



OIL ANALYSIS REPORT

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

Machine Id
813513
 Component
Diesel Engine
 Fluid
MOBIL DELVAC EXTREME 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | RPL0008082 | RPL0008145 | RPL0008178 |
| Sample Date | | Client Info | | 24 Oct 2023 | 21 Jul 2023 | 27 Apr 2023 |
| Machine Age | hrs | Client Info | | 11217 | 10647 | 9987 |
| Oil Age | hrs | Client Info | | 1230 | 660 | 1070 |
| Filter Age | hrs | Client Info | | 1230 | 660 | 1070 |
| Oil Changed | | Client Info | | Changed | Not Changd | Changed |
| Filter Changed | | Client Info | | Changed | Not Changd | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 25 | 13 | 24 |
| Chromium | ppm | ASTM D5185m | >20 | 1 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 2 | <1 | 6 |
| Silver | ppm | ASTM D5185m | >3 | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 8 | 6 | 8 |
| Lead | ppm | ASTM D5185m | >40 | 2 | 0 | 3 |
| Copper | ppm | ASTM D5185m | >330 | <1 | 0 | 1 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

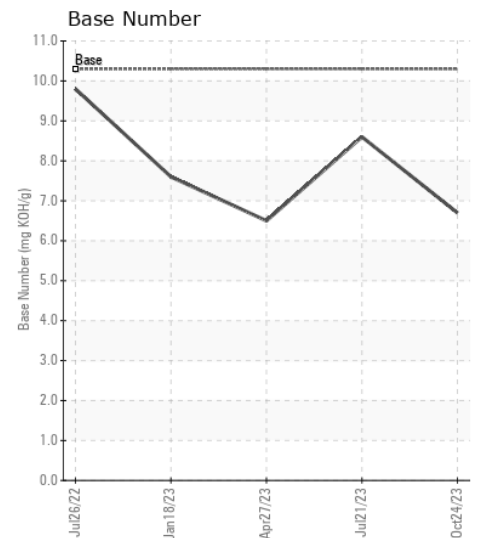
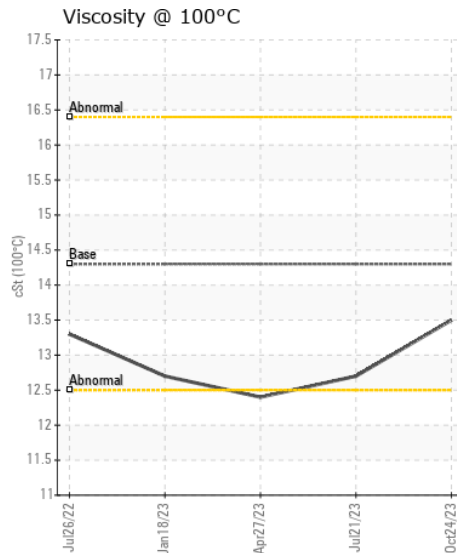
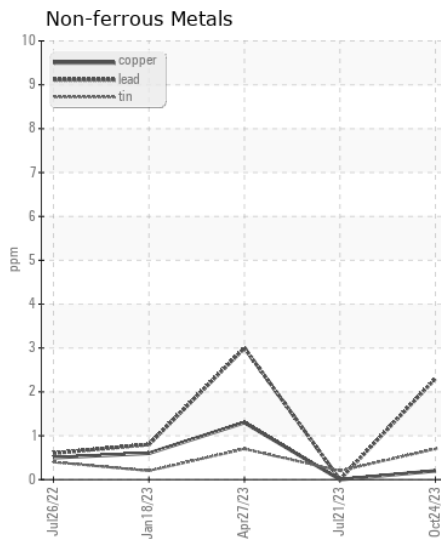
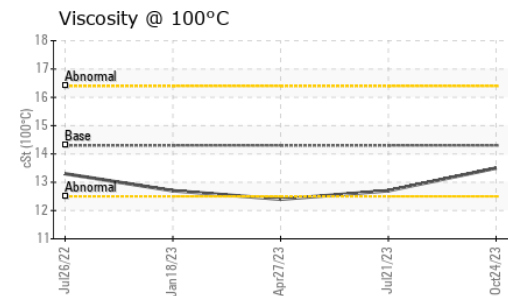
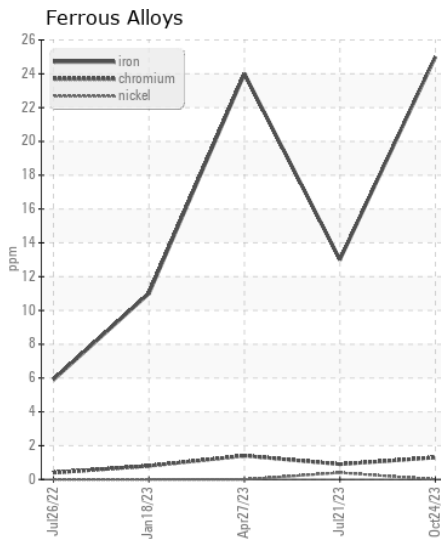
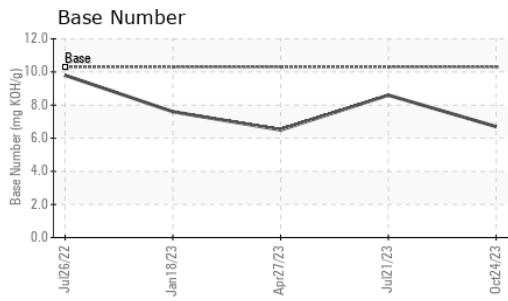
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 5 | 4 | 4 |
| Potassium | ppm | ASTM D5185m | >20 | 7 | 4 | 6 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | 1.7 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.8 | 0.4 | 0.7 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 12.4 | 9.3 | 12.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 25.0 | 20.2 | 25.0 |
| 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 | | 1 | 2 | <1 |
| Boron | ppm | ASTM D5185m | | 4 | 4 | 9 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 62 | 66 | 65 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 980 | 1045 | 845 |
| Calcium | ppm | ASTM D5185m | | 1135 | 1199 | 1186 |
| Phosphorus | ppm | ASTM D5185m | | 1123 | 1109 | 1002 |
| Zinc | ppm | ASTM D5185m | | 1362 | 1398 | 1216 |
| Sulfur | ppm | ASTM D5185m | | 3127 | 3956 | 3414 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 20.2 | 15.7 | 19.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.3 | 6.7 | 8.6 | 6.5 |
| Visc @ 100°C | cSt | ASTM D445 | 14.3 | 13.5 | 12.7 | 12.4 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0008082 **Received** : 16 Jan 2024
Lab Number : 06060888 **Diagnosed** : 17 Jan 2024
Unique Number : 10832270 **Diagnostician** : Wes Davis
Test Package : FLEET

RTL PACLEASE - 7017 - Oklahoma City
 8700 West I-40
 Oklahoma City, OK
 US 73128
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.com

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: