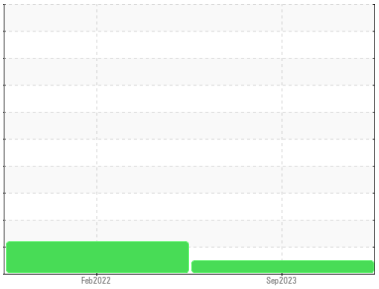
# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Area
**KANSAS/88**
Machine Id
**53.167L [KANSAS^88]**
Component
**Hydraulic System**
Fluid
**MOBIL MOBILTRANS AST 30 (--- GAL)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

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

**Contamination**
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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 | | **WC0833903** | WC0665215 | --- |
| Sample Date | | Client Info | | **25 Sep 2023** | 24 Feb 2022 | --- |
| Machine Age | hrs | Client Info | | **2643** | 2127 | --- |
| Oil Age | hrs | Client Info | | **0** | 0 | --- |
| Oil Changed | | Client Info | | **N/A** | Not Changd | --- |
| Sample Status | | | | **NORMAL** | ABNORMAL | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **18** | ▲ 38 | --- |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | <1 | --- |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | --- |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | --- |
| Silver | ppm | ASTM D5185m | | **0** | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | **0** | 4 | --- |
| Lead | ppm | ASTM D5185m | >10 | **0** | 2 | --- |
| Copper | ppm | ASTM D5185m | >75 | **7** | 13 | --- |
| Tin | ppm | ASTM D5185m | >10 | **<1** | <1 | --- |
| Antimony | ppm | ASTM D5185m | | **---** | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | **<1** | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | --- |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **59** | 16 | --- |
| Barium | ppm | ASTM D5185m | | **0** | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | **26** | 8 | --- |
| Manganese | ppm | ASTM D5185m | | **1** | 2 | --- |
| Magnesium | ppm | ASTM D5185m | | **308** | 25 | --- |
| Calcium | ppm | ASTM D5185m | | **1232** | 288 | --- |
| Phosphorus | ppm | ASTM D5185m | | **654** | 567 | --- |
| Zinc | ppm | ASTM D5185m | | **792** | 638 | --- |
| Sulfur | ppm | ASTM D5185m | | **2471** | 1504 | --- |

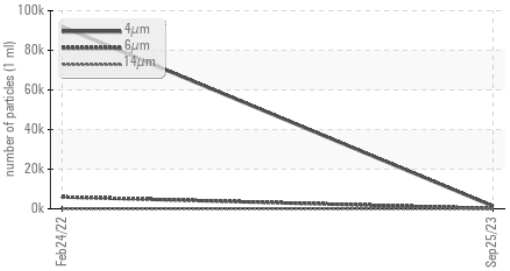
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **7** | 10 | --- |
| Sodium | ppm | ASTM D5185m | | **3** | 2 | --- |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 2 | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **1295** | 91918 | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **130** | ▲ 5962 | --- |
| Particles >14µm | | ASTM D7647 | >640 | **18** | 15 | --- |
| Particles >21µm | | ASTM D7647 | >160 | **5** | 2 | --- |
| Particles >38µm | | ASTM D7647 | >40 | **0** | 1 | --- |
| Particles >71µm | | ASTM D7647 | >10 | **0** | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/18/16 | **17/14/11** | ▲ 24/20/11 | --- |

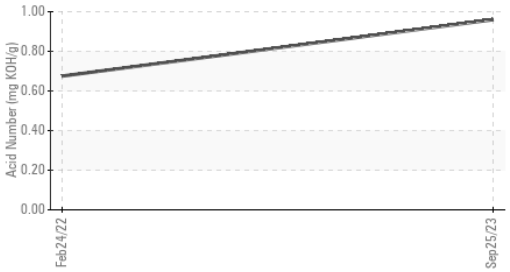
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.96** | 0.675 | --- |

# OIL ANALYSIS REPORT

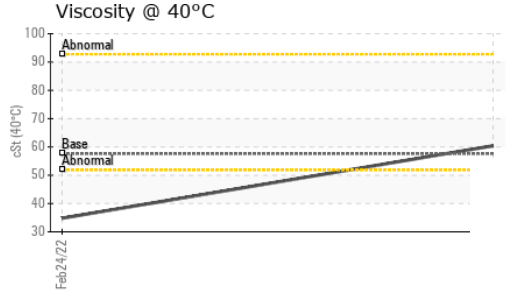
Particle Trend



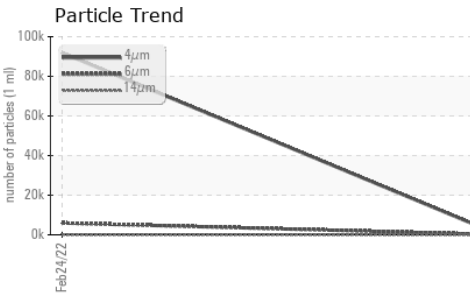

Acid Number




Viscosity @ 40°C

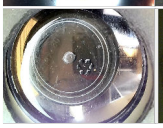
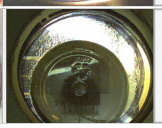



Particle Trend



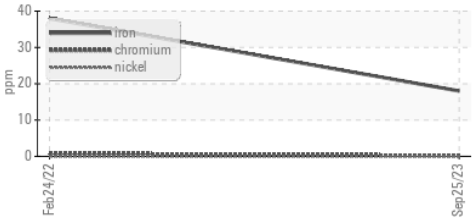

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | **NONE** | NONE | --- |
| Appearance | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Odor | scalar | *Visual | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.1 | **NEG** | NEG | --- |
| Free Water | scalar | *Visual | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 57.6 | **60.4** | 34.8 | --- |

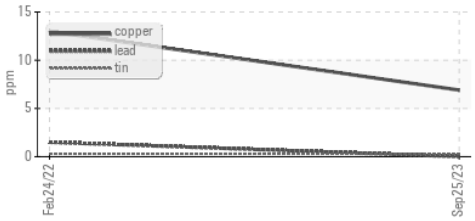
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | |  |  | *no image* |
| Bottom | | |  |  | *no image* |

## GRAPHS

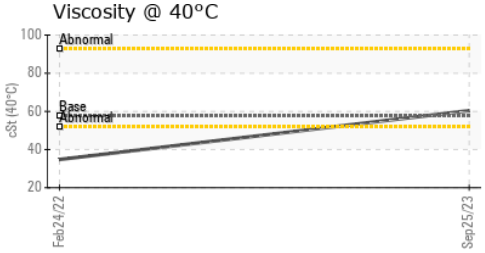
Ferrous Alloys



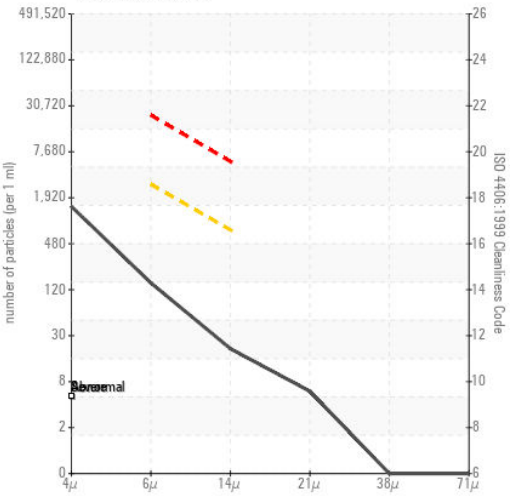

Non-ferrous Metals



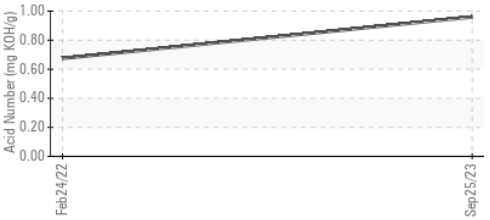

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0833903
**Lab Number** : 05961198
**Unique Number** : 10662411
**Test Package** : CONST

**Received** : 26 Sep 2023
**Diagnosed** : 27 Sep 2023
**Diagnostician** : Don Baldridge

*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)*

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Report Id: SHEWIC [WUSCAR] 05961198 (Generated: 09/27/2023 18:42:26) Rev: 1

Submitted By: ?