



OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
[C&L EXCAVATION]
 Machine Id
JCB JS160 2767702
 Component
Swing Drive
 Fluid
SHELL SPIRAX HD 80W140 (4 QTS)



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

Appearance is unacceptable. There is a high amount of visible silt present in the sample. Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | JCB004530 | --- | --- |
| Sample Date | Client Info | | 26 Mar 2023 | --- | --- |
| Machine Age | hrs | Client Info | 1301 | --- | --- |
| Oil Age | hrs | Client Info | 200 | --- | --- |
| Oil Changed | Client Info | | Changed | --- | --- |
| Sample Status | | | SEVERE | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|------------|------------------|--------------|----------|----------|
| PQ | ASTM D8184 | | 400 | --- | --- |
| Iron | ppm | ASTM D5185m >400 | 722 | --- | --- |
| Chromium | ppm | ASTM D5185m >10 | 8 | --- | --- |
| Nickel | ppm | ASTM D5185m >10 | 3 | --- | --- |
| Titanium | ppm | ASTM D5185m | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m >25 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m >50 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m >200 | 2 | --- | --- |
| Tin | ppm | ASTM D5185m >10 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185m | 1 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 9 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 1 | --- | --- |
| Manganese | ppm | ASTM D5185m | 6 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 6 | --- | --- |
| Calcium | ppm | ASTM D5185m | 34 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 615 | --- | --- |
| Zinc | ppm | ASTM D5185m | 39 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 16155 | --- | --- |

CONTAMINANTS

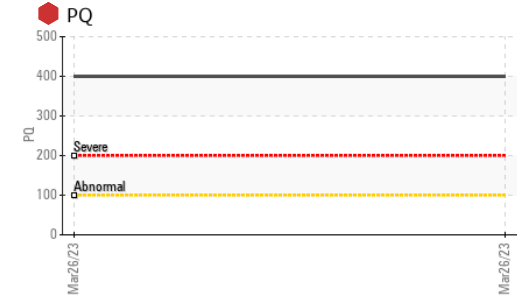
| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >50 | 13 | --- | --- |
| Sodium | ppm | ASTM D5185m | 3 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | <1 | --- | --- |
| Water | % | ASTM D6304 >0.2 | 0.619 | --- | --- |
| ppm Water | ppm | ASTM D6304 >2000 | 6190 | --- | --- |

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 | HEAVY | --- | --- |
| Debris | scalar | *Visual NONE | MODER | --- | --- |
| Sand/Dirt | scalar | *Visual NONE | NONE | --- | --- |
| Appearance | scalar | *Visual NORML | MILKY | --- | --- |
| Odor | scalar | *Visual NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual >0.2 | 0.2% | --- | --- |
| Free Water | scalar | *Visual | NEG | --- | --- |



OIL ANALYSIS REPORT

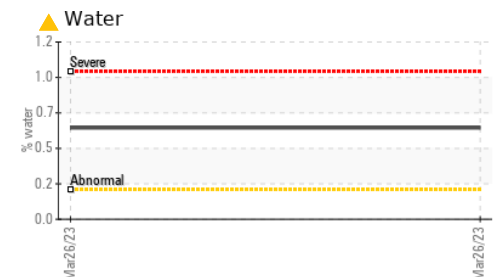
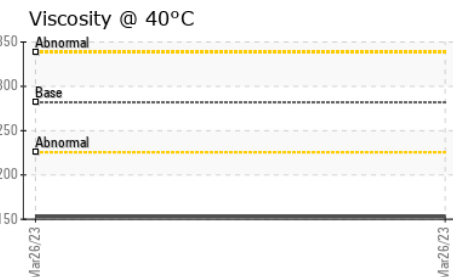
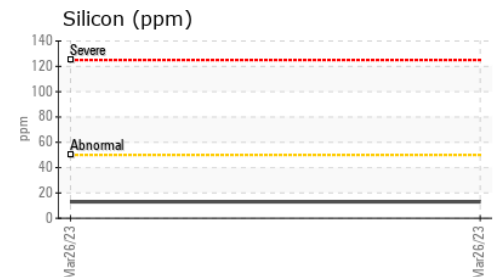
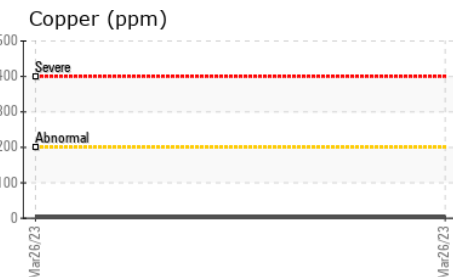
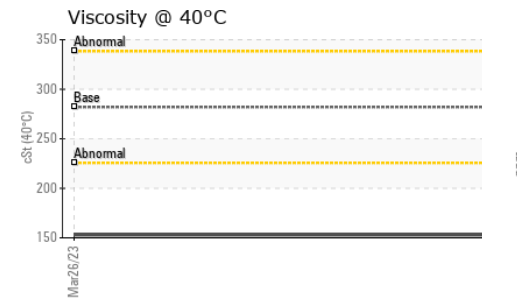
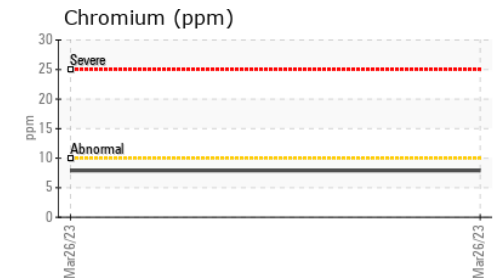
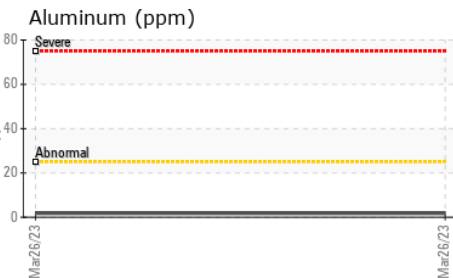
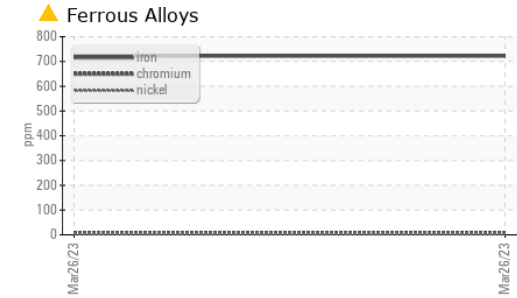
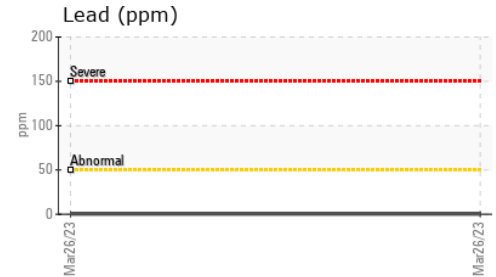
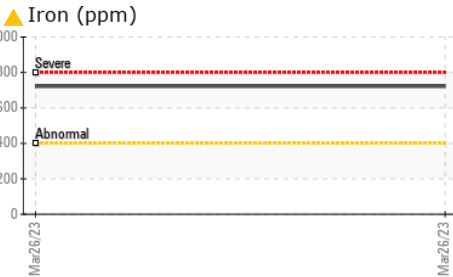
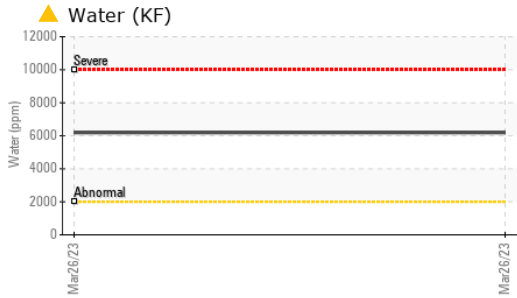


| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|------------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 282 | 153 | --- |

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

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

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JCB004530 **Received** : 31 Mar 2023
Lab Number : 05807889 **Diagnosed** : 10 Apr 2023
Unique Number : 10405418 **Diagnostician** : Doug Bogart
Test Package : MOB 1 (Additional Tests: KF, PQ)

ALTA EQUIPMENT
 114 HALL ST
 CONCORD, NH
 US 03301
 Contact: MATT NAUGHTON
 matt.naughton@altg.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: