



T R A A P

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

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

Machine Id

87

Component

2 Differential

Fluid

TRC MOLY ULTRA-TEC GEAR OIL 85W140 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | TR0001453 | TR0001276 | TR0000838 |
| Sample Date | | Client Info | | 23 Feb 2024 | 24 Oct 2023 | 19 Jun 2023 |
| Machine Age | hrs | Client Info | | 6702 | 5899 | 5245 |
| Oil Age | hrs | Client Info | | 6702 | 5899 | 5245 |
| Filter Age | hrs | Client Info | | 0 | 5899 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | N/A | None | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >500 | 112 | 63 | 72 |
| Chromium | ppm | ASTM D5185m | >10 | 1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | 3 | 2 | 2 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >100 | 4 | 5 | 5 |
| Tin | ppm | ASTM D5185m | >10 | 8 | 4 | 4 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

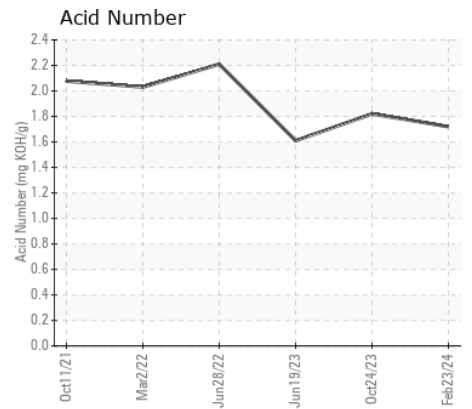
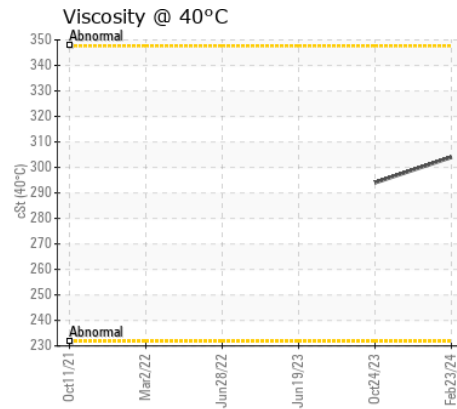
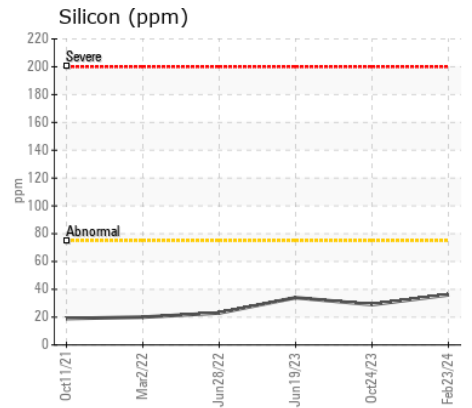
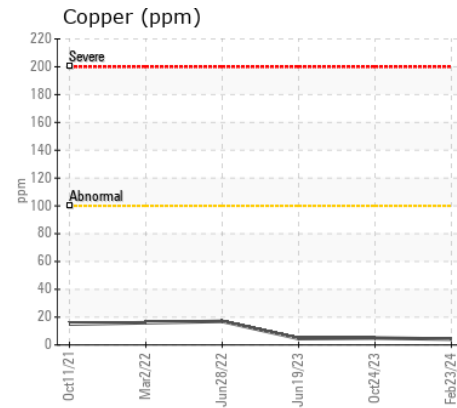
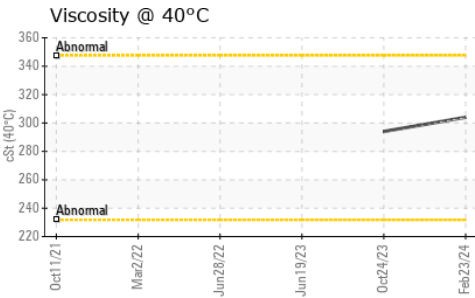
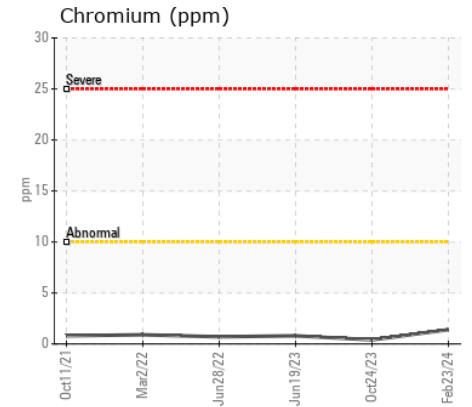
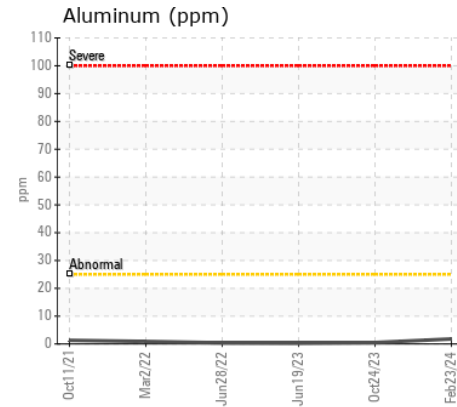
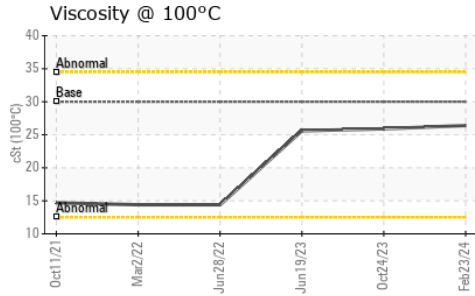
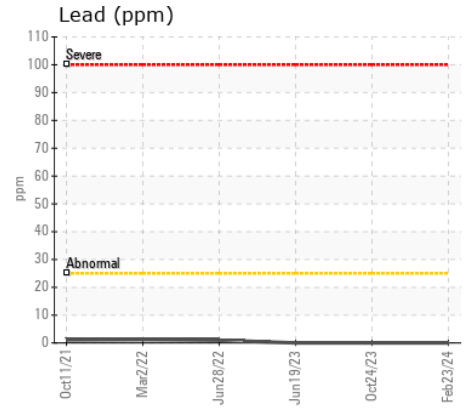
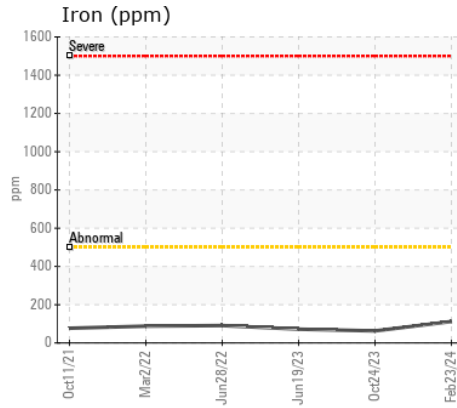
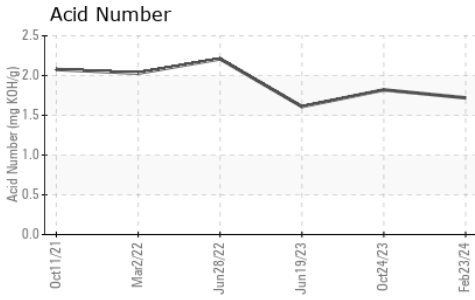
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 36 | 29 | 34 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | <1 |
| Water | | WC Method | >.2 | NEG | NEG | NEG |
| 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 | >.2 | NEG | NEG | NEG |

FLUID CONDITION

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

| | | | | | | |
|----------------------|----------|-------------|-----|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 0 | 4 | 2 |
| Boron | ppm | ASTM D5185m | | 237 | 304 | 304 |
| Barium | ppm | ASTM D5185m | | 2 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185m | | 5 | 2 | 3 |
| Magnesium | ppm | ASTM D5185m | | 3 | <1 | 2 |
| Calcium | ppm | ASTM D5185m | | 20 | 9 | 12 |
| Phosphorus | ppm | ASTM D5185m | | 1056 | 963 | 1104 |
| Zinc | ppm | ASTM D5185m | | 14 | 6 | 0 |
| Sulfur | ppm | ASTM D5185m | | 20931 | 18482 | 24897 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 1.72 | 1.82 | 1.61 |
| Visc @ 40°C | cSt | ASTM D445 | | 304 | 294 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 30 | 26.4 | 25.9 | 25.6 |
| Viscosity Index (VI) | Scale | ASTM D2270 | 105 | 114 | 114 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR0001453
Lab Number : 06101104
Unique Number : 10899334
Test Package : MOB 2 (Additional Tests: KV100, VI)

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 27 Feb 2024 - Doug Bogart

S S CONCRETE MATERIALS LLC
 P.O. BOX 23283
 BULLHEAD CITY, AZ
 US 86439
 Contact: SERVICE MANAGER
 snsmaterials1@gmail.com

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)

T:
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