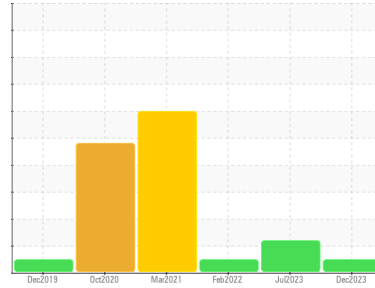




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
Mori Seiki Core NTX 2500 #363 (molds) -cc5216

Component
Hydraulic System

Fluid
AW HYDRAULIC OIL ISO 32 (--- 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. Please specify the brand, type, and viscosity of the oil on your 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 | | | WC0887646 | WC0837815 | WC0667056 |
| Sample Date | Client Info | | | 10 Dec 2023 | 10 Jul 2023 | 07 Feb 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 | | | | NORMAL | ATTENTION | NORMAL |

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

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Lead | ppm | ASTM D5185(m) | >20 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >20 | 6 | 6 | 10 |
| Tin | ppm | ASTM D5185(m) | >20 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | | 0 | 0 | 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 | | method | limit/base | current | history1 | history2 |
|------------|-----|---------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 5 | 2 | 2 | 1 |
| Barium | ppm | ASTM D5185(m) | 5 | <1 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 25 | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | 200 | 16 | 17 | 4 |
| Phosphorus | ppm | ASTM D5185(m) | 300 | 253 | 283 | 200 |
| Zinc | ppm | ASTM D5185(m) | 370 | 236 | 264 | 177 |
| Sulfur | ppm | ASTM D5185(m) | 2500 | 1649 | 1710 | 602 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |

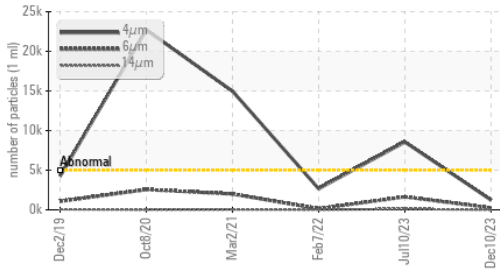
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >15 | 1 | 2 | 3 |
| Sodium | ppm | ASTM D5185(m) | | <1 | <1 | 0 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | <1 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|------------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 1225 | ▲ 8566 | 2665 |
| Particles >6µm | | ASTM D7647 | >1300 | 245 | ▲ 1631 | 134 |
| Particles >14µm | | ASTM D7647 | >160 | 9 | 108 | 7 |
| Particles >21µm | | ASTM D7647 | >40 | 3 | 35 | 3 |
| Particles >38µm | | ASTM D7647 | >10 | 1 | 4 | 0 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 17/15/10 | ▲ 20/18/14 | 19/14/10 |

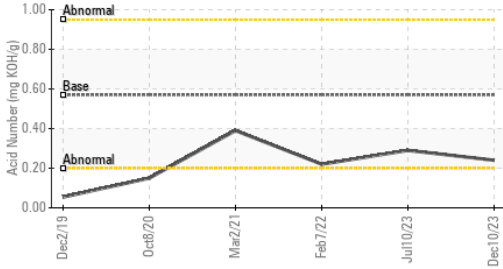


OIL ANALYSIS REPORT

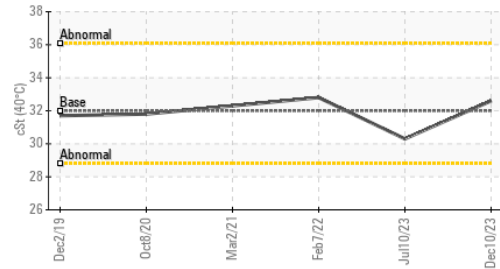
Particle Trend



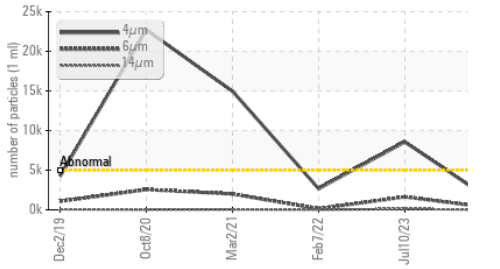
Acid Number



Viscosity @ 40°C



Particle Trend



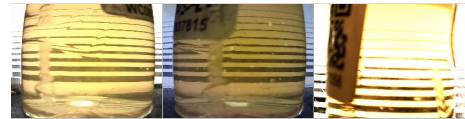
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.57 | 0.24 | 0.29 | 0.22 |

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

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|------------------|-----|---------------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 32 | 32.6 | 30.3 | 32.8 |

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

Color

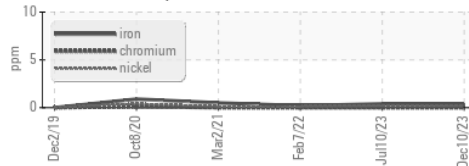


Bottom

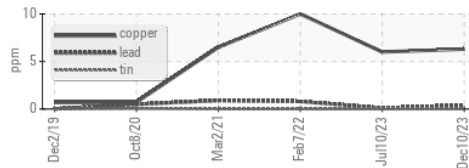


GRAPHS

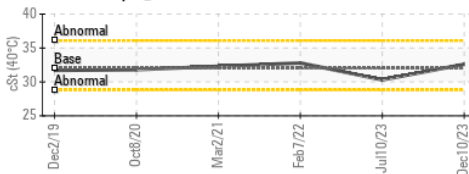
Ferrous Alloys



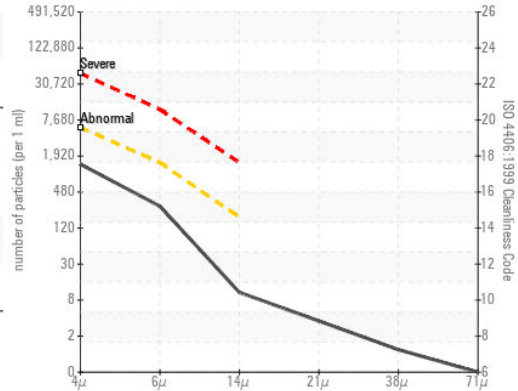
Non-ferrous Metals



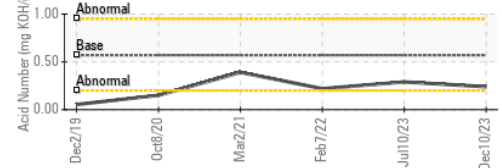
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 HUSKY INJECTION MOLDING SYSTEMS LTD
Sample No. : WC0887646 **Received** : 11 Dec 2023 **530 QUEEN STREET SOUTH**
Lab Number : 02602288 **Diagnosed** : 12 Dec 2023 **BOLTON, ON**
Unique Number : 5695373 **Diagnostician** : Kevin Marson **CA L7E 5S5**
Test Package : IND 2 (Additional Tests: TAN Man) **Contact: Robert Cameron**

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.

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