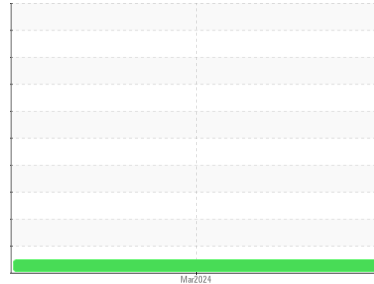




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
Chem-Ecol
 Machine Id
A2403118
 Component
Unknown Component
 Fluid
CHEM-ECOL TAPPING OIL 104 (--- GAL)

DIAGNOSIS

Recommendation

We certify that this oil is clean, that the additives are at acceptable levels, and that it is suitable for use.

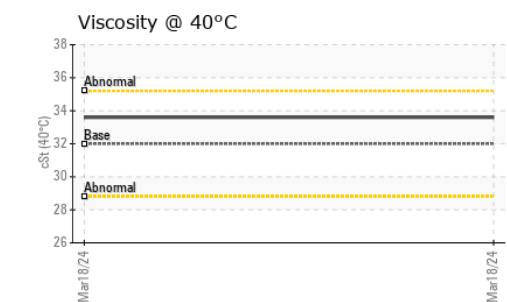
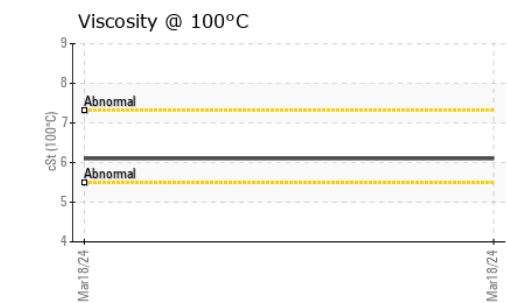
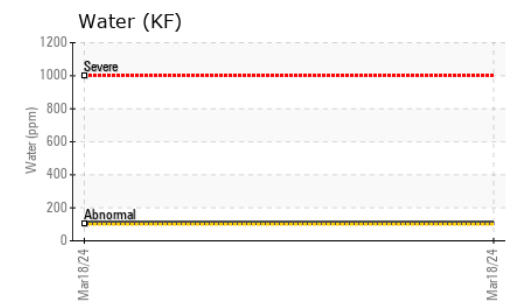
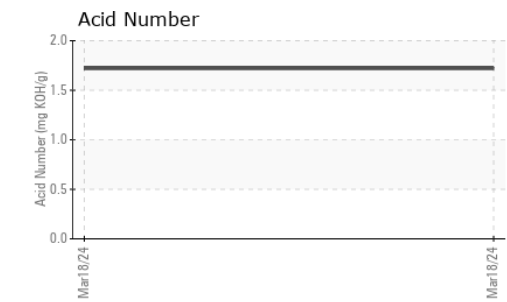
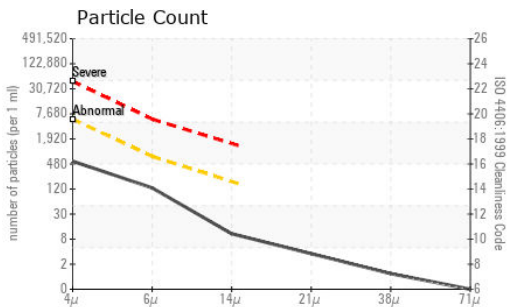
| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Batch # | Client Info | | | 3032-A | --- | --- |
| Department | Client Info | | | Production | --- | --- |
| Sample From | Client Info | | | Machine | --- | --- |
| Production Stage | Client Info | | | Final | --- | --- |
| Sent to WC | Client Info | | | 03/18/2024 | --- | --- |
| Sample Number | Client Info | | | E30001707 | --- | --- |
| Sample Date | Client Info | | | 18 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) | | 7 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Lead | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | | 6 | --- | --- |
| Tin | ppm | ASTM D5185(m) | | 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) | | 0 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 143 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 1621 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 509 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | | 635 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | 6183 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | | 1 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 4 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | --- | --- |
| Water | % | ASTM D6304* | | 0.010 | --- | --- |
| ppm Water | ppm | ASTM D6304* | | 106 | --- | --- |

OIL ANALYSIS REPORT



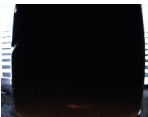

| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | 491 | --- | --- |
| Particles >6µm | ASTM D7647 | >640 | 113 | --- | --- |
| Particles >14µm | ASTM D7647 | >160 | 9 | --- | --- |
| Particles >21µm | ASTM D7647 | >40 | 3 | --- | --- |
| Particles >38µm | ASTM D7647 | >10 | 1 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/16/14 | 16/14/10 | --- | --- |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 1.72 | --- | --- |

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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|----------------------|--------|---------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 33.6 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 6.1 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 130 | --- | --- |

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

| | | | | | | |
|--------|--|--|--|---|----------|----------|
| Color | | | |  | no image | no image |
| Bottom | | | |  | no image | no image |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30001707
Lab Number : **02623385**
Unique Number : 5748504
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

Received : 20 Mar 2024
Tested : 21 Mar 2024
Diagnosed : 22 Mar 2024 - Tatiana Sorkina

Environmental 360 Solutions Ltd.
 640 Victoria Street
 Cobourg, ON
 CA K9A 5H5
 Contact: Tatiana Sorkina
 tsorkina@e360s.ca
 T: (800)263-3939
 F: (905)373-4950

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.