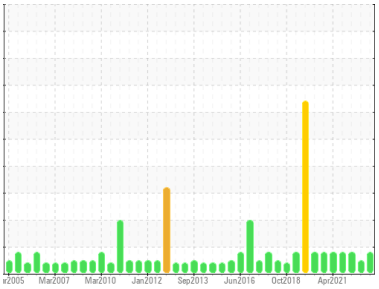
# PROBLEM SUMMARY

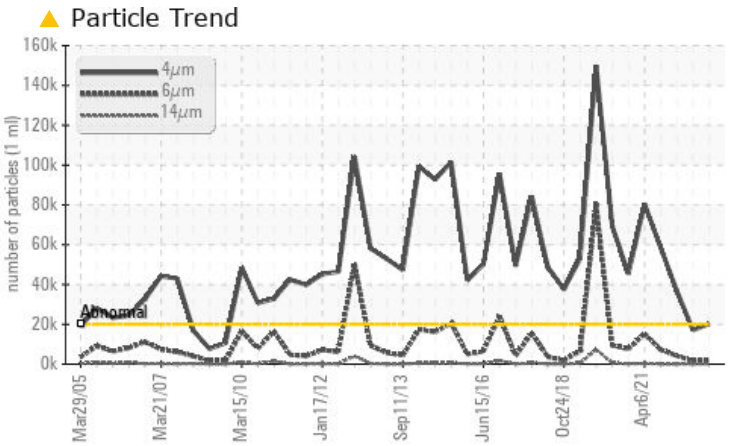
Sample Rating Trend



ISO

Area
**[199003]**
Machine Id
**TCV -G1-GOV**
Component
**Governor System**
Fluid
**ESSO TERESSO ISO 68 (727 LTR)**

## COMPONENT CONDITION SUMMARY




## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status | | | | ATTENTION | NORMAL | ATTENTION |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >20000 | ▲ **20176** | 17100 | ▲ 36929 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | ▲ **22/18/12** | 21/18/11 | ▲ 22/19/13 |

**Customer Id:** NEWSTJ
**Sample No.:** WC0455566
**Lab Number:** 02563215
**Test Package:** IND 2

*To manage this report scan the QR code*


*To discuss the diagnosis or test data:*
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wesd@wearcheck.ca

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

## RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---|---|---|---|---|
| Change Filter | --- | --- | ? | We recommend you service the filters on this component. |

## HISTORICAL DIAGNOSIS

**25 Nov 2022 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.

**view report**

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**01 Jun 2022 Diag: Wes Davis**

ISO

We recommend you service the filters on this component. Resample at the next service interval to monitor.All component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**view report**

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**28 Oct 2021 Diag: Wes Davis**

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. Particles >6µm are notably high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

**view report**

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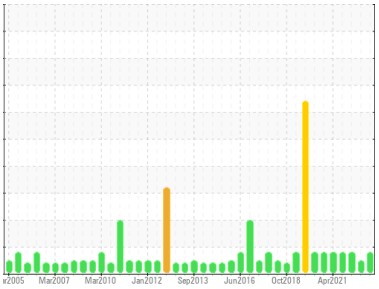
# OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
**[199003]**
Machine Id
**TCV -G1-GOV**
Component
**Governor System**
Fluid
**ESSO TERESSO ISO 68 (727 LTR)**

## DIAGNOSIS

**Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor.

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

**Contamination**
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

**Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0455566** | WC0455735 | WC0445362 |
| Sample Date | | Client Info | | **24 May 2023** | 25 Nov 2022 | 01 Jun 2022 |
| 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 | | | | **ATTENTION** | NORMAL | ATTENTION |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185(m) | >50 | **2** | 1 | 2 |
| Chromium | ppm | ASTM D5185(m) | >10 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >10 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >3 | **<1** | <1 | 0 |
| Lead | ppm | ASTM D5185(m) | >75 | **2** | 1 | 1 |
| Copper | ppm | ASTM D5185(m) | >15 | **1** | 1 | 1 |
| Tin | ppm | ASTM D5185(m) | >55 | **1** | <1 | 1 |
| Antimony | ppm | ASTM D5185(m) | >5 | **<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 | **<1** | <1 | 0 |
| 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 | <1 |
| Calcium | ppm | ASTM D5185(m) | 0 | **4** | 2 | 4 |
| Phosphorus | ppm | ASTM D5185(m) | 0.7 | **4** | 4 | 4 |
| Zinc | ppm | ASTM D5185(m) | 0 | **3** | 3 | 3 |
| Sulfur | ppm | ASTM D5185(m) | 1315 | **1535** | 1450 | 1458 |
| Lithium | ppm | ASTM D5185(m) | | **<1** | <1 | <1 |

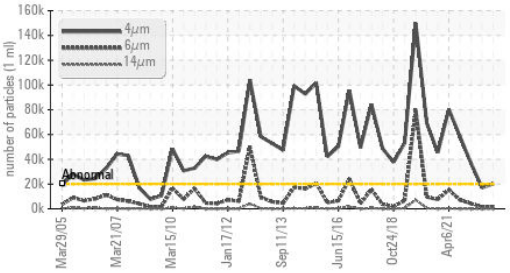
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >8 | **<1** | <1 | <1 |
| Sodium | ppm | ASTM D5185(m) | | **1** | 1 | 1 |
| Potassium | ppm | ASTM D5185(m) | >20 | **0** | 0 | <1 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >20000 | ▲ **20176** | 17100 | ▲ 36929 |
| Particles >6µm | | ASTM D7647 | >5000 | **1862** | 1569 | 4230 |
| Particles >14µm | | ASTM D7647 | >640 | **24** | 17 | 71 |
| Particles >21µm | | ASTM D7647 | >160 | **4** | 4 | 16 |
| Particles >38µm | | ASTM D7647 | >40 | **1** | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >10 | **1** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | ▲ **22/18/12** | 21/18/11 | ▲ 22/19/13 |

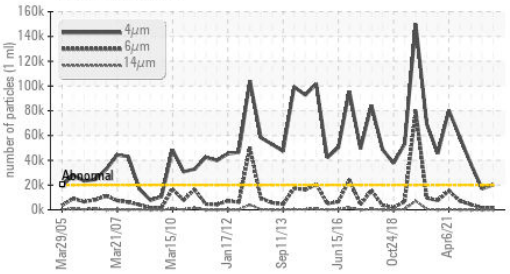
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.02 | **0.10** | 0.12 | 0.11 |

# OIL ANALYSIS REPORT

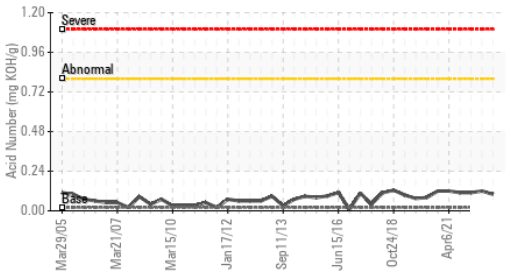
Particle Trend



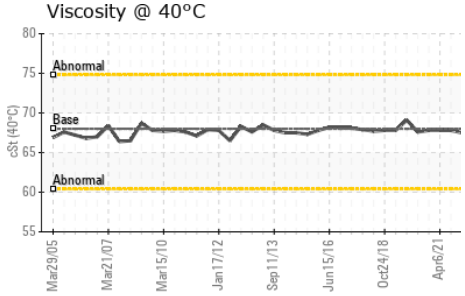

Particle Trend




Acid Number



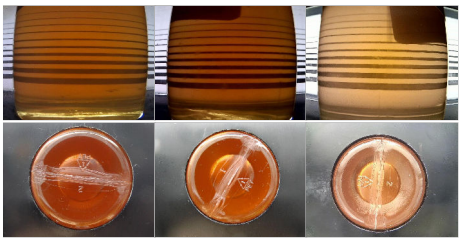

Viscosity @ 40°C




| 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* | >0.1 | **NEG** | NEG | NEG |
| Free Water | scalar | Visual* | | **NEG** | NEG | NEG |

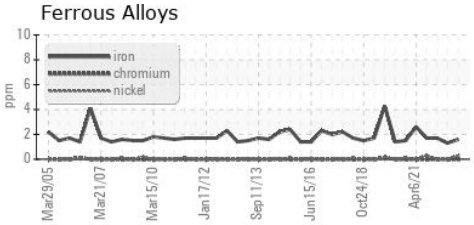
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 68 | **67.5** | 67.8 | 67.5 |

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

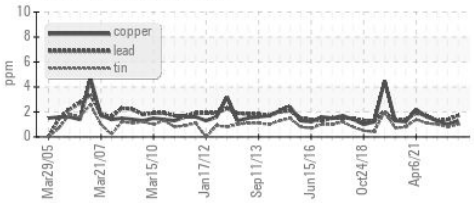


## GRAPHS

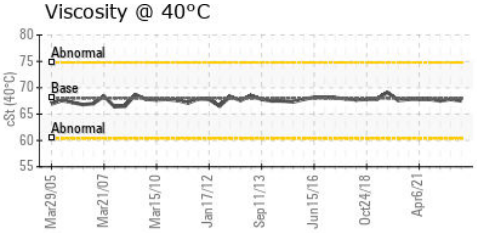
Ferrous Alloys



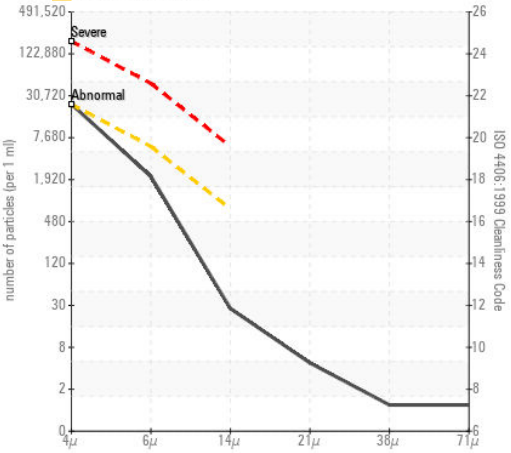

Non-ferrous Metals



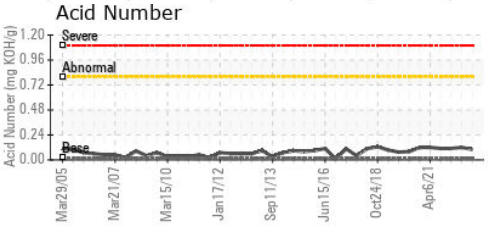

Viscosity @ 40°C




Particle Count




Acid Number




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : WC0455566 **Received** : 09 Jun 2023
**Lab Number** : 02563215 **Diagnosed** : 12 Jun 2023
**Unique Number** : 5592256 **Diagnostician** : Wes Davis
**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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