

PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

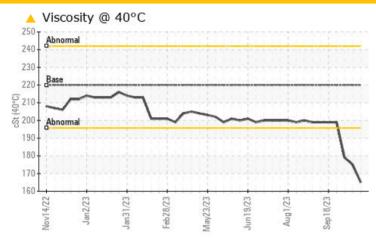


7 Machine Id 7-3-260 Roll Press

Component **Gearbox**

MOBIL MOBILGEAR 600 XP 220 (2500 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Resample at the next service interval to monitor.

| PROBLEMATIC TEST RESULTS | | | | | | | |
|--------------------------|-----|---------------|----------|----------|--------------|--------------|--|
| Sample Status | | | ABNORMAL | ABNORMAL | ABNORMAL | | |
| Visc @ 40°C | cSt | ASTM D7279(m) | 220 | <u> </u> | <u>▲</u> 175 | ▲ 179 | |

Customer Id: STMBOW Sample No.: WC0842798 Lab Number: 02590138 Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

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

10 Oct 2023 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



02 Oct 2023 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



27 Sep 2023 Diag: Wes Davis

NORMAL



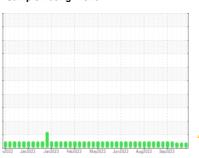
Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



/ 7-3-260 Roll Press

Component **Gearbox**

Area

MOBIL MOBILGEAR 600 XP 220 (2500 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

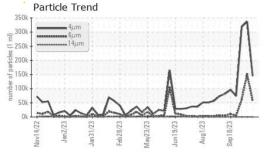
▲ Fluid Condition

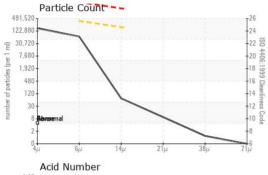
Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

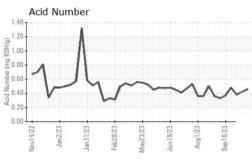
| | | v2022 Jan20 | 23 Jan 2023 Feb 2023 | May2023 Jun2023 Aug2023 | Sep2023 | |
|------------------|----------|---------------------|----------------------|-------------------------|-------------|-------------|
| SAMPLE INFORM | ATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0842798 | WC0842748 | WC0842746 |
| Sample Date | | Client Info | | 16 Oct 2023 | 10 Oct 2023 | 02 Oct 2023 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | ABNORMAL | ABNORMAL |
| WEAR METALS | | method | limit/base | current | history1 | history2 |
| Iron | ppm | ASTM D5185(m) | >200 | 8 | 10 | 11 |
| Chromium | ppm | ASTM D5185(m) | >15 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >15 | <1 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >25 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185(m) | >100 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >200 | <1 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >25 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | >5 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| ADDITIVES | | method | limit/base | current | history1 | history2 |
| Boron | ppm | ASTM D5185(m) | | 1 | 2 | 3 |
| Barium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | <1 | <1 | 0 |
| Calcium | ppm | ASTM D5185(m) | | 2 | 6 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | | 98 | 109 | 118 |
| Zinc | ppm | ASTM D5185(m) | | 2 | 3 | 2 |
| Sulfur | ppm | ASTM D5185(m) | | 8366 | 8976 | 8991 |
| Lithium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185(m) | >50 | <1 | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | | 0 | <1 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | 0 | 0 | 1 |
| FLUID CLEANLINE | ESS | method | limit/base | current | history1 | history2 |
| Particles >4µm | | ASTM D7647 | | 144608 | 336892 | 317815 |
| Particles >6µm | | ASTM D7647 | >320000 | 57578 | 150973 | 60373 |
| Particles >14μm | | ASTM D7647 | >160000 | 63 | 305 | 39 |
| Particles >21μm | | ASTM D7647 | >40000 | 8 | 12 | 9 |
| Particles >38μm | | ASTM D7647 | >10000 | 1 | 1 | 0 |
| Particles >71μm | | ASTM D7647 | >2500 | 0 | 1 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/25/24 | 24/23/13 | 26/24/15 | 25/23/12 |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 0.46 | 0.42 | 0.38 |
| | 9 | . 10 1 111 10 1 - 1 | | 55 | V. 12 | |

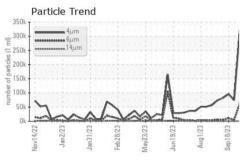


OIL ANALYSIS REPORT





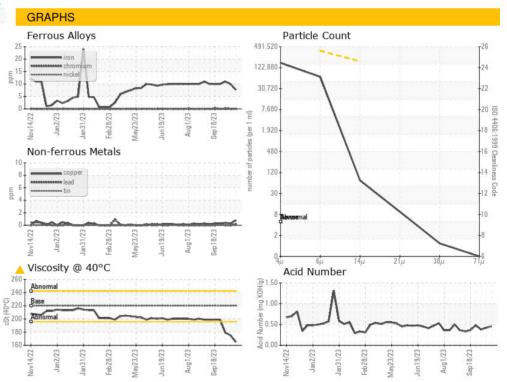




| VISUAL | | method | limit/base | current | history1 | history2 |
|-------------------------|--------|---------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | NEG | NEG |
| Free Water | scalar | Visual* | | NEG | NEG | NEG |
| FILIID PROPERTIES | | method | limit/haco | current | history1 | history2 |

| | | | | | | , | , |
|-------------|-----|---------------|-----|--------------|----------|---|-----|
| Visc @ 40°C | cSt | ASTM D7279(m) | 220 | <u>▲</u> 165 | <u> </u> | _ | 179 |

| SAIVIPLE IIVIAGES | memod | IIIIII/Dase | Current | HISTORY | HISTORYZ |
|-------------------|-------|-------------|---------|----------|----------|
| Color | | | | | |
| Bottom | | | | C OS Xey | (55°-) |





CALA ISO 17025:2017 Accredited Laboratory

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

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : WC0842798

: 02590138 : 5659204

Received Diagnosed

Diagnostician : Kevin Marson

: 18 Oct 2023

: 19 Oct 2023

Test Package : IND 2 (Additional Tests: TAN Man) 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.

ST. MARYS CEMENT CO. 400 BOWMANVILLE AVENUE

BOWMANVILLE, ON CA L1C 7B5

Contact: Lou Traiforos lou.traiforos@vcimentos.com T: (905)440-5874

F: (905)623-4695