | history2 |
|------------|--------|-----------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | <1 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | <1 | 0 | <1 |
| Calcium | ppm | ASTM D5185(m) | 37 | 38 | 34 |
| Phosphorus | ppm | ASTM D5185(m) | 58 | 61 | 66 |
| Zinc | ppm | ASTM D5185(m) 0 | 4 | 1 | 1 |
| Sulfur | ppm | ASTM D5185(m) | 165 | 183 | 199 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >15 | 0 | 0 | <1 |
| Sodium | ppm | ASTM D5185(m) | 1 | <1 | <1 |
| Potassium | ppm | ASTM D5185(m) >20 | 1 | <1 | 0 |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | ▲ 18688 | 676 | 667 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 3177 | 196 | 200 |
| Particles >14µm | ASTM D7647 | >160 | 95 | 12 | 24 |
| Particles >21µm | ASTM D7647 | >40 | 11 | 3 | 9 |
| Particles >38µm | ASTM D7647 | >10 | 1 | 1 | 0 |
| Particles >71µm | ASTM D7647 | >3 | 1 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 21/19/14 | 17/15/11 | 17/15/12 |

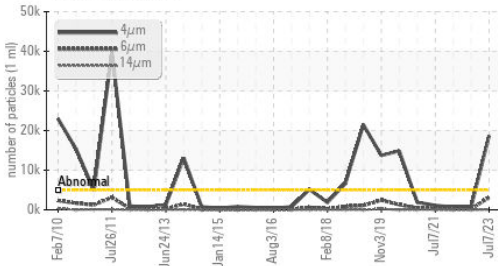
FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.13 | 0.20 | 0.17 |

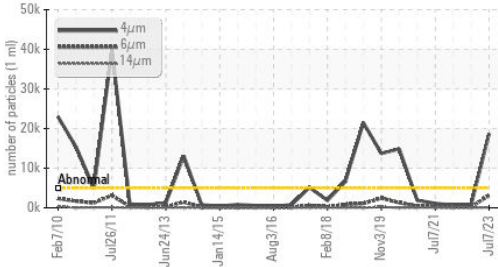


OIL ANALYSIS REPORT

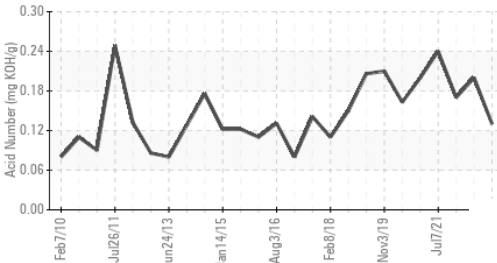
▲ Particle Trend



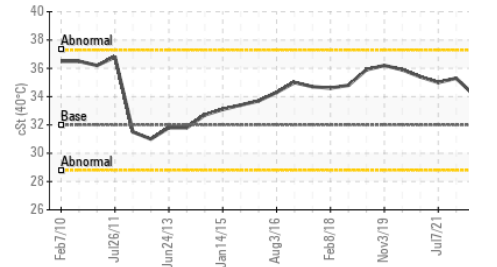
▲ Particle Trend



Acid Number



Viscosity @ 40°C

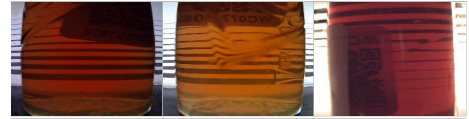


| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | 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* | >0.05 | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 32.0 | 33.7 | 34.1 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|

Color

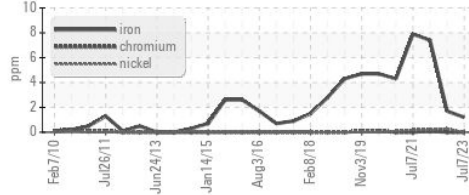


Bottom

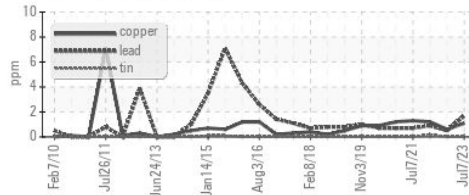


GRAPHS

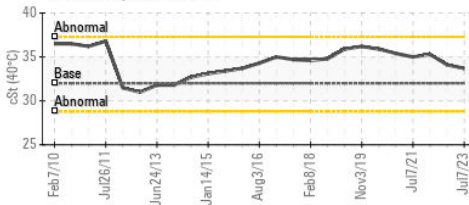
Ferrous Alloys



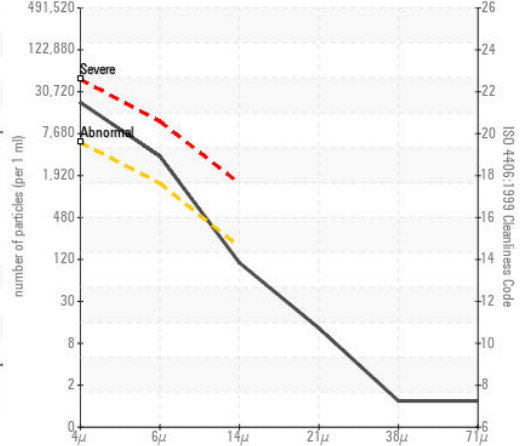
Non-ferrous Metals



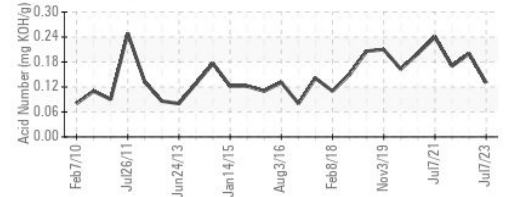
Viscosity @ 40°C



▲ Particle Count



Acid Number



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0831820 Received : 18 Aug 2023
 Lab Number : 02576741 Diagnosed : 22 Aug 2023
 Unique Number : 5629801 Diagnostician : Kevin Marson
 Test Package : IND 2 (Additional Tests: TAN Man)

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.

Goodyear Napanee
 388 GOODYEAR ROAD
 NAPANEE, ON
 CA K7R 3L2
 Contact: Mohammad Waleed
 Mohammad_Waleed@goodyear.com
 T: (613)354-7709
 F: (613)354-9377