



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

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

Machine Id
CATERPILLAR 966H 966H-L06 A6D00520
 Component
Transmission (Manual)
 Fluid
TRC PRO-TAC IV 30 SAE 30W (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number | | Client Info | | TR06189759 | TR06065824 | --- |
| Sample Date | | Client Info | | 17 May 2024 | 03 Jan 2024 | --- |
| Machine Age | hrs | Client Info | | 27087 | 26592 | --- |
| Oil Age | hrs | Client Info | | 495 | 1683 | --- |
| Filter Age | hrs | Client Info | | 495 | 1683 | --- |
| Oil Changed | | Client Info | | Not Chngd | Changed | --- |
| Filter Changed | | Client Info | | Not Chngd | Changed | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|------|-----|
| Iron | ppm | ASTM D5185m | >200 | 12 | 26 | --- |
| Chromium | ppm | ASTM D5185m | >5 | <1 | 0 | --- |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | --- |
| Silver | ppm | ASTM D5185m | >7 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | <1 | --- |
| Lead | ppm | ASTM D5185m | >45 | <1 | <1 | --- |
| Copper | ppm | ASTM D5185m | >225 | 9 | 14 | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

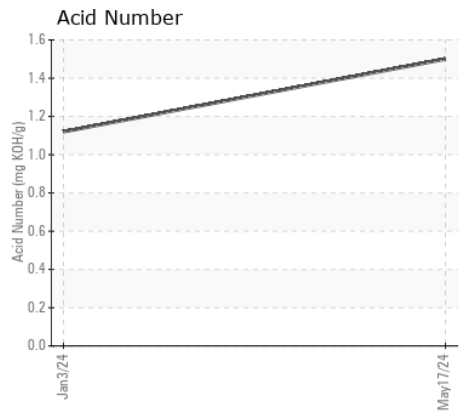
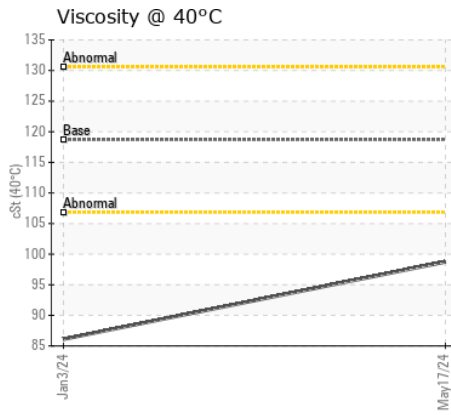
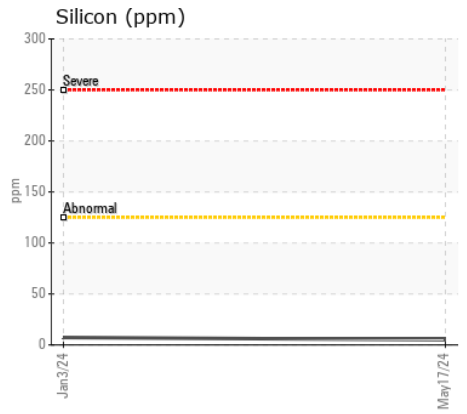
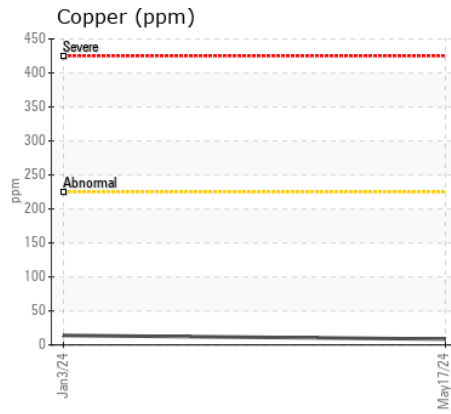
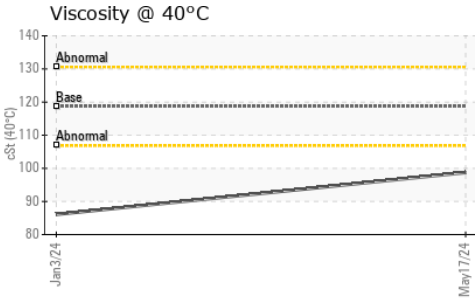
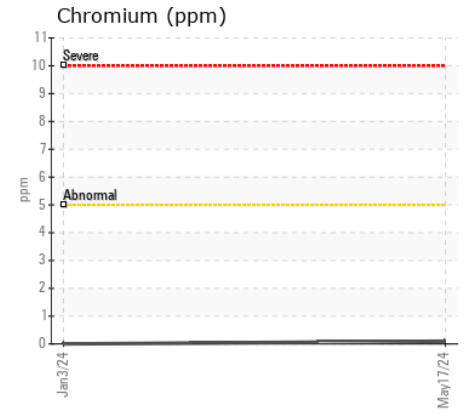
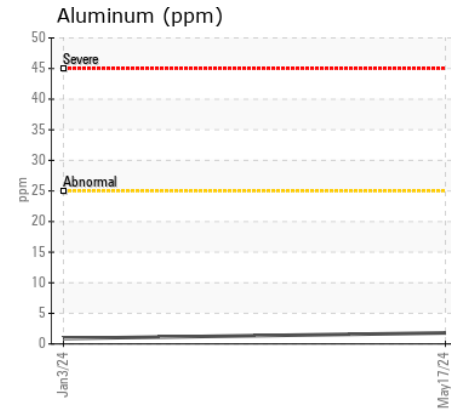
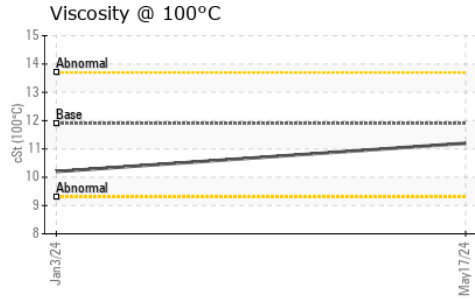
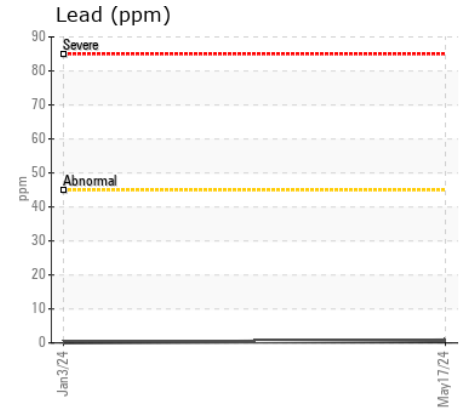
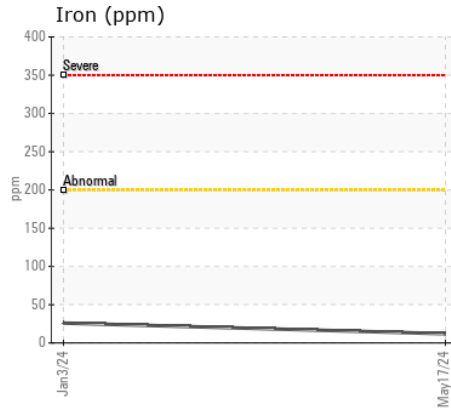
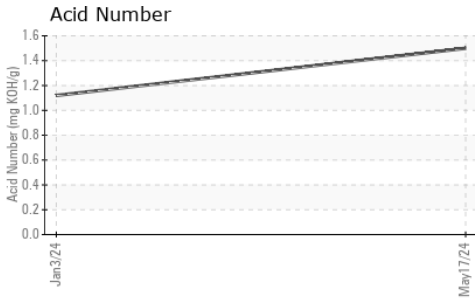
There is no indication of any contamination in the fluid.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-------|-----|
| Silicon | ppm | ASTM D5185m | >125 | 5 | 7 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 0 | --- |
| Water | | WC Method | >0.1 | NEG | NEG | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | --- |

FLUID CONDITION

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

| | | | | | | |
|----------------------|----------|-------------|-------|-------|------|-----|
| Sodium | ppm | ASTM D5185m | | <1 | 4 | --- |
| Boron | ppm | ASTM D5185m | | 0 | 2 | --- |
| Barium | ppm | ASTM D5185m | | 2 | 4 | --- |
| Molybdenum | ppm | ASTM D5185m | | <1 | 1 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | 1 | --- |
| Magnesium | ppm | ASTM D5185m | | 12 | 22 | --- |
| Calcium | ppm | ASTM D5185m | 3100 | 2984 | 2917 | --- |
| Phosphorus | ppm | ASTM D5185m | 1100 | 1104 | 1054 | --- |
| Zinc | ppm | ASTM D5185m | 1200 | 1247 | 1283 | --- |
| Sulfur | ppm | ASTM D5185m | | 6554 | 5737 | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.50 | 1.12 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 118.7 | 98.73 | 86.1 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 11.9 | 11.2 | 10.2 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270 | 96.6 | 98 | 98 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06189759 **Received** : 23 May 2024
Lab Number : 06189759 **Tested** : 31 May 2024
Unique Number : 11046511 **Diagnosed** : 31 May 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: KV100, VI)

BARR-TECH COMPOSTING
 9117 KALLENBERGER RD N
 SPRAGUE, WA
 US 99032
 Contact: RON GROGAN

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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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F: