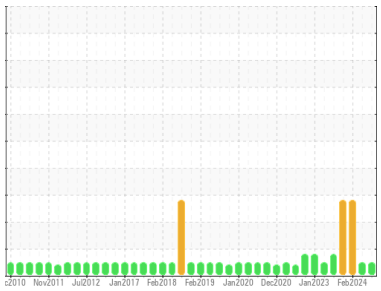
# OIL ANALYSIS REPORT

Area
## OKLAHOMA/115/EG - LOADER
Machine Id
## 48.83L [OKLAHOMA^115^EG - LOADER]
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**
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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 | | **WC0848870** | WC0857474 | WC0886885 |
| Sample Date | | Client Info | | **05 Apr 2024** | 12 Mar 2024 | 06 Feb 2024 |
| Machine Age | hrs | Client Info | | **11425** | 11307 | 11101 |
| Oil Age | hrs | Client Info | | **500** | 500 | 500 |
| Oil Changed | | Client Info | | **Changed** | Changed | Not Changd |
| Sample Status | | | | **NORMAL** | NORMAL | SEVERE |

| 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 | **6** | 3 | 13 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | **2** | 2 | 2 |
| Lead | ppm | ASTM D5185m | >10 | **0** | 0 | 1 |
| Copper | ppm | ASTM D5185m | >75 | **2** | 3 | 8 |
| Tin | ppm | ASTM D5185m | >10 | **0** | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | <1 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **53** | 57 | 59 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 5 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | 0 | 2 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **20** | 19 | 16 |
| Calcium | ppm | ASTM D5185m | | **3271** | 3126 | 2935 |
| Phosphorus | ppm | ASTM D5185m | | **1104** | 1126 | 975 |
| Zinc | ppm | ASTM D5185m | | **1381** | 1356 | 1176 |
| Sulfur | ppm | ASTM D5185m | | **6059** | 5878 | 4995 |

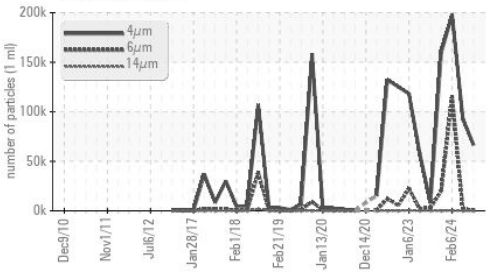
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **9** | 10 | 15 |
| Sodium | ppm | ASTM D5185m | | **2** | 3 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | **1** | 0 | 3 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **66384** | 92843 | 197951 |
| Particles >6µm | | ASTM D7647 | >2500 | **832** | 1794 | ▲ 116005 |
| Particles >14µm | | ASTM D7647 | >640 | **26** | 31 | 225 |
| Particles >21µm | | ASTM D7647 | >160 | **7** | 8 | 4 |
| Particles >38µm | | ASTM D7647 | >40 | **0** | 0 | 0 |
| Particles >71µm | | ASTM D7647 | >10 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/18/16 | **23/17/12** | 24/18/12 | ▲ 25/24/15 |

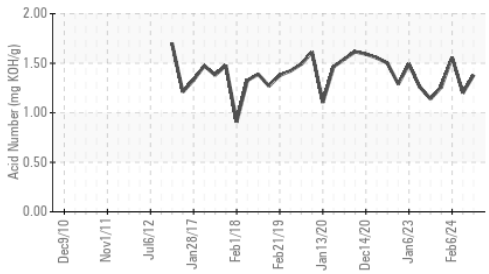
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **1.38** | 1.20 | 1.56 |

# OIL ANALYSIS REPORT

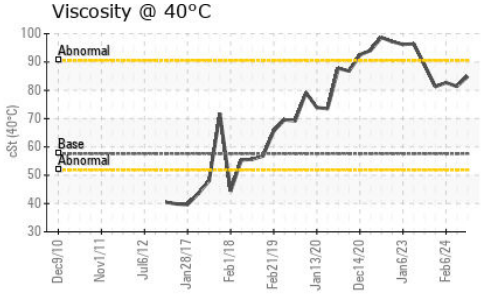
Particle Trend



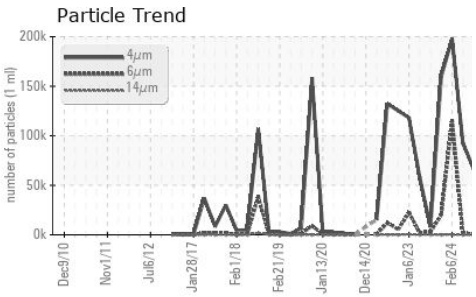

Acid Number




Viscosity @ 40°C




Particle Trend



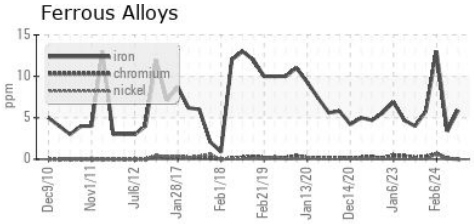

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| 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 D445 | 57.6 | **84.9** | 81.4 | 82.7 |

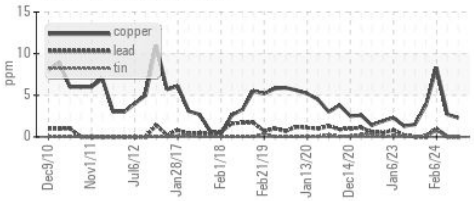
| SAMPLE IMAGES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Color | | | |  | | |
| Bottom | | | |  | | |

## GRAPHS

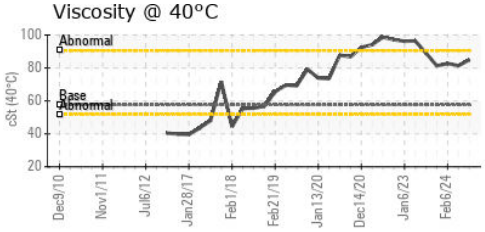
Ferrous Alloys



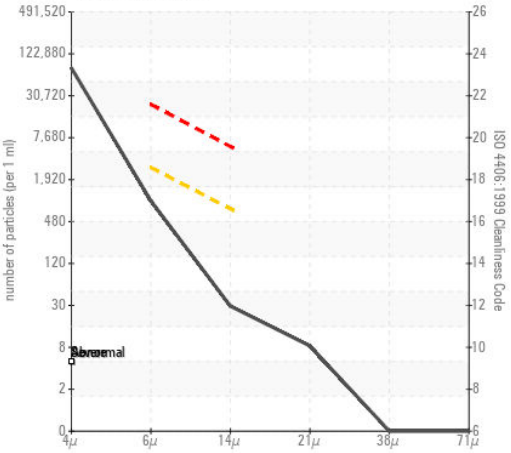

Non-ferrous Metals



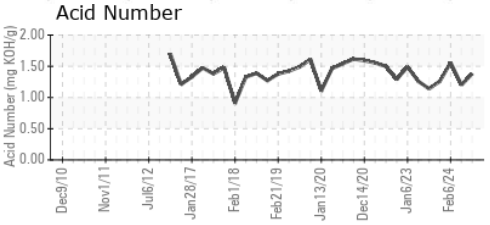

Viscosity @ 40°C




Particle Count




Acid Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0848870
**Lab Number** : 06160286
**Unique Number** : 10995709
**Test Package** : CONST

**Received** : 25 Apr 2024
**Tested** : 26 Apr 2024
**Diagnosed** : 26 Apr 2024 - Wes Davis

*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] 06160286 (Generated: 04/26/2024 11:11:43) Rev: 1

Submitted By: PATRICIA BIBLE