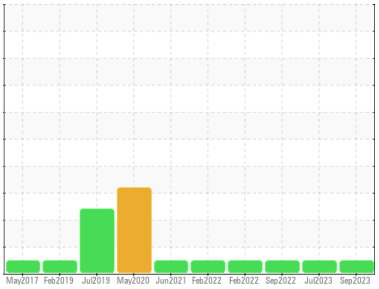
# OIL ANALYSIS REPORT

Area
**OKLAHOMA/102/EG - EXCAVATOR**
Machine Id
**20.511L [OKLAHOMA^102^EG - EXCAVATOR]**
Component
**Rear Left Final Drive**
Fluid
**MOBIL MOBILTRANS HD 50 (--- 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.

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **WC0848932** | WC0808021 | WC0738589 |
| Sample Date | | Client Info | | **11 Sep 2023** | 05 Jul 2023 | 10 Sep 2022 |
| Machine Age | hrs | Client Info | | **7753** | 7686 | 7291 |
| Oil Age | hrs | Client Info | | **7753** | 395 | 1000 |
| Oil Changed | | Client Info | | **Not Changd** | Changed | Changed |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185m | >800 | **173** | 150 | 315 |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | <1 | 2 |
| Nickel | ppm | ASTM D5185m | >5 | **<1** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >15 | **<1** | <1 | <1 |
| Silver | ppm | ASTM D5185m | >2 | **0** | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >75 | **6** | 6 | 10 |
| Lead | ppm | ASTM D5185m | >10 | **<1** | <1 | 0 |
| Copper | ppm | ASTM D5185m | >75 | **<1** | <1 | <1 |
| Tin | ppm | ASTM D5185m | >8 | **0** | <1 | <1 |
| Antimony | ppm | ASTM D5185m | >50 | **---** | --- | --- |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **<1** | 0 | 0 |

| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **12** | 10 | 0 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | | **4** | 4 | 3 |
| Manganese | ppm | ASTM D5185m | | **2** | 2 | 3 |
| Magnesium | ppm | ASTM D5185m | | **33** | 39 | 29 |
| Calcium | ppm | ASTM D5185m | | **3014** | 3267 | 3026 |
| Phosphorus | ppm | ASTM D5185m | | **1024** | 1091 | 1001 |
| Zinc | ppm | ASTM D5185m | | **1232** | 1377 | 1252 |
| Sulfur | ppm | ASTM D5185m | | **8433** | 10316 | 10060 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >400 | **30** | 26 | 48 |
| Sodium | ppm | ASTM D5185m | | **0** | 2 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | **3** | 2 | 0 |

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | MODER | 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 | >0.2 | **NEG** | NEG | NEG |
| Free Water | scalar | *Visual | | **NEG** | NEG | NEG |

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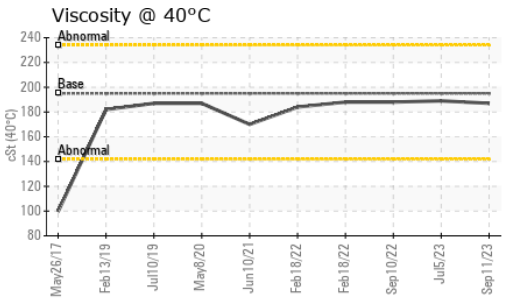
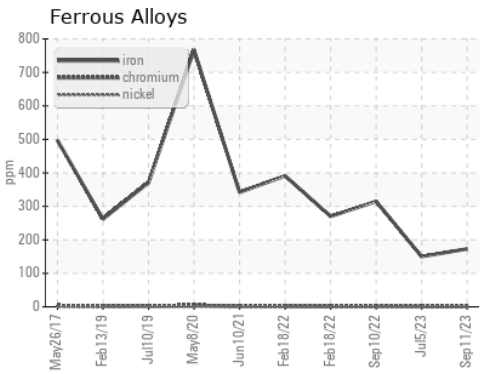
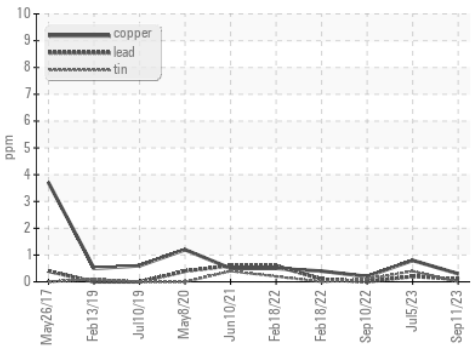


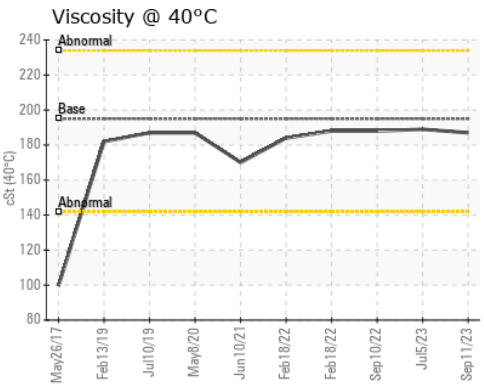

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 195 | **187** | 189 | 188 |

| 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.** : WC0848932
**Lab Number** : 05958837
**Unique Number** : 10660050
**Test Package** : CONST

**Received** : 22 Sep 2023
**Diagnosed** : 24 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] 05958837 (Generated: 09/30/2023 07:15:59) Rev: 1

Submitted By: PATRICIA BIBLE