



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
50155

Component
Hoist

Fluid
HITACHI SUPER EH56HBW (--- 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

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | | WC0876939 | --- | --- |
| Sample Date | Client Info | | | 11 Mar 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 2 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | Client Info | | | N/A | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.05 | NEG | --- | --- |

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

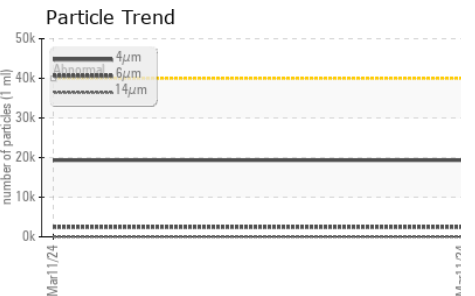
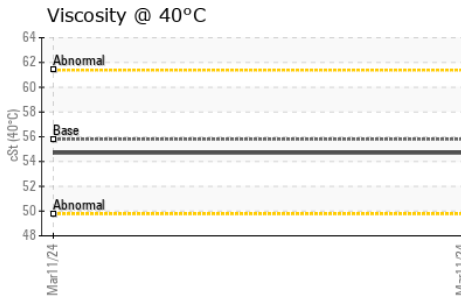
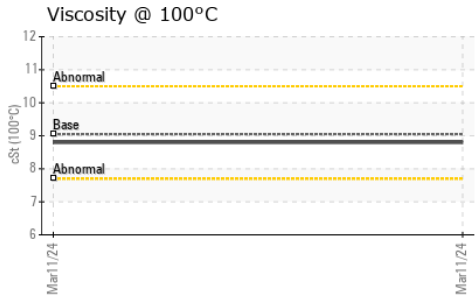
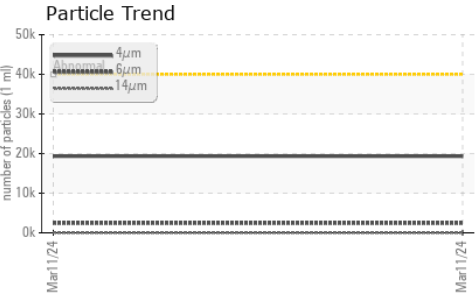
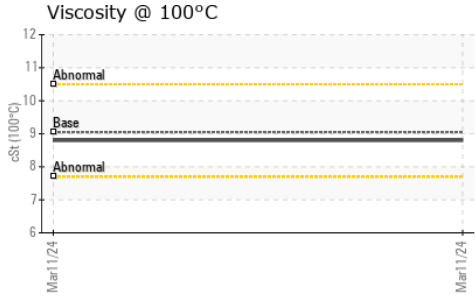
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 21 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 3491 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 897 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 1038 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 2789 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >15 | 13 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | --- | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >40000 | 19326 | --- | --- |
| Particles >6µm | | ASTM D7647 | >10000 | 2464 | --- | --- |
| Particles >14µm | | ASTM D7647 | >80 | 24 | --- | --- |
| Particles >21µm | | ASTM D7647 | >20 | 7 | --- | --- |
| Particles >38µm | | ASTM D7647 | >4 | 6 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 5 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >22/20/13 | 21/18/12 | --- | --- |



OIL ANALYSIS REPORT



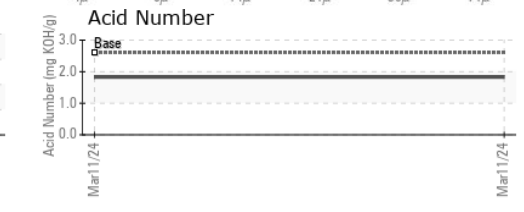
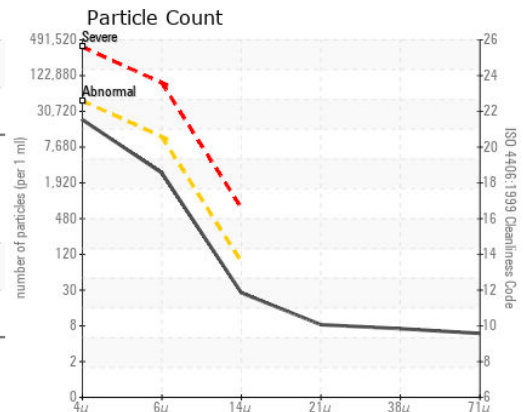
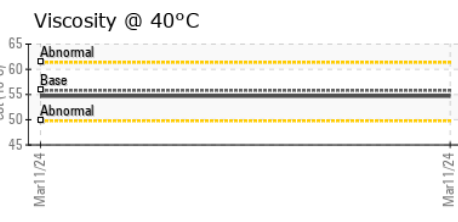
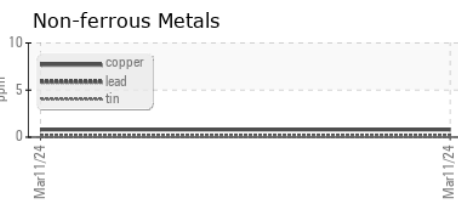
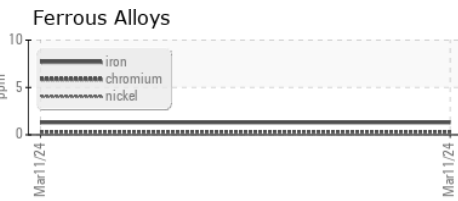
| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|-----|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 2.6 | 1.83 | --- | --- |

| 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 | NONE | --- | --- |
| 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) | 55.8 | 54.7 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 9.05 | 8.8 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 142 | 138 | --- | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|-----------------|-----------------|
| Color | | | | <i>no image</i> | <i>no image</i> |
| Bottom | | | | <i>no image</i> | <i>no image</i> |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
 Sample No. : WC0876939
 Lab Number : **02623045**
 Unique Number : 5748164
 Test Package : IND 2 (Additional Tests: KV100, VI)

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 200 WOODLAWN ROAD WEST
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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.