



OIL ANALYSIS REPORT

Area
Metelix - M10200
 Machine Id
AG294
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

Sample Rating Trend



VISCOSITY



DIAGNOSIS

- ▲ Recommendation**
 The sample submitted is 4 times dirtier than the ISO dirt count recommendation of 19/16/14. Viscosity at 40 °C is out of spec (46 ± 5 cSt).
- ▲ Contamination**
 Particles >6µm and oil cleanliness are notably high.
- ▲ Fluid Condition**
 Visc @ 40°C is abnormally low.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|------------------|-------------|-------------|--------------------|----------|----------|
| Machine ID | Client Info | | Trimmer 2 | --- | --- |
| Department | Client Info | | Sales | --- | --- |
| Sample From | Client Info | | Machine | --- | --- |
| Production Stage | Client Info | | Initial | --- | --- |
| Sent to WC | Client Info | | 04/15/2024 | --- | --- |
| Sample Number | Client Info | | E30001856 | --- | --- |
| Sample Date | Client Info | | 03 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | | Client Info | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

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

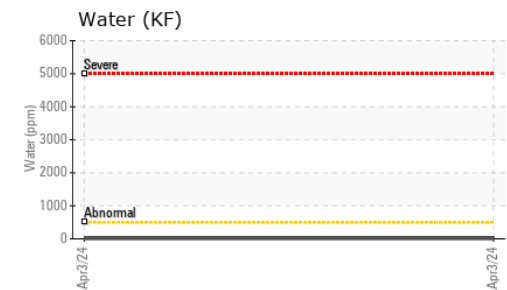
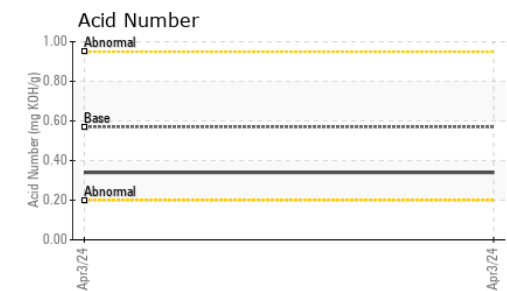
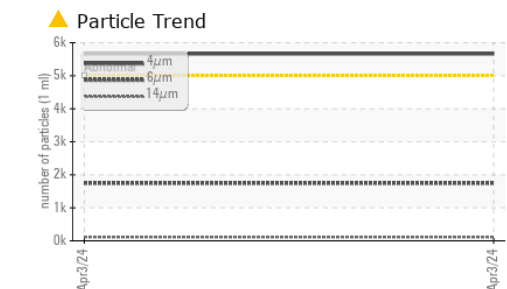
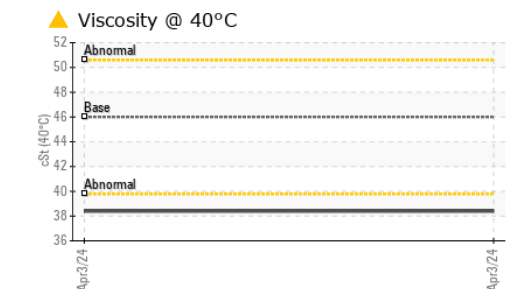
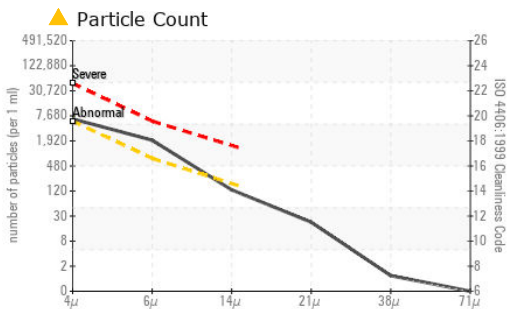
ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) 5 | <1 | --- | --- |
| Barium | ppm | ASTM D5185(m) 5 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) 5 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) 25 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185(m) 200 | 48 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) 300 | 338 | --- | --- |
| Zinc | ppm | ASTM D5185(m) 370 | 409 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) 2500 | 804 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >15 | <1 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | 0 | --- | --- |
| Water | % | ASTM D6304* >0.05 | 0.001 | --- | --- |
| ppm Water | ppm | ASTM D6304* >500 | 9 | --- | --- |

OIL ANALYSIS REPORT



| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | ● 5664 | --- | --- |
| Particles >6µm | ASTM D7647 | >640 | ▲ 1748 | --- | --- |
| Particles >14µm | ASTM D7647 | >160 | 113 | --- | --- |
| Particles >21µm | ASTM D7647 | >40 | 19 | --- | --- |
| Particles >38µm | ASTM D7647 | >10 | 1 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/16/14 | ▲ 20/18/14 | --- | --- |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|-----|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.57 | 0.34 | --- | --- |

| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Precipitate | scalar | Visual* | NONE | NONE | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | VLITE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.05 | NEG | --- | --- |
| Free Water | scalar | Visual* | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|----------------------|--------|---------------|---------|---------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D7279(m) | 46 | ▲ 38.4 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 6.7 | 6.3 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 97 | 112 | --- | --- |

SAMPLE IMAGES

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



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001856
Lab Number : **02629622**
Unique Number : 5762754
Test Package : IND 2 (Additional Tests: KF, KV100, VI)

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To discuss this sample report, contact Customer Service at 1-905-372-2251.
 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.