



OIL ANALYSIS REPORT

| | |
|-----------------|-----------|
| WEAR | NORMAL |
| CONTAMINATION | ATTENTION |
| FLUID CONDITION | NORMAL |

Area

9
Machine Id
09-0030-020-020 PRESS BOTTOM DRIVE (9MC1M1)

Component
9 Gearbox

Fluid
SHELL OMALA S4 GXV 320 (205 LTR)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0945417 | WC0857978 | WC0855134 |
| Sample Date | | Client Info | | 19 Jun 2024 | 27 Feb 2024 | 06 Dec 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ATTENTION | ATTENTION | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185(m) | >200 | 58 | 64 | 67 |
| Chromium | ppm | ASTM D5185(m) | >15 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185(m) | >15 | <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 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) | >100 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >25 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

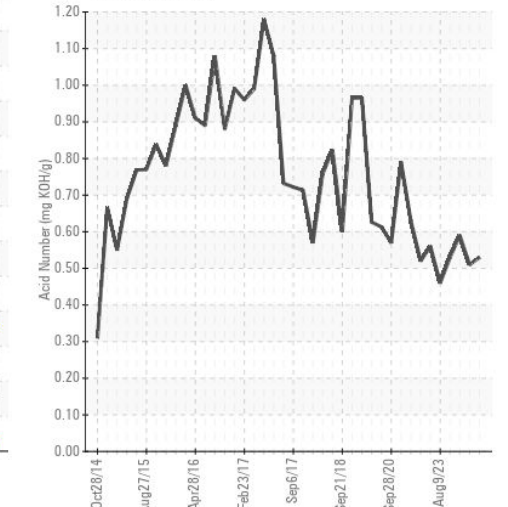
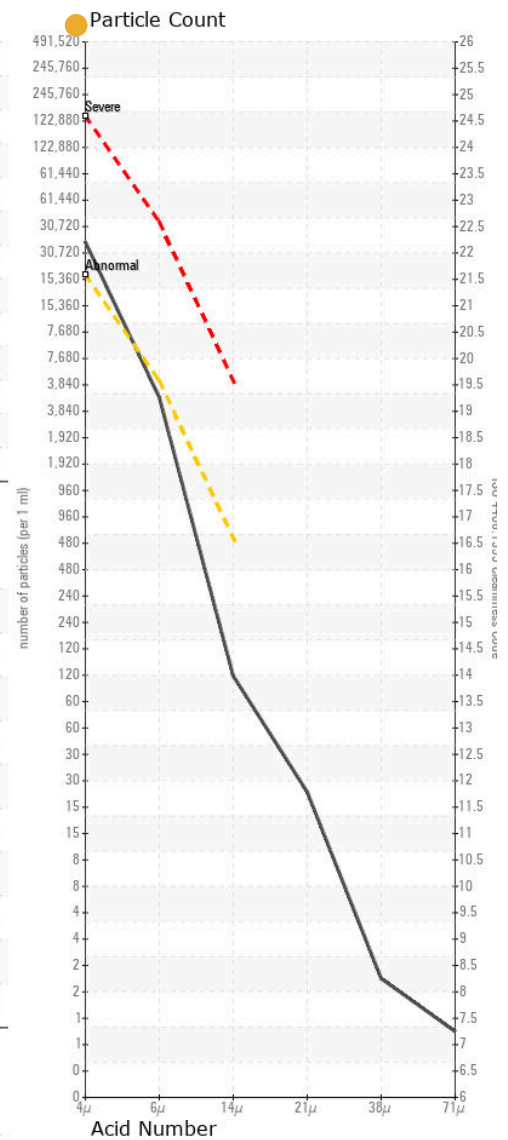
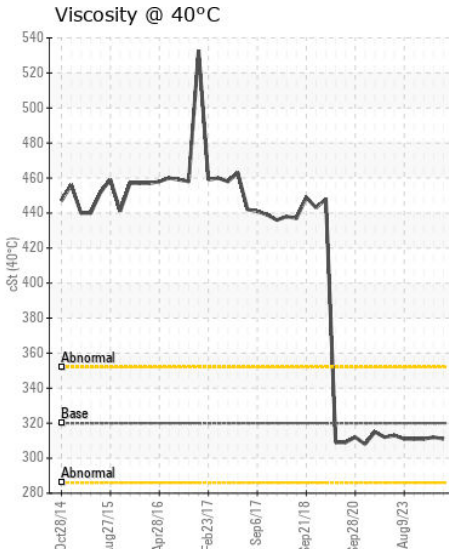
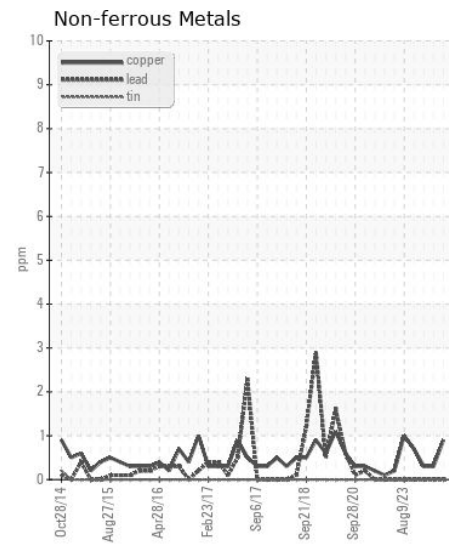
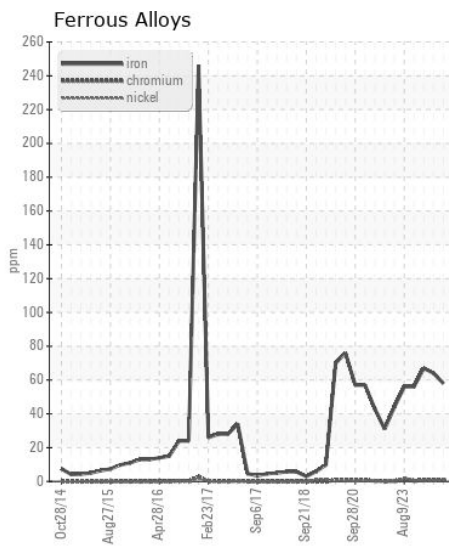
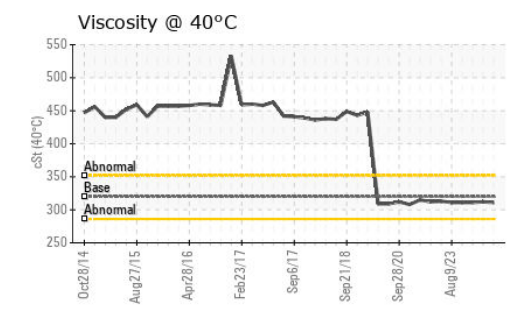
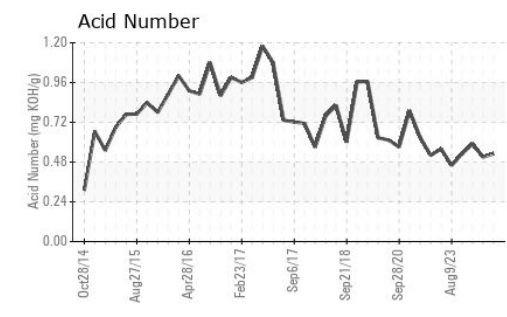
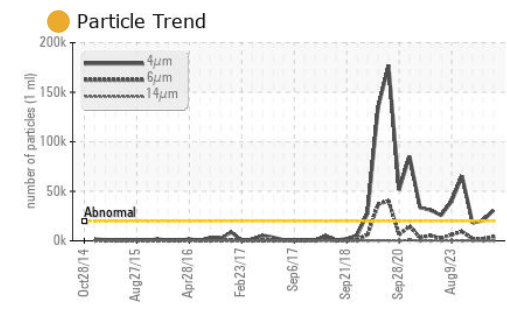
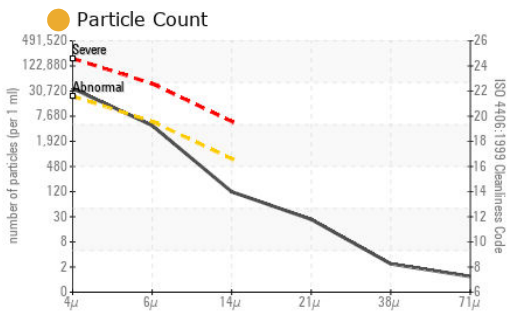
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

| | | | | | | |
|------------------|--------|---------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >50 | 2 | 3 | 3 |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | 0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >20000 | 30753 | 20482 | 17904 |
| Particles >6µm | | ASTM D7647 | >5000 | 4023 | 2008 | 1954 |
| Particles >14µm | | ASTM D7647 | >640 | 105 | 47 | 95 |
| Particles >21µm | | ASTM D7647 | >160 | 23 | 15 | 34 |
| Particles >38µm | | ASTM D7647 | >40 | 2 | 2 | 4 |
| Particles >71µm | | ASTM D7647 | >10 | 1 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | 22/19/14 | 22/18/13 | 21/18/14 |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|---------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Boron | ppm | ASTM D5185(m) | | 7 | 7 | 8 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | 0 | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | | 7 | 9 | 9 |
| Phosphorus | ppm | ASTM D5185(m) | | 217 | 242 | 248 |
| Zinc | ppm | ASTM D5185(m) | | 12 | 12 | 12 |
| Sulfur | ppm | ASTM D5185(m) | | 8667 | 8978 | 9381 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.53 | 0.51 | 0.59 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 320 | 311 | 312 | 311 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0945417 **Received** : 25 Jun 2024
Lab Number : 02644070 **Tested** : 25 Jun 2024
Unique Number : 5801609 **Diagnosed** : 25 Jun 2024 - Wes Davis
Test Package : IND 2 (Additional Tests: TAN Man)

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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.