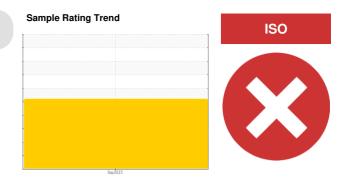


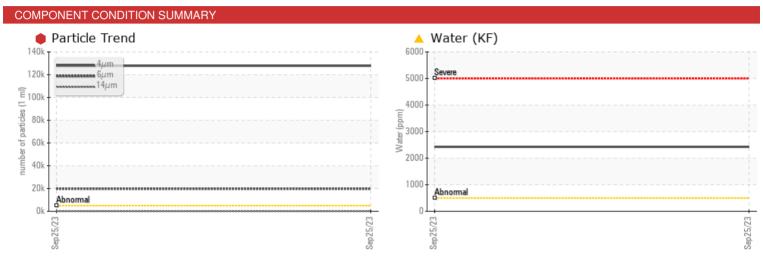
PROBLEM SUMMARY

Universal Alloy - U00200 M1 3320

Component **Hydraulic System**

AW HYDRAULIC OIL ISO 68 (--- GAL)





RECOMMENDATION

This is a baseline read-out on the submitted sample.

| PROBLEMATIC TEST RESULTS | | | | | | | | | | |
|--------------------------|-----|--------------|-----------|-----------------|--|--|--|--|--|--|
| Sample Status | | | | SEVERE | | | | | | |
| Water | % | ASTM D6304* | >0.05 | △ 0.242 | | | | | | |
| ppm Water | ppm | ASTM D6304* | >500 | 2426.5 | | | | | | |
| Particles >4µm | | ASTM D7647 | >5000 | 127863 | | | | | | |
| Particles >6μm | | ASTM D7647 | >1300 | 19798 | | | | | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 24/21/14 | | | | | | |

Customer Id: CHECOB Sample No.: E30000440 Lab Number: 02586415 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Tatiana Sorkina +1 (800)263-3939 tsorkina@e360s.ca

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



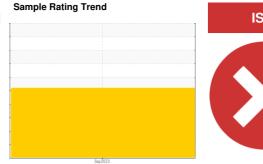
OIL ANALYSIS REPORT

Universal Alloy - U00200 M₁ 3320

Component

Hydraulic System

AW HYDRAULIC OIL ISO 68 (--- GAL)





DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample.

Wear

Copper ppm levels are noted.

Contamination

Particles >6µm are severely high. Particles >4µm and oil cleanliness are severely high. Water and ppm water contamination levels are abnormal.

Fluid Condition

{not applicable}

| | | | | Sep2023 | | |
|------------------|-----------|---------------|-------------|----------------|----------|----------|
| SAMPLE INFORI | MATION | method | limit/base | current | history1 | history2 |
| | WATION | | IIIIIIVDase | | HISTORY | HISTOLYZ |
| Batch # | | Client Info | | Mobile | | |
| Machine ID | | Client Info | | M1 3320 | | |
| Department | | Client Info | | Production | | |
| Sample From | | Client Info | | Machine | | |
| Production Stage | | Client Info | | Initial | | |
| Sent to WC | | Client Info | | 09/29/2023 | | |
| Sample Number | | Client Info | | E30000440 | | |
| Sample Date | | Client Info | | 25 Sep 2023 | | |
| Machine Age | hrs | Client Info | | 0 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | N/A | | |
| Sample Status | | | | SEVERE | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >20 | 6 | | |
| Chromium | ppm | ASTM D5185(m) | >20 | <1 | | |
| Nickel | ppm | ASTM D5185(m) | >20 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | 720 | 0 | | |
| Silver | | ASTM D5185(m) | | <1 | | |
| Aluminum | ppm | ASTM D5185(m) | >20 | 2 | | |
| Lead | ppm | (/ | | 2 | | |
| | ppm | ASTM D5185(m) | >20 | | | |
| Copper | ppm | ASTM D5185(m) | >20 | 17 | | |
| Tin | ppm | ASTM D5185(m) | >20 | 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) | 5 | <1 | | |
| Barium | ppm | ASTM D5185(m) | 5 | <1 | | |
| Molybdenum | ppm | ASTM D5185(m) | 5 | 0 | | |
| Manganese | ppm | ASTM D5185(m) | | 0 | | |
| Magnesium | ppm | ASTM D5185(m) | 25 | 1 | | |
| Calcium | ppm | ASTM D5185(m) | 200 | 25 | | |
| Phosphorus | ppm | ASTM D5185(m) | 300 | 345 | | |
| Zinc | ppm | ASTM D5185(m) | 370 | 344 | | |
| Sulfur | ppm | ASTM D5185(m) | 2500 | 719 | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | |
| CONTAMINANTS | 8 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >15 | 2 | | |
| Sodium | ppm | ASTM D5185(m) | 2.10 | 1 | | |
| Potassium | | | >20 | 2 | | |
| Water | ppm o/ | ASTM D5185(m) | | | | |
| vvalei | % | ASTM D6304* | >0.05 | <u>^</u> 0.242 | | |

ppm Water

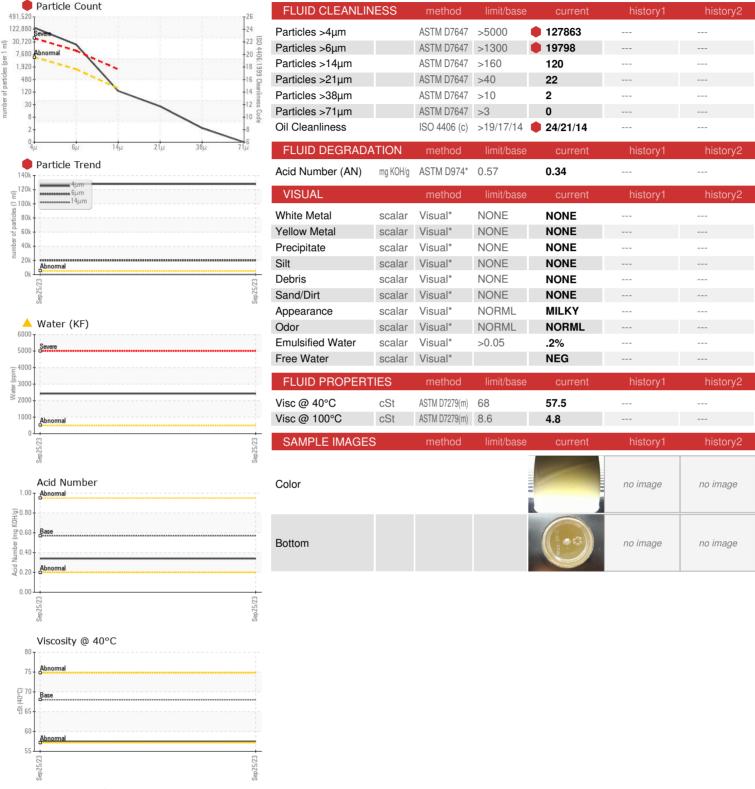
ppm

ASTM D6304* >500

2426.5



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : E30000440 . 02586415

: 5655481

Received

Diagnosed Diagnostician

: 05 Oct 2023 : Tatiana Sorkina

: 03 Oct 2023

Test Package : IND 2 (Additional Tests: KF, KV100, VI) 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.

Environmental 360 Solutions Ltd.

640 Victoria Street Cobourg, ON **CA K9A 5H5**

Contact: Fred Kosseim fkosseim@e360s.ca T: (905)372-2251

F: (905)372-1658