



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

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

Machine Id  
**COL AGG 3**

Component  
**Gearbox**

Fluid  
**TRC MOLY ULTRA-TEC GEAR OIL 80W90 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test           | UOM | Method      | Limit/Abn | Current     | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number  |     | Client Info |           | TR06187854  | ---      | ---      |
| Sample Date    |     | Client Info |           | 15 May 2024 | ---      | ---      |
| Machine Age    | yrs | Client Info |           | 0           | ---      | ---      |
| Oil Age        | yrs | Client Info |           | 1           | ---      | ---      |
| Filter Age     | yrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | N/A         | ---      | ---      |
| Filter Changed |     | Client Info |           | N/A         | ---      | ---      |
| Sample Status  |     |             |           | NORMAL      | ---      | ---      |

## WEAR

All component wear rates are normal.

|              |        |             |      |      |     |     |
|--------------|--------|-------------|------|------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >200 | 150  | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | 2    | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | <1   | --- | --- |
| Titanium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| Silver       | ppm    | ASTM D5185m |      | <1   | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | 2    | --- | --- |
| Lead         | ppm    | ASTM D5185m | >50  | <1   | --- | --- |
| Copper       | ppm    | ASTM D5185m | >200 | <1   | --- | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <1   | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | --- | --- |

## CONTAMINATION

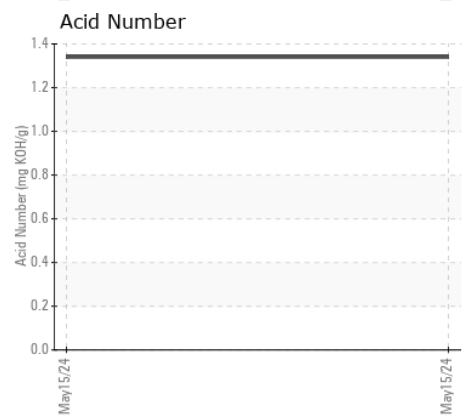
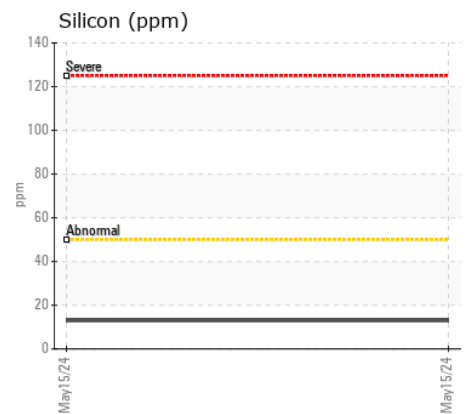
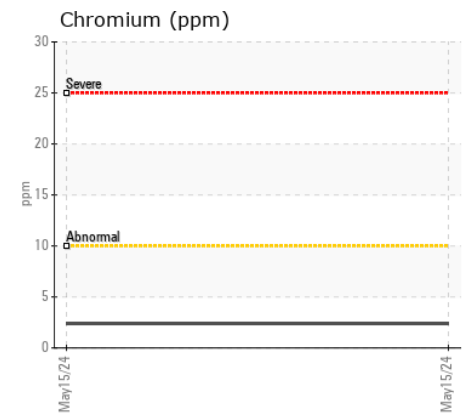
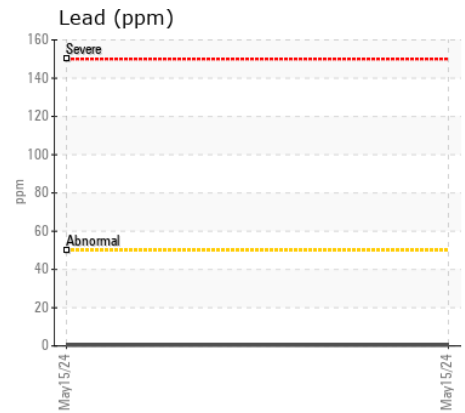
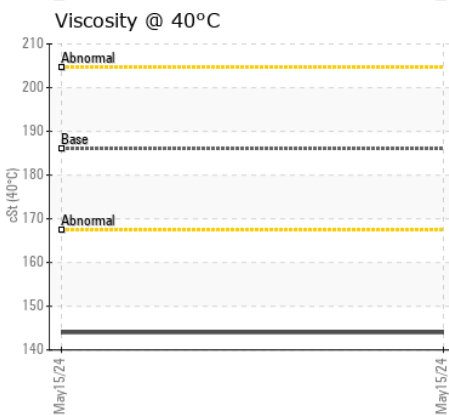
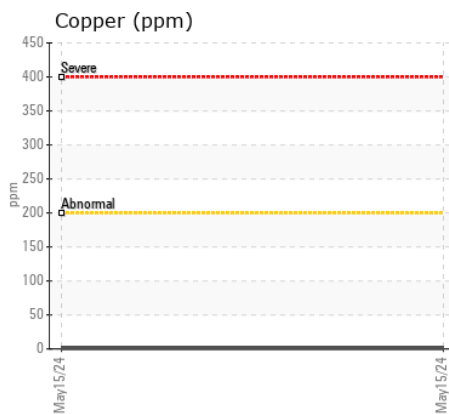
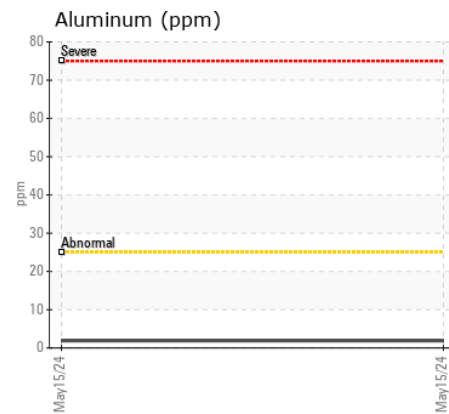
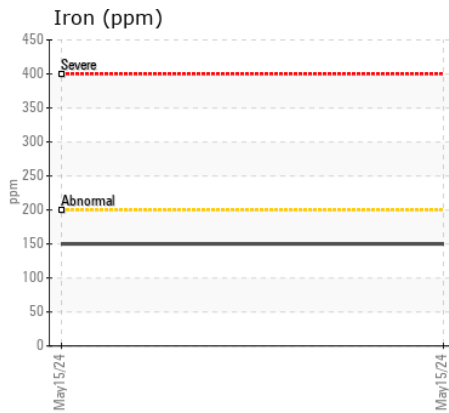
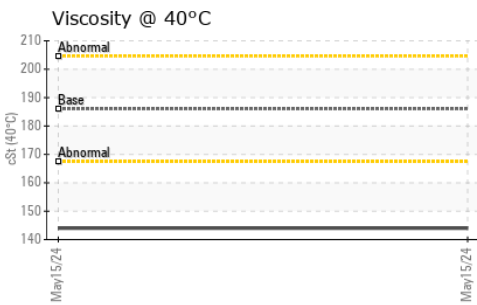
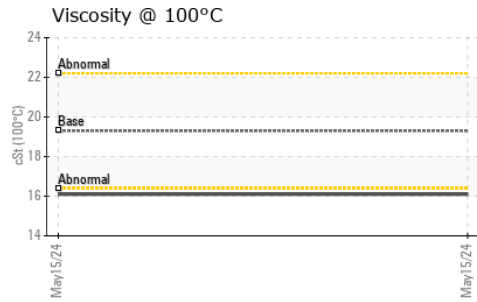
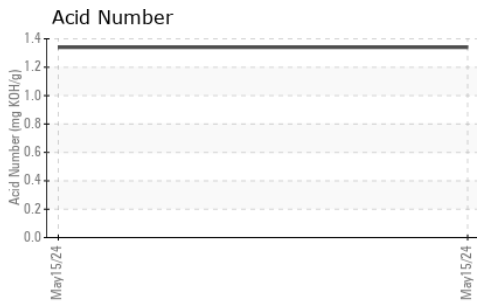
There is no indication of any contamination in the oil.

|                  |        |             |       |       |     |     |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon          | ppm    | ASTM D5185m | >50   | 13    | --- | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | 2     | --- | --- |
| Water            |        | WC Method   | >0.2  | NEG   | --- | --- |
| Silt             | scalar | *Visual     | NONE  | NONE  | --- | --- |
| Debris           | scalar | *Visual     | NONE  | NONE  | --- | --- |
| Sand/Dirt        | scalar | *Visual     | NONE  | NONE  | --- | --- |
| Appearance       | scalar | *Visual     | NORML | NORML | --- | --- |
| Odor             | scalar | *Visual     | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual     | >0.2  | 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 |      | 6     | --- | --- |
| Boron                | ppm      | ASTM D5185m |      | 207   | --- | --- |
| Barium               | ppm      | ASTM D5185m |      | 7     | --- | --- |
| Molybdenum           | ppm      | ASTM D5185m |      | <1    | --- | --- |
| Manganese            | ppm      | ASTM D5185m |      | 1     | --- | --- |
| Magnesium            | ppm      | ASTM D5185m |      | 2     | --- | --- |
| Calcium              | ppm      | ASTM D5185m |      | 41    | --- | --- |
| Phosphorus           | ppm      | ASTM D5185m |      | 1034  | --- | --- |
| Zinc                 | ppm      | ASTM D5185m |      | 64    | --- | --- |
| Sulfur               | ppm      | ASTM D5185m |      | 22347 | --- | --- |
| Acid Number (AN)     | mg KOH/g | ASTM D8045  |      | 1.34  | --- | --- |
| Visc @ 40°C          | cSt      | ASTM D445   | 186  | 144   | --- | --- |
| Visc @ 100°C         | cSt      | ASTM D445   | 19.3 | 16.1  | --- | --- |
| Viscosity Index (VI) | Scale    | ASTM D2270  | 125  | 117   | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : TR06187854

**Lab Number** : 06187854

**Unique Number** : 11044606

**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**Received** : 22 May 2024

**Tested** : 24 May 2024

**Diagnosed** : 24 May 2024 - Wes Davis

**CHRIST BROTHERS PRODUCTS**

820 S FRITZ

LEBANON, IL

US 62254

Contact: BRUCE COWELL

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:

F: