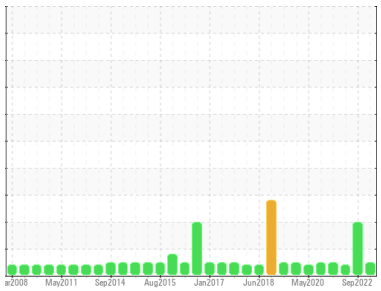
# OIL ANALYSIS REPORT

Area
**OKLAHOMA/1151/EG - OTHER SERVICE**
Machine Id
**48.03L [OKLAHOMA^1151^EG - OTHER SERVICE]**
Component
**Hydraulic System**
Fluid
**MOBIL MOBILTRANS AST 30 (--- GAL)**

**Sample Rating Trend**




**NORMAL**

## DIAGNOSIS

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

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

**Contamination**
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**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 | | **WC0935295** | WC0726284 | WC0607613 |
| Sample Date | | Client Info | | **28 May 2024** | 08 Sep 2022 | 05 Nov 2021 |
| Machine Age | hrs | Client Info | | **20672** | 18692 | 18029 |
| Oil Age | hrs | Client Info | | **16026** | 663 | 0 |
| Oil Changed | | Client Info | | **N/A** | Not Changd | Not Changd |
| Sample Status | | | | **NORMAL** | ABNORMAL | ABNORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >0.1 | **NEG** | NEG | NEG |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >20 | **4** | 7 | 13 |
| Chromium | ppm | ASTM D5185m | >10 | **2** | 0 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >10 | **<1** | 1 | 3 |
| Lead | ppm | ASTM D5185m | >10 | **0** | 6 | <1 |
| Copper | ppm | ASTM D5185m | >75 | **2** | ▲ 75 | 3 |
| Tin | ppm | ASTM D5185m | >10 | **<1** | 3 | <1 |
| Antimony | ppm | ASTM D5185m | | **---** | --- | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

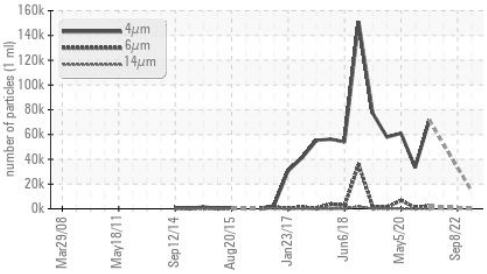
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **10** | 0 | 29 |
| Barium | ppm | ASTM D5185m | | **<1** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **0** | <1 | 1 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **8** | 12 | 21 |
| Calcium | ppm | ASTM D5185m | | **1275** | 2857 | 3134 |
| Phosphorus | ppm | ASTM D5185m | | **877** | 1003 | 961 |
| Zinc | ppm | ASTM D5185m | | **1042** | 1169 | 1126 |
| Sulfur | ppm | ASTM D5185m | | **3213** | 6798 | 4065 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **4** | 7 | 8 |
| Sodium | ppm | ASTM D5185m | | **4** | 15 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 0 | 0 |

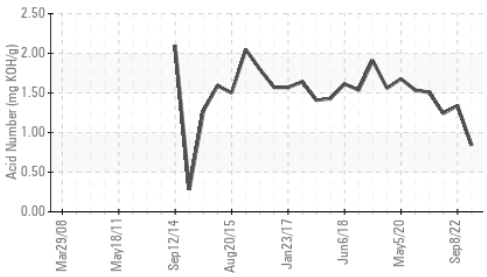
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **14375** | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **455** | --- | --- |
| Particles >14µm | | ASTM D7647 | >640 | **24** | --- | --- |
| Particles >21µm | | ASTM D7647 | >160 | **5** | --- | --- |
| Particles >38µm | | ASTM D7647 | >40 | **0** | --- | --- |
| Particles >71µm | | ASTM D7647 | >10 | **0** | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/18/16 | **21/16/12** | --- | --- |

# OIL ANALYSIS REPORT

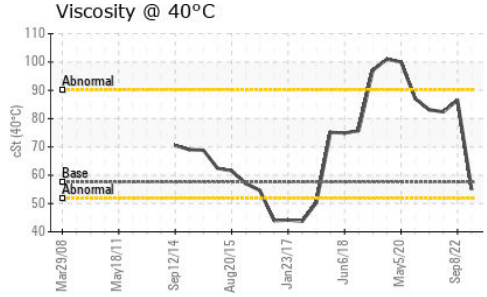
Particle Trend



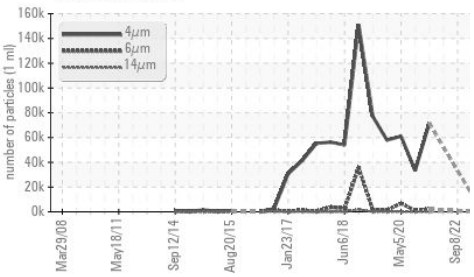

Acid Number




Viscosity @ 40°C




Particle Trend

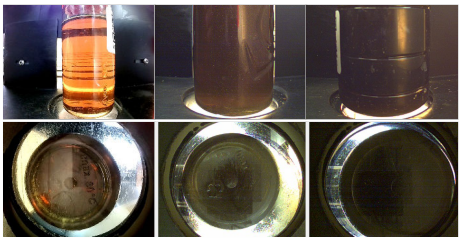



| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.84** | 1.34 | 1.241 |

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | ▲ MODER | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Silt | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Debris | scalar | *Visual | NONE | **NONE** | NONE | ▲ MODER |
| 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 |

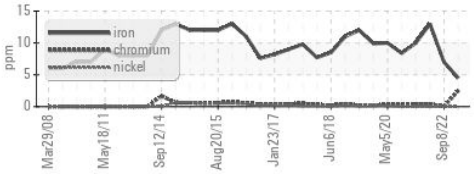
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 57.6 | **54.9** | 86.5 | 82.4 |

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

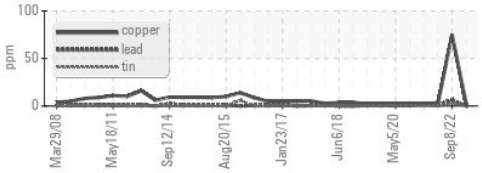


## GRAPHS

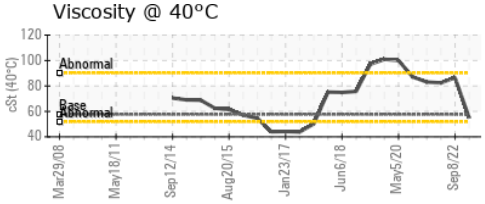
Ferrous Alloys



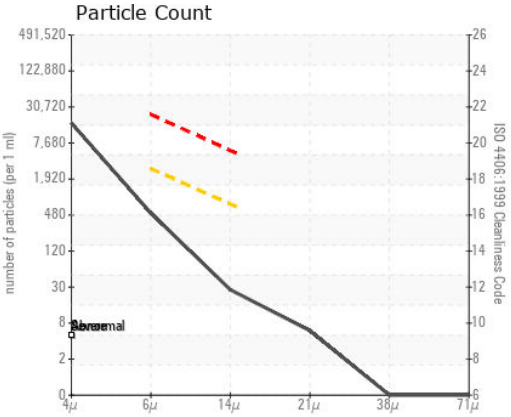

Non-ferrous Metals



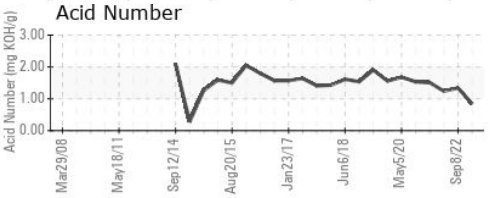

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0935295
**Lab Number** : 06200058
**Unique Number** : 11062181
**Test Package** : CONST

**Received** : 05 Jun 2024
**Tested** : 06 Jun 2024
**Diagnosed** : 07 Jun 2024 - Jonathan Hester

*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] 06200058 (Generated: 06/07/2024 23:12:10) Rev: 1

Submitted By: GARRETT ADAMS