



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
FORTRESS SPECIALTY CELLULOSE
Machine Id
NO UNIT

Component
Hydraulic System

Fluid
ASPHALT RELEASE AGENT LLOYDS TEST 1 (--- GAL)



DIAGNOSIS

Recommendation

Il s'agit du relevé de base de l'échantillon soumis.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-----------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | WC | --- | --- |
| Sample Date | Client Info | | 13 Mar 2024 | --- | --- |
| Machine Age | hrs Client Info | | 0 | --- | --- |
| Oil Age | hrs Client Info | | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|-------------------|------------|--------------|----------|----------|
| Iron | ppm ASTM D5185(m) | >20 | 5 | --- | --- |
| Chromium | ppm ASTM D5185(m) | >10 | 0 | --- | --- |
| Nickel | ppm ASTM D5185(m) | >10 | <1 | --- | --- |
| Titanium | ppm ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm ASTM D5185(m) | >10 | <1 | --- | --- |
| Lead | ppm ASTM D5185(m) | >10 | 0 | --- | --- |
| Copper | ppm ASTM D5185(m) | >75 | <1 | --- | --- |
| Tin | ppm ASTM D5185(m) | >10 | 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) | | 0 | --- | --- |
| Calcium | ppm ASTM D5185(m) | | <1 | --- | --- |
| Phosphorus | ppm ASTM D5185(m) | | 20 | --- | --- |
| Zinc | ppm ASTM D5185(m) | | <1 | --- | --- |
| Sulfur | ppm ASTM D5185(m) | | 49 | --- | --- |
| Lithium | ppm ASTM D5185(m) | | <1 | --- | --- |

CONTAMINANTS

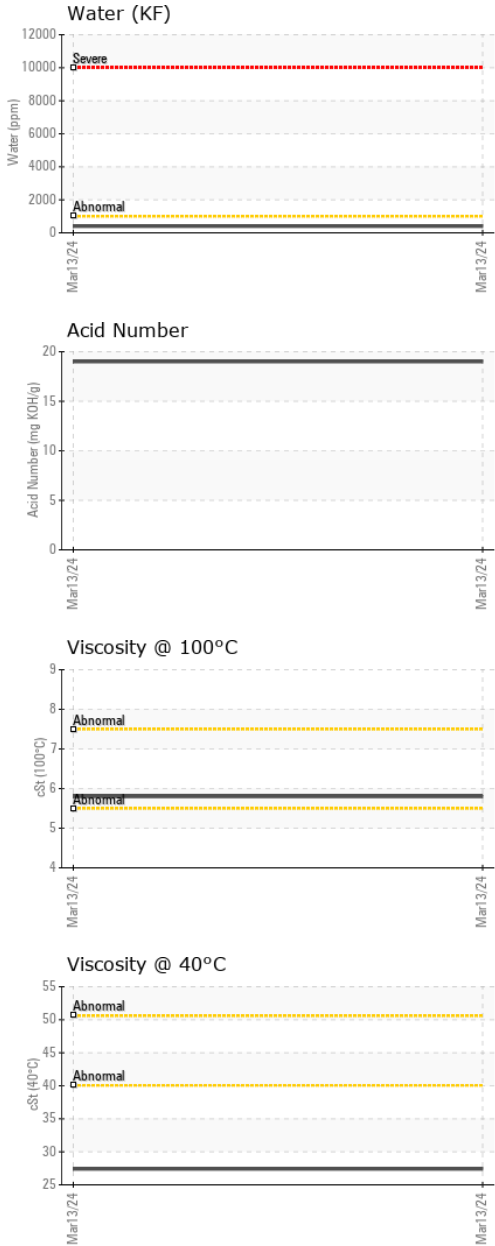
| | method | limit/base | current | history1 | history2 |
|-----------|-------------------|------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185(m) | >20 | 0 | --- | --- |
| Sodium | ppm ASTM D5185(m) | | 0 | --- | --- |
| Potassium | ppm ASTM D5185(m) | >20 | 0 | --- | --- |
| Water | % ASTM D6304* | >0.1 | 0.039 | --- | --- |
| ppm Water | ppm ASTM D6304* | >1000 | 399 | --- | --- |

INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------------------|------------|--------------|----------|----------|
| Soot % | % ASTM D7844* | | 0 | --- | --- |
| Nitration | Abs/cm ASTM D7624* | | 4.6 | --- | --- |
| Sulfation | Abs/.1mm ASTM D7415* | | 138.5 | --- | --- |



OIL ANALYSIS REPORT





| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >2500 | 28830 | --- | --- |
| Particles >6µm | ASTM D7647 | >640 | 8351 | --- | --- |
| Particles >14µm | ASTM D7647 | >80 | 95 | --- | --- |
| Particles >21µm | ASTM D7647 | >20 | 10 | --- | --- |
| Particles >38µm | ASTM D7647 | >4 | 1 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 1 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >18/16/13 | 22/20/14 | --- | --- |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|----------------------|------------|--------------|----------|----------|
| Oxidation | Abs/.1mm ASTM D7414* | | 165.3 | --- | --- |
| Acid Number (AN) | mg KOH/g ASTM D974* | | 19.0 | --- | --- |

| 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* | >0.1 | NEG | --- | --- |
| Free Water | scalar Visual* | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|-------------------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt ASTM D7279(m) | | 27.4 | --- | --- |
| Visc @ 100°C | cSt ASTM D7279(m) | | 5.8 | --- | --- |
| Viscosity Index (VI) | Scale ASTM D2270* | | 161 | --- | --- |

| 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. : WC
Lab Number : **02622169**
Unique Number : 5747288
Test Package : MOB 2 (Additional Tests: TAN Man)
Received : 14 Mar 2024
Tested : 15 Mar 2024
Diagnosed : 15 Mar 2024 - Bill Quesnel

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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