



OIL ANALYSIS REPORT

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



Area
OKLAHOMA/3
Machine Id
39.63 [OKLAHOMA^3]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0908793 | WC0935187 | WC0874007 |
| Sample Date | | Client Info | | 10 Jun 2024 | 12 May 2024 | 18 Mar 2024 |
| Machine Age | hrs | Client Info | | 6052 | 5706 | 5377 |
| Oil Age | hrs | Client Info | | 675 | 5377 | 558 |
| Filter Age | hrs | Client Info | | 675 | 5377 | 0 |
| Oil Changed | | Client Info | | Not Changd | N/A | Changed |
| Filter Changed | | Client Info | | N/A | N/A | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 25 | 12 | 22 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | >2 | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >2 | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 1 | 2 | 2 |
| Lead | ppm | ASTM D5185m | >40 | 2 | <1 | 2 |
| Copper | ppm | ASTM D5185m | >330 | 2 | 2 | 4 |
| Tin | ppm | ASTM D5185m | >15 | 0 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| 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.

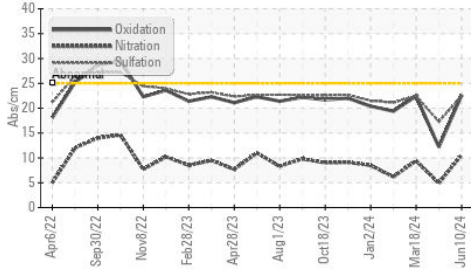
| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 5 | 5 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.1 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.6 | 4.9 | 9.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.4 | 17.3 | 22.5 |
| 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

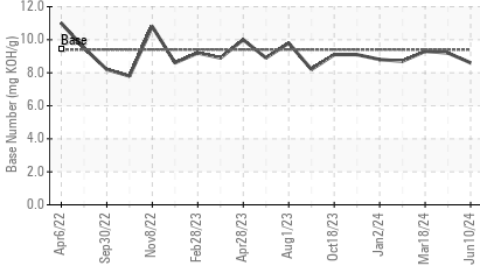
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|-----|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 8 | 6 | 10 |
| Boron | ppm | ASTM D5185m | 0 | 19 | 33 | 32 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0 | 41 | 41 | 41 |
| Manganese | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Magnesium | ppm | ASTM D5185m | 0 | 540 | 499 | 507 |
| Calcium | ppm | ASTM D5185m | | 2051 | 1755 | 1734 |
| Phosphorus | ppm | ASTM D5185m | | 888 | 872 | 786 |
| Zinc | ppm | ASTM D5185m | | 1061 | 965 | 965 |
| Sulfur | ppm | ASTM D5185m | | 3246 | 2945 | 2661 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 22.6 | 12.2 | 22.4 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.4 | 8.6 | 9.2 | 9.3 |
| Visc @ 100°C | cSt | ASTM D445 | 14 | 12.9 | 12.8 | 13.0 |

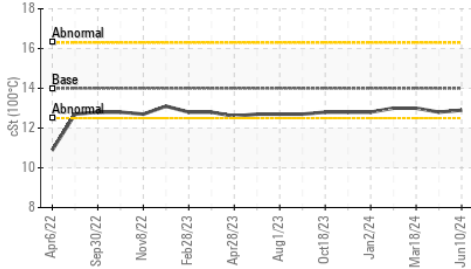
FT-IR (Direct Trend)



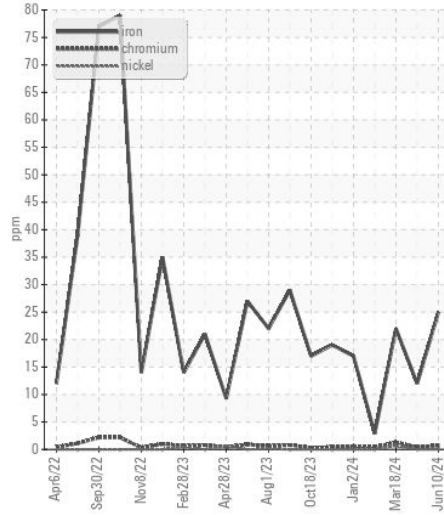
Base Number



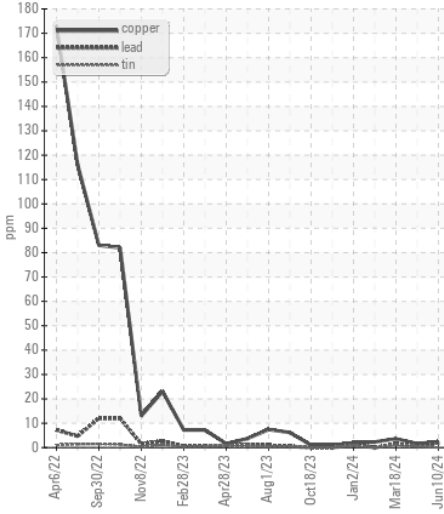
Viscosity @ 100°C



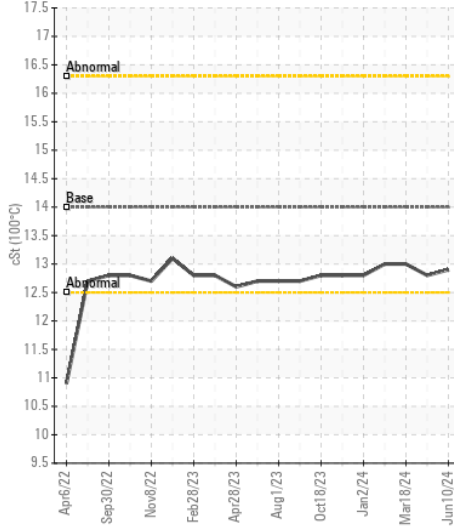
Ferrous Alloys



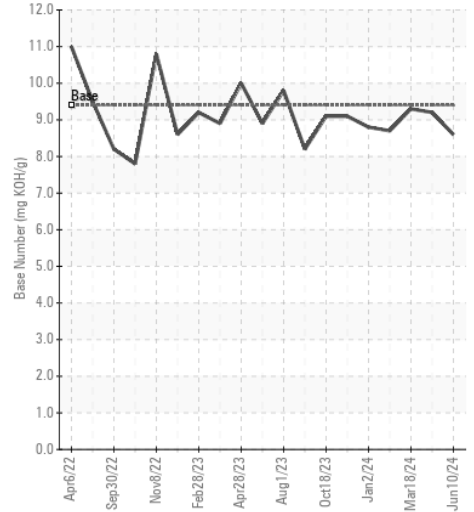
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0908793 **Received** : 20 Jun 2024
Lab Number : 06215626 **Tested** : 21 Jun 2024
Unique Number : 11088490 **Diagnosed** : 21 Jun 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

SHERWOOD CONSTRUCTION CO INC
 3219 WEST MAY ST
 WICHITA, KS
 US 67213
 Contact: SHAWN SOUTH
 shawn.south@sherwood.net

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: x:
 F: x: