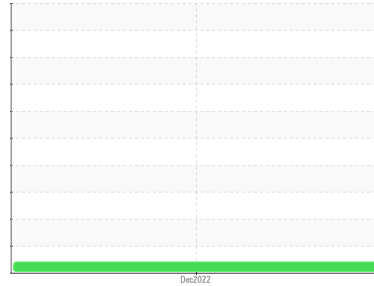




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
DOOSAN DL420-5 DWGCWLB JLL1010785

Component
Transmission

Fluid
DOOSAN 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

▲ Fluid Condition

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history 1 | history 2 |
|---------------|-------------|-------------|--------------------|-----------|-----------|
| Sample Number | Client Info | | WC0713504 | --- | --- |
| Sample Date | Client Info | | 28 Dec 2022 | --- | --- |
| Machine Age | hrs | Client Info | 3935 | --- | --- |
| Oil Age | hrs | Client Info | 1000 | --- | --- |
| Oil Changed | Client Info | | Changed | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history 1 | history 2 |
|-----------|--------|---------------|---------|--------------|-----------|
| Iron | ppm | ASTM D5185(m) | >200 | 43 | --- |
| Chromium | ppm | ASTM D5185(m) | >10 | 0 | --- |
| Nickel | ppm | ASTM D5185(m) | | 0 | --- |
| Titanium | ppm | ASTM D5185(m) | | <1 | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- |
| Aluminum | ppm | ASTM D5185(m) | >50 | 2 | --- |
| Lead | ppm | ASTM D5185(m) | >50 | <1 | --- |
| Copper | ppm | ASTM D5185(m) | >200 | 3 | --- |
| 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 | history 1 | history 2 |
|------------|--------|---------------|---------|--------------|-----------|
| Boron | ppm | ASTM D5185(m) | | 72 | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 12 | --- |
| Manganese | ppm | ASTM D5185(m) | | <1 | --- |
| Magnesium | ppm | ASTM D5185(m) | | 743 | --- |
| Calcium | ppm | ASTM D5185(m) | | 1309 | --- |
| Phosphorus | ppm | ASTM D5185(m) | | 875 | --- |
| Zinc | ppm | ASTM D5185(m) | | 880 | --- |
| Sulfur | ppm | ASTM D5185(m) | | 2756 | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- |

CONTAMINANTS

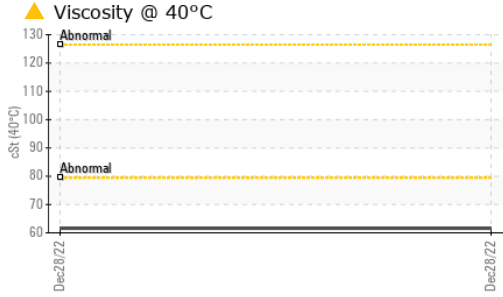
| | method | limit/base | current | history 1 | history 2 |
|-----------|--------|---------------|---------|-----------|-----------|
| Silicon | ppm | ASTM D5185(m) | >50 | 4 | --- |
| Sodium | ppm | ASTM D5185(m) | | 10 | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 2 | --- |

VISUAL

| | method | limit/base | current | history 1 | history 2 |
|------------------|--------|------------|---------|--------------|-----------|
| 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 | --- |



OIL ANALYSIS REPORT

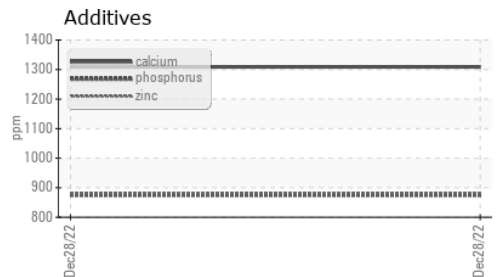
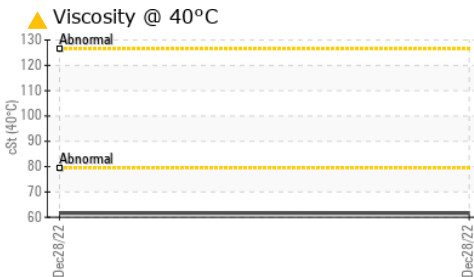
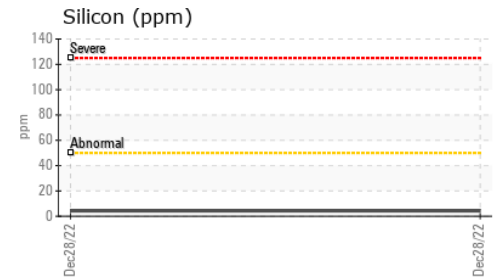
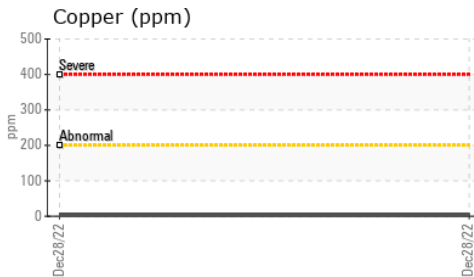
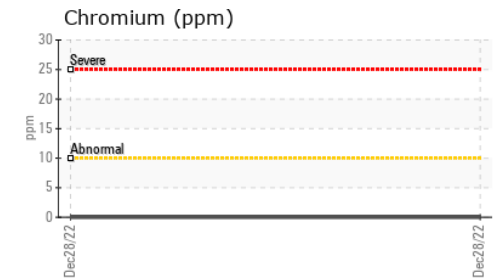
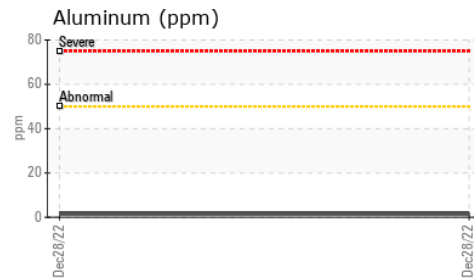
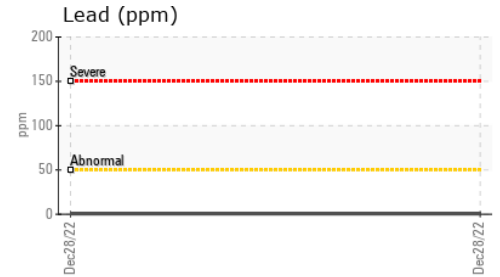
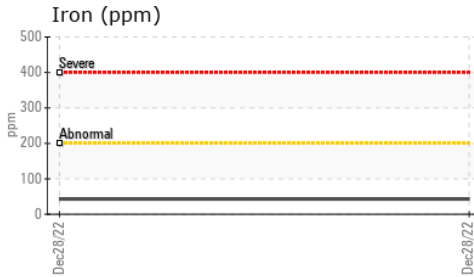


| FLUID PROPERTIES | method | limit/base | current | history 1 | history 2 |
|------------------|--------|---------------|---------|-----------|-----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | ▲ 61.6 | --- | --- |

| SAMPLE IMAGES | method | limit/base | current | history 1 | history 2 |
|---------------|--------|------------|---------|-----------|-----------|
|---------------|--------|------------|---------|-----------|-----------|

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

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0713504 **Received** : 03 Jan 2023
Lab Number : 02531070 **Diagnosed** : 03 Jan 2023
Unique Number : 5512069 **Diagnostician** : Kevin Marson
Test Package : MOB 1

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 GUELPH, ON
 CA N1H 6J3
 Contact: Randy Mann
 randy@mannconstruction.ca

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.

T:
F: