



OIL ANALYSIS REPORT

| | |
|-----------------|-----------|
| WEAR | NORMAL |
| CONTAMINATION | ATTENTION |
| FLUID CONDITION | NORMAL |

Area
Mobile Fleet
 Machine Id
6434 6434
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0937942 | WC0937877 | WC0867064 |
| Sample Date | | Client Info | | 17 Jun 2024 | 01 May 2024 | 01 Nov 2023 |
| Machine Age | hrs | Client Info | | 9658 | 9395 | 8692 |
| Oil Age | hrs | Client Info | | 251 | 216 | 330 |
| Filter Age | hrs | Client Info | | 251 | 216 | 330 |
| Oil Changed | | Client Info | | N/A | Changed | Not Changd |
| Filter Changed | | Client Info | | N/A | Changed | Not Changd |
| Sample Status | | | | ATTENTION | NORMAL | ATTENTION |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >65 | 2 | 6 | 3 |
| Chromium | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >3 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | >5 | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >35 | 3 | 4 | 2 |
| Lead | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| Copper | ppm | ASTM D5185m | >180 | 5 | 10 | 9 |
| Tin | ppm | ASTM D5185m | >8 | <1 | 1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

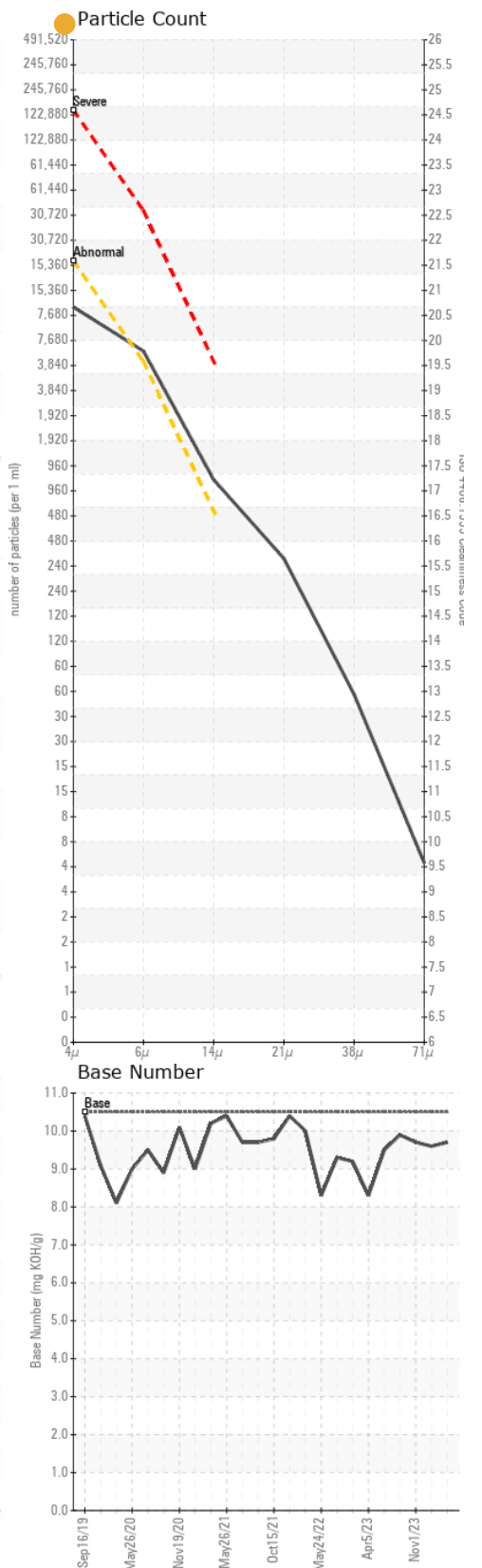
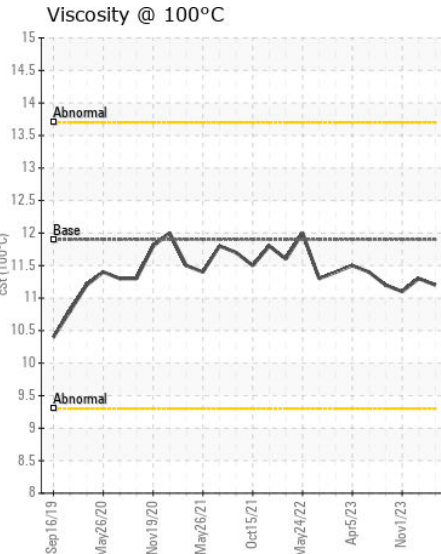
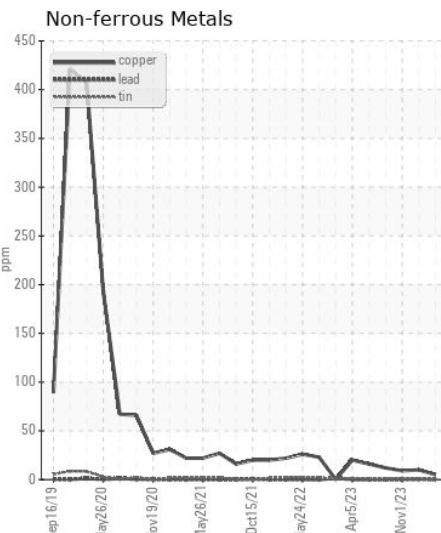
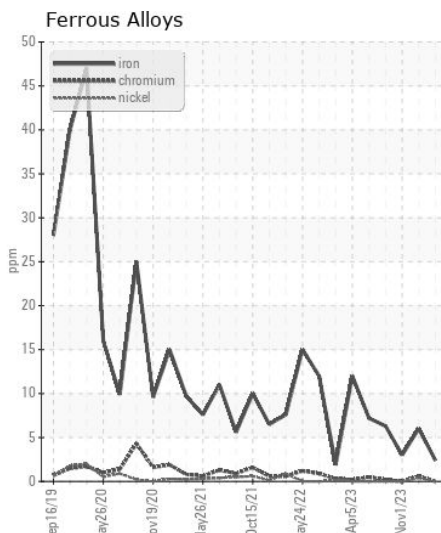
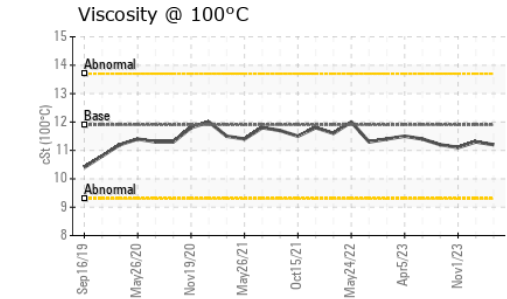
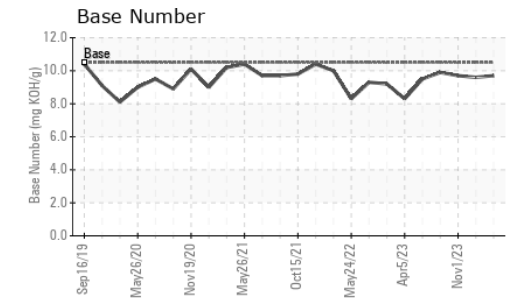
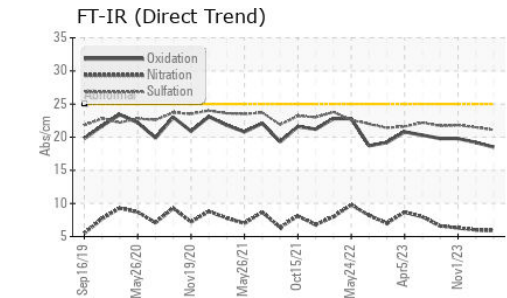
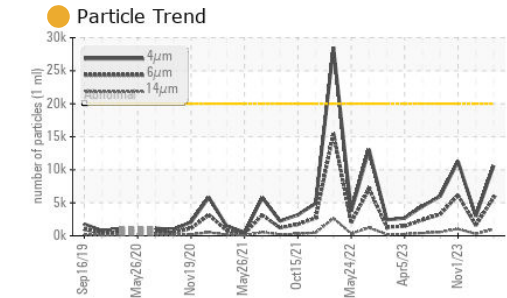
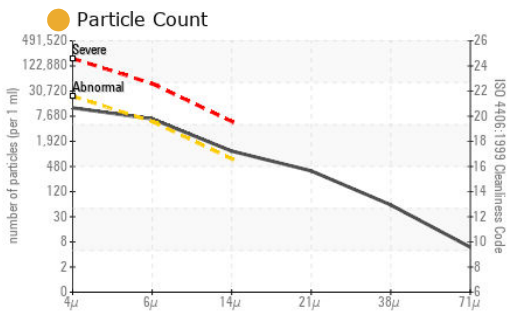
There is a moderate amount of particulates present in the oil.

| | | | | | | |
|------------------|----------|--------------|-----------|-----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | 5 | 7 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 6 | 2 |
| Fuel | | WC Method | >3.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | 0.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.9 | 6.0 | 6.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.1 | 21.5 | 21.8 |
| Particles >4µm | | ASTM D7647 | >20000 | 10596 | 2966 | 11275 |
| Particles >6µm | | ASTM D7647 | >5000 | 5772 | 1616 | 6142 |
| Particles >14µm | | ASTM D7647 | >640 | 982 | 275 | 1045 |
| Particles >21µm | | ASTM D7647 | >160 | 331 | 93 | 352 |
| Particles >38µm | | ASTM D7647 | >40 | 51 | 14 | 54 |
| Particles >71µm | | ASTM D7647 | >10 | 5 | 1 | 6 |
| Oil Cleanliness | | ISO 4406 (c) | >21/19/16 | 21/20/17 | 19/18/15 | 21/20/17 |
| 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 |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 2 | 1 | 2 |
| Boron | ppm | ASTM D5185m | | 47 | 65 | 52 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 45 | 44 | 49 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Magnesium | ppm | ASTM D5185m | | 515 | 489 | 446 |
| Calcium | ppm | ASTM D5185m | | 1664 | 1605 | 1532 |
| Phosphorus | ppm | ASTM D5185m | | 777 | 771 | 681 |
| Zinc | ppm | ASTM D5185m | | 917 | 900 | 802 |
| Sulfur | ppm | ASTM D5185m | | 3190 | 2773 | 2187 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.5 | 19.2 | 19.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.5 | 9.7 | 9.6 | 9.7 |
| Visc @ 100°C | cSt | ASTM D445 | 11.9 | 11.2 | 11.3 | 11.1 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0937942 **Received** : 19 Jun 2024
Lab Number : 06214510 **Tested** : 20 Jun 2024
Unique Number : 11087374 **Diagnosed** : 21 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PrtCount, TBN)

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509
 Contact: Leigh Dennis
 rdennis@thesunrockgroup.com
 T: (919)575-4505
 F: (919)575-0162

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)