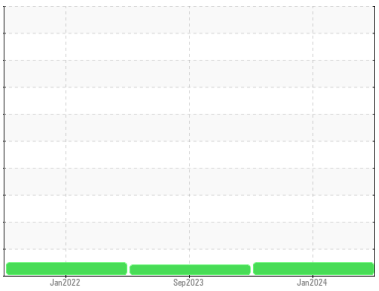
# OIL ANALYSIS REPORT

Sample Rating Trend




NORMAL

Area
**OKLAHOMA/102**
Machine Id
**45.63L [OKLAHOMA^102]**
Component
**Rear Differential**
Fluid
**MOBIL MOBILFLUID 424 (5 GAL)**

## DIAGNOSIS

**Recommendation**
The oil 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 no indication of any contamination in the oil.

**Fluid Condition**
Confirm oil type. The condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0886879** | WC0848880 | WC0584642 |
| Sample Date | | Client Info | | **30 Jan 2024** | 09 Sep 2023 | 14 Jan 2022 |
| Machine Age | hrs | Client Info | | **1755** | 1430 | 11 |
| Oil Age | hrs | Client Info | | **1000** | 500 | 0 |
| Oil Changed | | Client Info | | **Changed** | Not Changd | Not Changd |
| Sample Status | | | | **NORMAL** | ABNORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Water | | WC Method | >.2 | **NEG** | NEG | NEG |

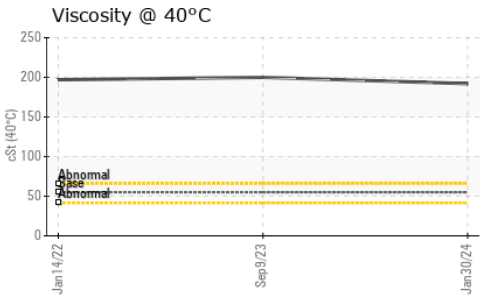
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >500 | **245** | 241 | 17 |
| Chromium | ppm | ASTM D5185m | >3 | **2** | 5 | <1 |
| Nickel | ppm | ASTM D5185m | >3 | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | **0** | <1 | 2 |
| Lead | ppm | ASTM D5185m | >13 | **0** | 0 | 0 |
| Copper | ppm | ASTM D5185m | >103 | **4** | 5 | <1 |
| Tin | ppm | ASTM D5185m | >5 | **0** | 0 | 0 |
| Antimony | ppm | ASTM D5185m | >5 | **---** | --- | 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 | | **0** | 2 | 4 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 3 |
| Molybdenum | ppm | ASTM D5185m | | **40** | 19 | 3 |
| Manganese | ppm | ASTM D5185m | | **7** | 8 | 4 |
| Magnesium | ppm | ASTM D5185m | | **0** | 2 | 19 |
| Calcium | ppm | ASTM D5185m | | **14** | 41 | 64 |
| Phosphorus | ppm | ASTM D5185m | | **1746** | 2011 | 2068 |
| Zinc | ppm | ASTM D5185m | | **50** | 73 | 58 |
| Sulfur | ppm | ASTM D5185m | | **24274** | 29632 | 23343 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >100 | **16** | 23 | 16 |
| Sodium | ppm | ASTM D5185m | | **11** | 8 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | **<1** | 2 | <1 |

| 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** | ▲ MODER | LIGHT |
| 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 | >.2 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

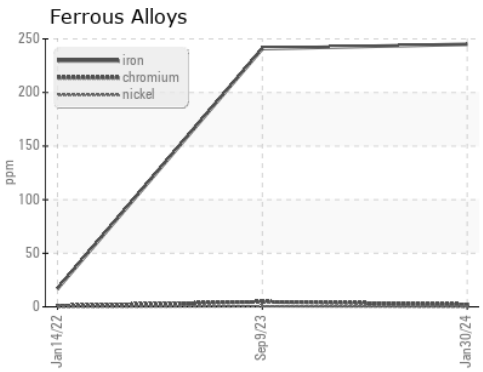
# OIL ANALYSIS REPORT

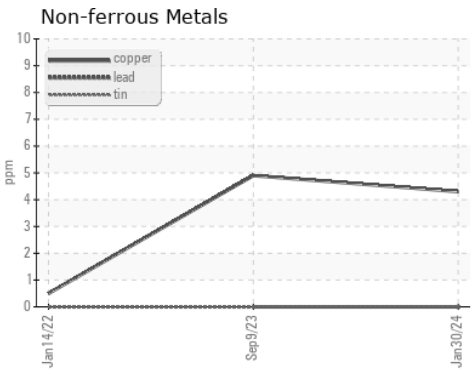


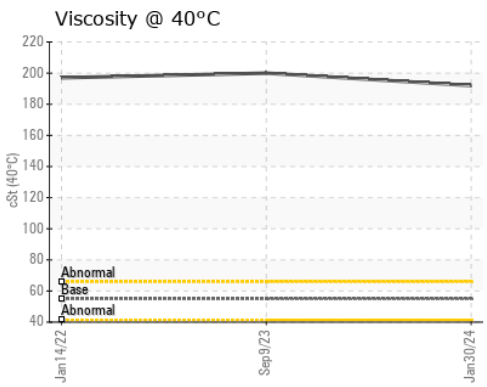

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 55 | **192** | 200 | 197 |

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

## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0886879
**Lab Number** : 06098768
**Unique Number** : 10896998
**Test Package** : CONST

**Received** : 23 Feb 2024
**Tested** : 26 Feb 2024
**Diagnosed** : 26 Feb 2024 - 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)*

**SHERWOOD CONSTRUCTION CO INC**
3219 WEST MAY ST
WICHITA, KS
US 67213
Contact: SHAWN SOUTH
shawn.south@sherwood.net
T: x:
F: x:

Report Id: SHEWIC [WUSCAR] 06098768 (Generated: 02/29/2024 07:57:49) Rev: 1

Submitted By: PATRICIA BIBLE