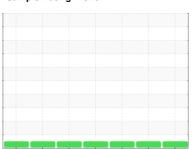


OIL ANALYSIS REPORT

Sample Rating Trend







OKLAHOMA/102 Machine Id 35.105L [OKLAHOMA^102]

Hydraulic System

MOBIL MOBILTRANS AST 30 (21 GAL)

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 component. The amount and size of particulates present in the system is acceptable.

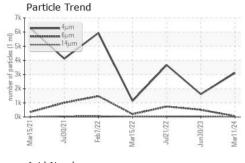
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

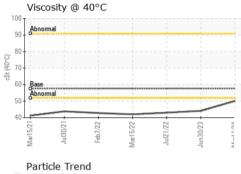
| 451 30 (21 GAL | , | Mar2021 | Jul2021 Feb2022 | Mar2022 Jul2022 Jun2023 | Mar2024 | |
|------------------|----------|--------------|-----------------|-------------------------|-------------|-------------|
| SAMPLE INFORM | MATION | method | limit/base | current | history1 | history2 |
| Sample Number | | Client Info | | WC0832391 | WC0808014 | WC0713195 |
| Sample Date | | Client Info | | 11 Mar 2024 | 30 Jun 2023 | 21 Jul 2022 |
| Machine Age | hrs | Client Info | | 3315 | 4189 | 2390 |
| Oil Age | hrs | Client Info | | 0 | 2950 | 2390 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |
| CONTAMINATIO | N | 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 | 13 | 17 | 15 |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | 2 | 3 |
| Lead | ppm | ASTM D5185m | >10 | 2 | 2 | 2 |
| Copper | ppm | ASTM D5185m | | 12 | 10 | 11 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | <1 |
| Vanadium | | ASTM D5185m | >10 | 0 | <1 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | ppm | | | | | |
| ADDITIVES | | method | limit/base | | history1 | history2 |
| Boron | ppm | ASTM D5185m | | 7 | 2 | 4 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 13 | 11 | 9 |
| Calcium | ppm | ASTM D5185m | | 835 | 402 | 343 |
| Phosphorus | ppm | ASTM D5185m | | 779 | 664 | 643 |
| Zinc | ppm | ASTM D5185m | | 977 | 865 | 819 |
| Sulfur | ppm | ASTM D5185m | | 2959 | 2244 | 2053 |
| CONTAMINANTS | 3 | method | limit/base | current | history1 | history2 |
| Silicon | ppm | ASTM D5185m | >20 | 6 | 5 | 4 |
| Sodium | ppm | ASTM D5185m | | 3 | 3 | 0 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 4 | 3 |
| FLUID CLEANLIN | NESS | method | limit/base | current | history1 | history2 |
| Particles >4μm | | ASTM D7647 | | 3115 | 1611 | 3669 |
| Particles >6μm | | ASTM D7647 | >2500 | 55 | 508 | 737 |
| Particles >14μm | | ASTM D7647 | >640 | 5 | 50 | 47 |
| Particles >21µm | | ASTM D7647 | >160 | 1 | 13 | 12 |
| Particles >38μm | | ASTM D7647 | >40 | 0 | 1 | 0 |
| Particles >71µm | | ASTM D7647 | >10 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >/18/16 | 19/13/10 | 18/16/13 | 19/17/13 |
| FLUID DEGRADA | NOITA | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.01 | 0.81 | 0.80 |

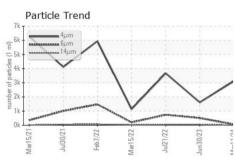


OIL ANALYSIS REPORT



| Acid | Numbe | er | | | | |
|----------------------------|----------|---------|------------|------------|----------|------------|
| 0.7 Acid Number (mg KOH/g) | \wedge | \ | | | | |
| Acid Numb | | | | | | |
| Mar15/21 | Jui30/21 | Feb7/22 | Mar15/22 - | Jul21/22 - | Jun30/23 | Mar11/24 - |





| 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 PROPERT | TIES | method | limit/base | current | history1 | history2 |

| . 20.5 | | | | | | |
|-------------|-----|-----------|------|------|------|------|
| Visc @ 40°C | cSt | ASTM D445 | 57.6 | 50.1 | 44.1 | 43.0 |

| SAMPLE IMAGES |
|---------------|
|---------------|

Particle Count

491 520 122,880

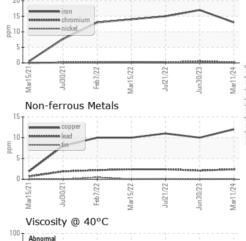


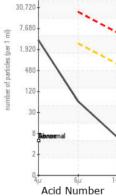


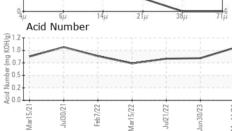
Ferrous Alloys

Color

Bottom











Certificate L2367

Laboratory Sample No. Lab Number : 06121536 Unique Number: 10930369

Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0832391

cSt (40°C)

Received **Tested**

: 18 Mar 2024 Diagnosed

: 19 Mar 2024 : 21 Mar 2024 - Jonathan Hester

3219 WEST MAY ST WICHITA, KS US 67213

Contact: DOUG KING Doug.King@sherwood.net

SHERWOOD CONSTRUCTION CO INC

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)

T:

F: