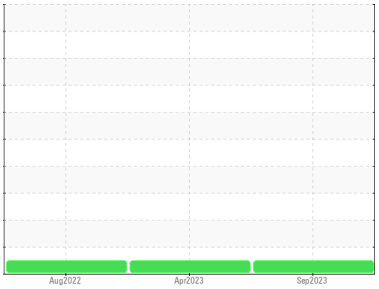
# OIL ANALYSIS REPORT

Area
## OKLAHOMA/102/EG - DOZER
Machine Id
## 38.88 [OKLAHOMA^102^EG - DOZER]
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 amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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 | | **WC0857371** | WC0800760 | WC0702140 |
| Sample Date | | Client Info | | **21 Sep 2023** | 05 Apr 2023 | 26 Aug 2022 |
| Machine Age | hrs | Client Info | | **2491** | 1922 | 615 |
| Oil Age | hrs | Client Info | | **569** | 1922 | 374 |
| Oil Changed | | Client Info | | **Not Changd** | Changed | Not Changd |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| PQ | | ASTM D8184 | | **15** | --- | --- |
| Iron | ppm | ASTM D5185m | >20 | **10** | 11 | 6 |
| Chromium | ppm | ASTM D5185m | >10 | **<1** | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | **<1** | <1 | 0 |
| Silver | ppm | ASTM D5185m | | **0** | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | **5** | 4 | 1 |
| Lead | ppm | ASTM D5185m | >10 | **<1** | 0 | <1 |
| Copper | ppm | ASTM D5185m | >75 | **6** | 8 | 7 |
| Tin | ppm | ASTM D5185m | >10 | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | **0** | 0 | 0 |

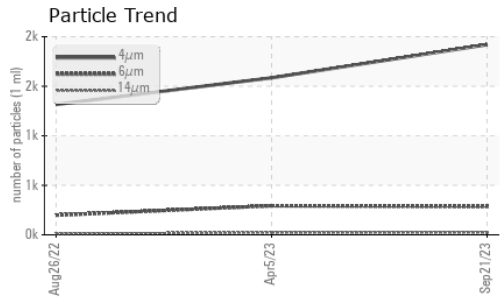
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185m | | **20** | 6 | 1 |
| Barium | ppm | ASTM D5185m | | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | **<1** | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | **13** | 13 | 6 |
| Calcium | ppm | ASTM D5185m | | **1848** | 981 | 402 |
| Phosphorus | ppm | ASTM D5185m | | **870** | 744 | 741 |
| Zinc | ppm | ASTM D5185m | | **1093** | 954 | 916 |
| Sulfur | ppm | ASTM D5185m | | **3471** | 2911 | 1990 |

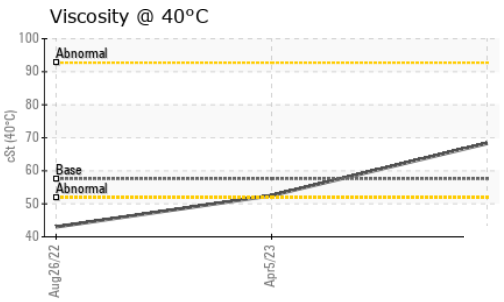
| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185m | >20 | **13** | 10 | 3 |
| Sodium | ppm | ASTM D5185m | | **2** | <1 | 2 |
| Potassium | ppm | ASTM D5185m | >20 | **0** | 0 | 0 |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | | **1920** | 1585 | 1316 |
| Particles >6µm | | ASTM D7647 | >2500 | **286** | 293 | 198 |
| Particles >14µm | | ASTM D7647 | >640 | **24** | 23 | 12 |
| Particles >21µm | | ASTM D7647 | >160 | **4** | 8 | 4 |
| Particles >38µm | | ASTM D7647 | >40 | **0** | 1 | 1 |
| Particles >71µm | | ASTM D7647 | >10 | **0** | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >--/18/16 | **18/15/12** | 18/15/12 | 18/15/11 |

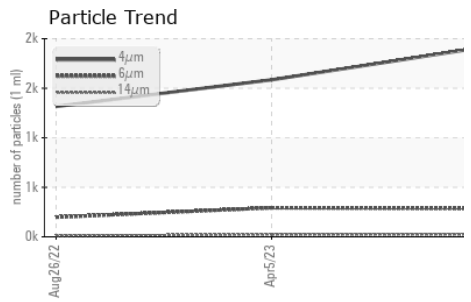
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | **1.26** | 1.05 | 1.06 |

# OIL ANALYSIS REPORT

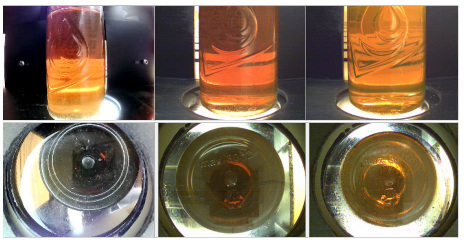




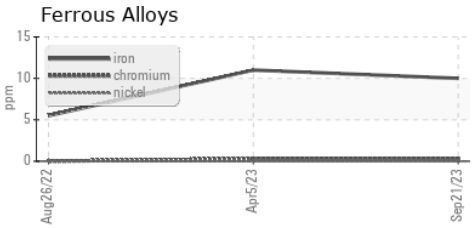

| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | **NONE** | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | **NONE** | NONE | NONE |
|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

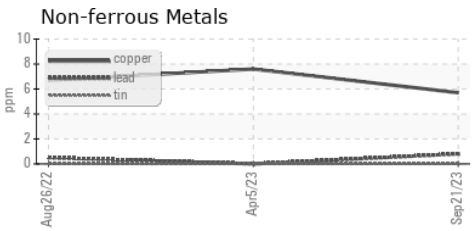
| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D445 | 57.6 | **68.3** | 52.5 | 43.0 |

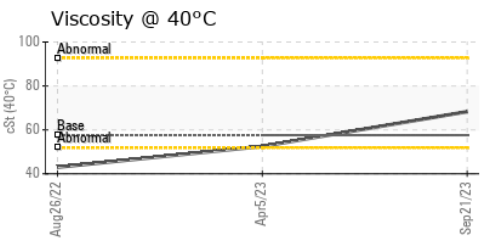
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | |
| Bottom | | | | | |

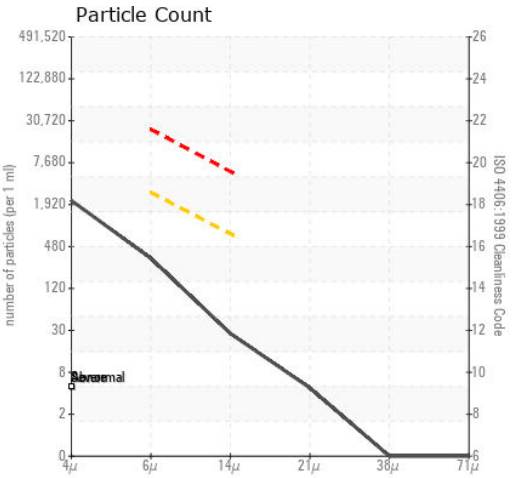


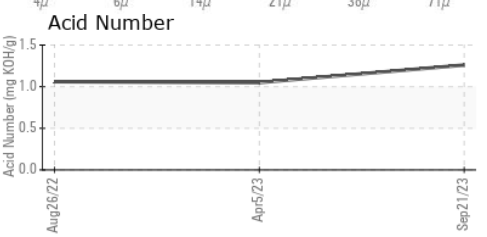
## GRAPHS




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : WC0857371 **Received** : 28 Sep 2023
**Lab Number** : 05963495 **Diagnosed** : 29 Sep 2023
**Unique Number** : 10670046 **Diagnostician** : Don Baldridge
**Test Package** : CONST ( Additional Tests: PQ )

*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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