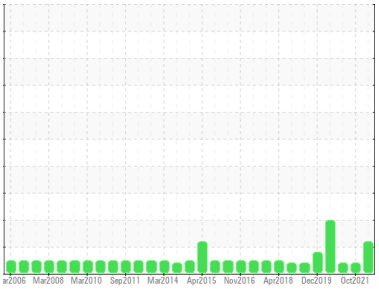
# PROBLEM SUMMARY

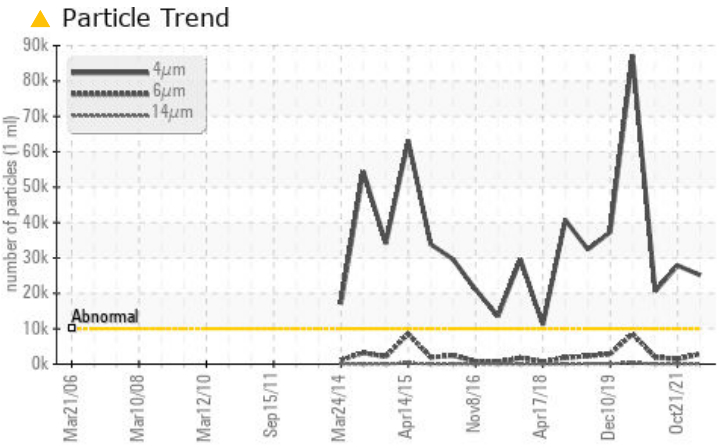
Sample Rating Trend



ISO

Area
**[192032]**
Machine Id
**MOP G1 UGBR/THBR**
Component
**Bearing**
Fluid
**ESSO TERESSO ISO 68 (727 LTR)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | **ABNORMAL** | ABNORMAL | ABNORMAL |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ **25186** | ▲ 27857 | ▲ 20547 |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ **2883** | 1421 | 1944 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/14 | ▲ **22/19/14** | ▲ 22/18/13 | ▲ 22/18/14 |

**Customer Id:** NEWSTJ
**Sample No.:** WC0445375
**Lab Number:** 02517642
**Test Package:** IND 2

*To manage this report scan the QR code*

*To discuss the diagnosis or test data:*
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Kevin.Marson@wearcheck.com

*To change component or sample information:*
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gloria.gonzalez@wearcheck.com

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Filter | MISSED | Dec 20 2022 | ? | We recommend you service the filters on this component. |
| Resample | MISSED | Dec 20 2022 | ? | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

**21 Oct 2021 Diag: Kevin Marson**

ISO

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

**15 Apr 2021 Diag: Kevin Marson**

ISO

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.All component wear rates are normal. Particles >4µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

**27 Apr 2020 Diag: Kevin Marson**

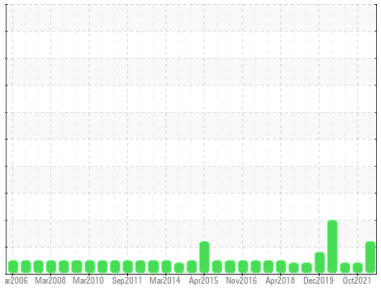
ISO

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Component wear rates appear to be normal (unconfirmed). Particles >4µm are severely high. Particles >6µm are abnormally high. Particles >14µm are abnormally high. Particles >21µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

# OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
**[192032]**
Machine Id
**MOP G1 UGBR/THBR**
Component
**Bearing**
Fluid
**ESSO TERESSO ISO 68 (727 LTR)**

## DIAGNOSIS

**Recommendation**
We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

**Wear**
All component wear rates are normal.

**Contamination**
Particles >4µm and oil cleanliness are abnormally high. Particles >6µm are notably high.

**Fluid Condition**
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0445375** | WC0445200 | WC0328054 |
| Sample Date | | Client Info | | **07 Jun 2022** | 21 Oct 2021 | 15 Apr 2021 |
| 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 |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >2 | **NEG** | NEG | NEG |

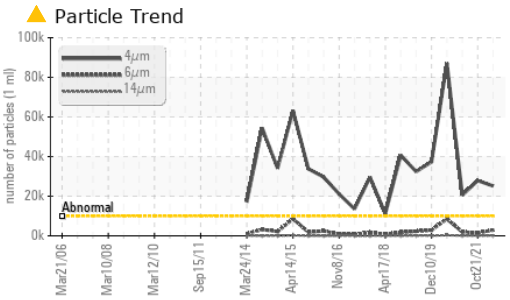
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185(m) | >63 | **3** | 3 | 2 |
| Chromium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | | **0** | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >2 | **0** | 0 | 0 |
| Lead | ppm | ASTM D5185(m) | >161 | **<1** | <1 | <1 |
| Copper | ppm | ASTM D5185(m) | >13 | **<1** | <1 | <1 |
| Tin | ppm | ASTM D5185(m) | >27 | **7** | 7 | 6 |
| Antimony | ppm | ASTM D5185(m) | | **1** | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |

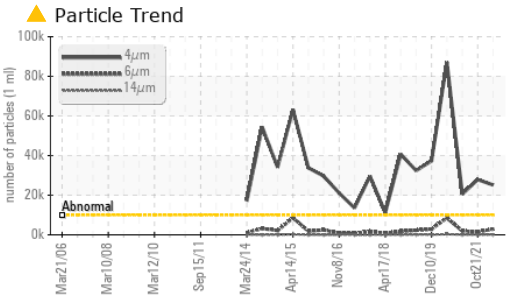
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | 4.5 | **0** | <1 | <1 |
| Barium | ppm | ASTM D5185(m) | 0.4 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 0 | **0** | 0 | 0 |
| Calcium | ppm | ASTM D5185(m) | 0 | **0** | <1 | <1 |
| Phosphorus | ppm | ASTM D5185(m) | 0.7 | **1** | 2 | <1 |
| Zinc | ppm | ASTM D5185(m) | 0 | **2** | 2 | 2 |
| Sulfur | ppm | ASTM D5185(m) | 1315 | **1338** | 1306 | 1304 |
| Lithium | ppm | ASTM D5185(m) | | **<1** | <1 | <1 |

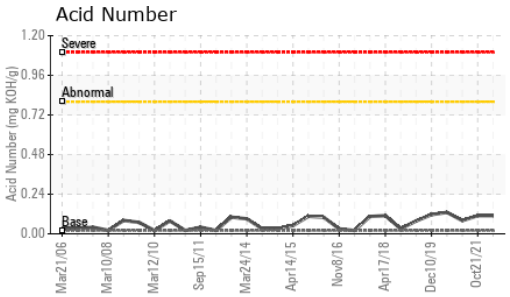
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >12 | **0** | 0 | 0 |
| Sodium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | <1 | <1 |

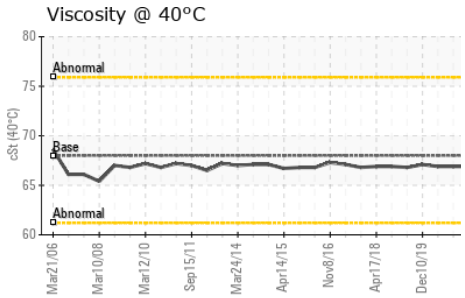
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ **25186** | ▲ 27857 | ▲ 20547 |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ **2883** | 1421 | 1944 |
| Particles >14µm | | ASTM D7647 | >160 | **115** | 61 | 96 |
| Particles >21µm | | ASTM D7647 | >40 | **25** | 16 | 24 |
| Particles >38µm | | ASTM D7647 | >10 | **0** | 1 | 2 |
| Particles >71µm | | ASTM D7647 | >3 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/14 | ▲ **22/19/14** | ▲ 22/18/13 | ▲ 22/18/14 |

# OIL ANALYSIS REPORT



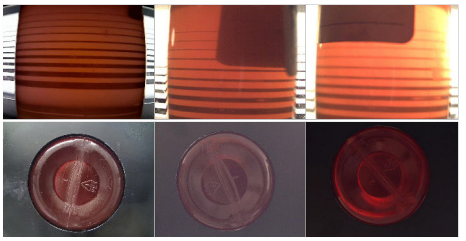




| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.02 | **0.11** | 0.11 | 0.08 |

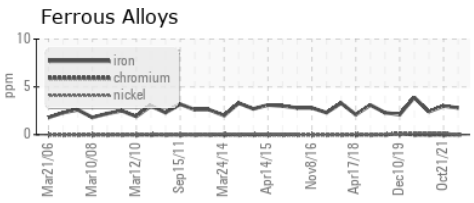
| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | **NONE** | NONE | NONE |
| Silt | scalar | Visual* | NONE | **NONE** | NONE | VLITE |
| 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* | >2 | **NEG** | NEG | NEG |
| Free Water | scalar | Visual* | | **NEG** | NEG | NEG |

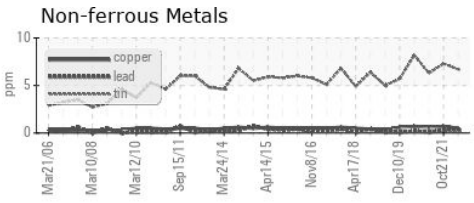
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 68 | **66.7** | 66.9 | 66.9 |

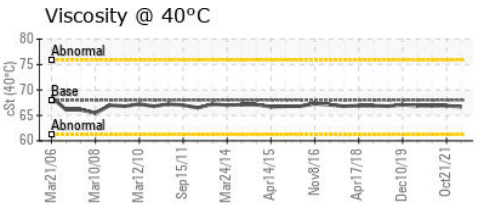
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |

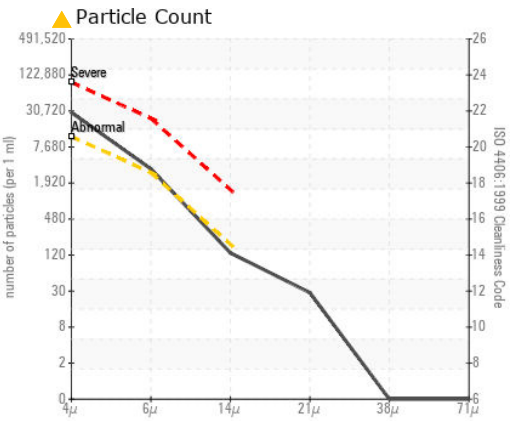


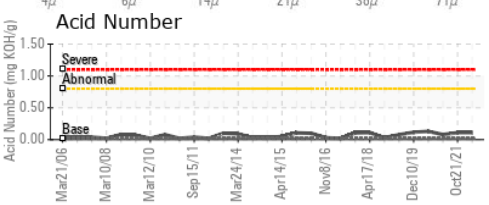
## GRAPHS




CALA
ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WC0445375 **Received** : 20 Oct 2022
**Lab Number** : 02517642 **Diagnosed** : 21 Oct 2022
**Unique Number** : 5474622 **Diagnostician** : Kevin Marson
**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.*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