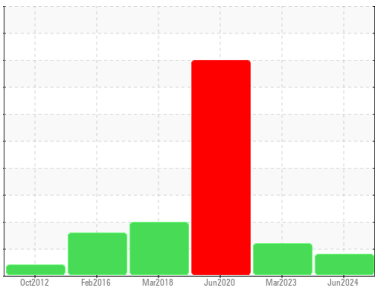
# OIL ANALYSIS REPORT

Sample Rating Trend




ISO

Area
**OKLAHOMA/102/EG - ROLLER/COMPACTOR**
Machine Id
**64.13L [OKLAHOMA^102^EG - ROLLER/COMPACTOR]**
Component
**Hydraulic System**
Fluid
**MOBIL MOBILFLUID 424 (--- GAL)**

## DIAGNOSIS

**Recommendation**
The filter change at the time of sampling has been noted. 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 | | **WC0935274** | WC0792452 | WC0473938 |
| Sample Date | | Client Info | | **24 Jun 2024** | 19 Mar 2023 | 18 Jun 2020 |
| Machine Age | hrs | Client Info | | **945** | 552 | 85 |
| Oil Age | hrs | Client Info | | **393** | 552 | 500 |
| Oil Changed | | Client Info | | **Changed** | Changed | Not Changd |
| Sample Status | | | | **ATTENTION** | ABNORMAL | 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 | **5** | 8 | 17 |
| Chromium | ppm | ASTM D5185m | >10 | **0** | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | **1** | 2 | 6 |
| Lead | ppm | ASTM D5185m | >10 | **2** | 2 | 6 |
| Copper | ppm | ASTM D5185m | >75 | **11** | 11 | 36 |
| Tin | ppm | ASTM D5185m | >10 | **0** | <1 | 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 | | **97** | 133 | 124 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | 1 | 2 |
| Manganese | ppm | ASTM D5185m | | **0** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **19** | 21 | 19 |
| Calcium | ppm | ASTM D5185m | | **3544** | 3503 | 3694 |
| Phosphorus | ppm | ASTM D5185m | | **1106** | 1073 | 1111 |
| Zinc | ppm | ASTM D5185m | | **1330** | 1343 | 1400 |
| Sulfur | ppm | ASTM D5185m | | **5849** | 6110 | 7025 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **9** | 11 | 13 |
| Sodium | ppm | ASTM D5185m | | **5** | 4 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 1 | 2 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **8378** | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | **3505** | --- | --- |
| Particles >14µm | | ASTM D7647 | >640 | **393** | --- | --- |
| Particles >21µm | | ASTM D7647 | >160 | **92** | --- | --- |
| Particles >38µm | | ASTM D7647 | >40 | **3** | --- | --- |
| Particles >71µm | | ASTM D7647 | >10 | **0** | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >--/18/16 | **20/19/16** | --- | --- |

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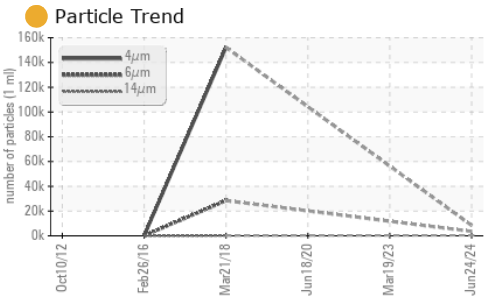
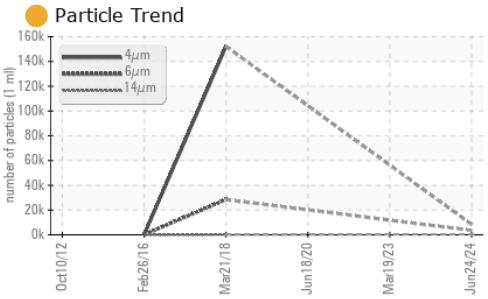
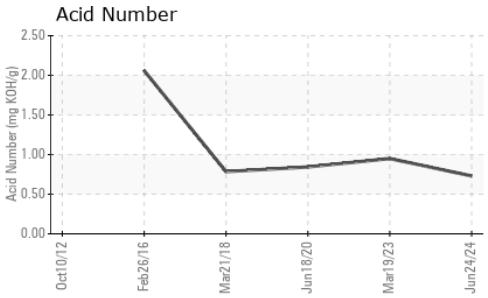
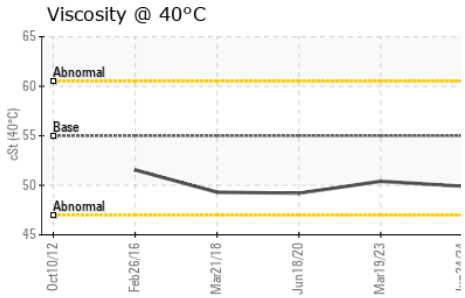


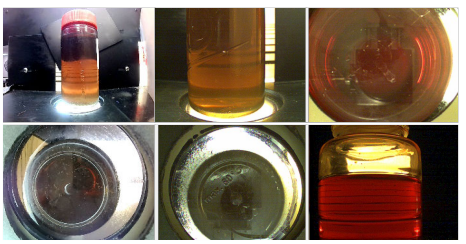




| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **0.73** | 0.95 | 0.844 |

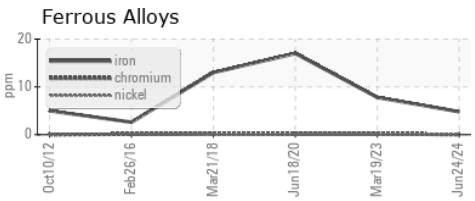
| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | ▲ MODER | ▲ HEAVY |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE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

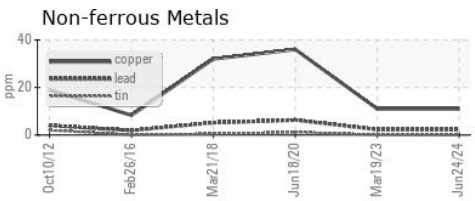
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 55 | **49.9** | 50.4 | 49.2 |

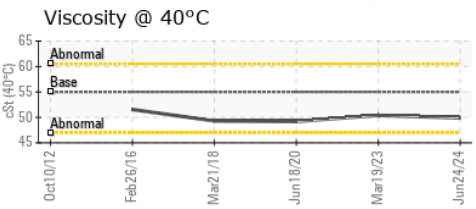
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |

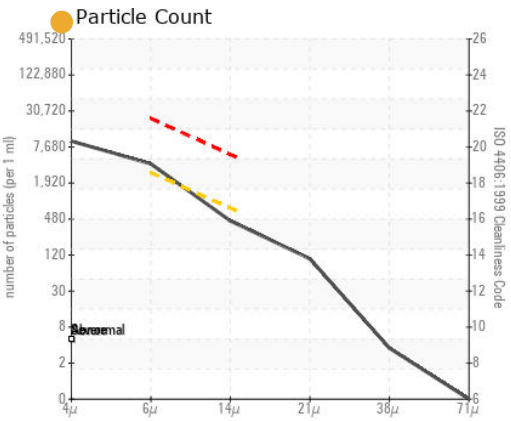


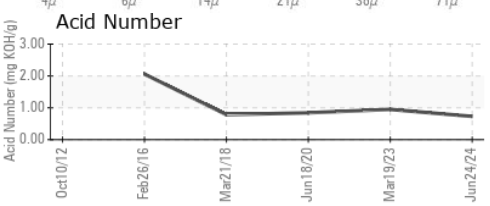
## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0935274
**Lab Number** : 06234800
**Unique Number** : 11123634
**Test Package** : CONST

**Received** : 12 Jul 2024
**Tested** : 15 Jul 2024
**Diagnosed** : 15 Jul 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] 06234800 (Generated: 07/15/2024 09:48:04) Rev: 1

Submitted By: RUSTY RILEY