



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

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

Machine Id  
**CATERPILLAR 558LL 10-18 (S/N F5L00339)**  
 Component  
**Right Final Drive**  
 Fluid  
**CAT TRANS AND DRIVE TRAIN OIL 50 SAE (2 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number  |     | Client Info |           | TR06196007  | ---      | ---      |
| Sample Date    |     | Client Info |           | 18 Apr 2024 | ---      | ---      |
| Machine Age    | hrs | Client Info |           | 2036        | ---      | ---      |
| Oil Age        | hrs | Client Info |           | 2036        | ---      | ---      |
| Filter Age     | hrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | Changed     | ---      | ---      |
| Filter Changed |     | Client Info |           | Not Changd  | ---      | ---      |
| Sample Status  |     |             |           | NORMAL      | ---      | ---      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |      |     |     |
|--------------|--------|-------------|------|------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >800 | 95   | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | 1    | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >5   | 0    | --- | --- |
| Titanium     | ppm    | ASTM D5185m | >15  | 2    | --- | --- |
| Silver       | ppm    | ASTM D5185m | >2   | 0    | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >75  | 12   | --- | --- |
| Lead         | ppm    | ASTM D5185m | >10  | <1   | --- | --- |
| Copper       | ppm    | ASTM D5185m | >75  | 6    | --- | --- |
| Tin          | ppm    | ASTM D5185m | >8   | 0    | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <1   | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | --- | --- |

**CONTAMINATION**

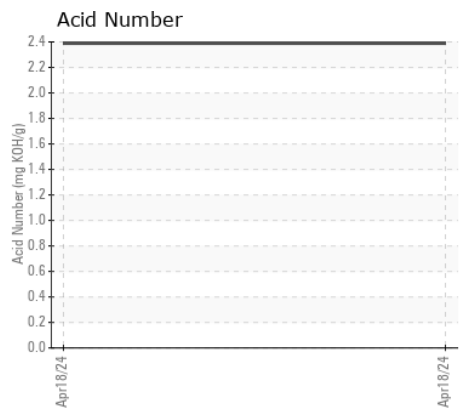
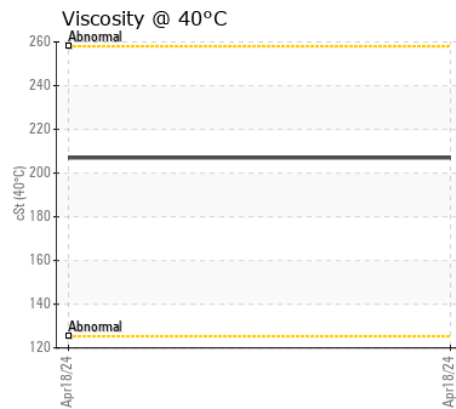
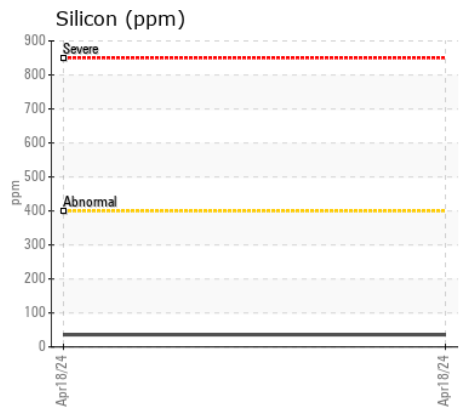
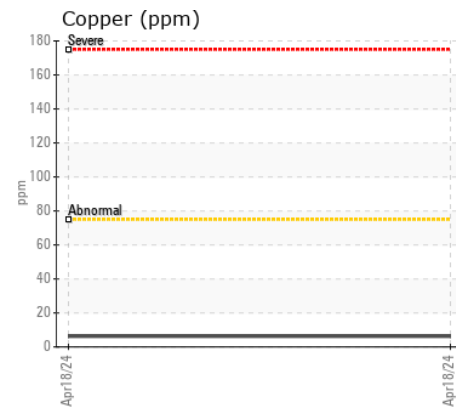
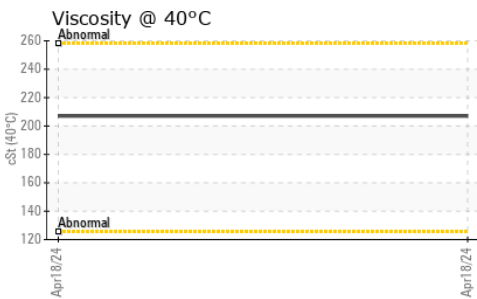
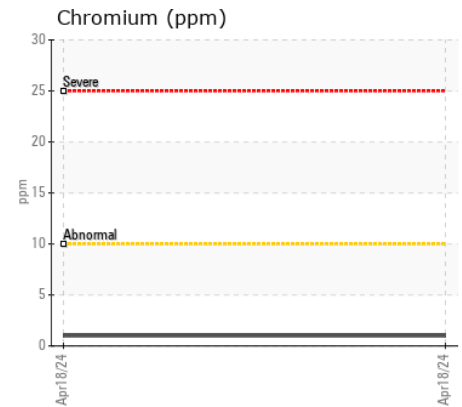
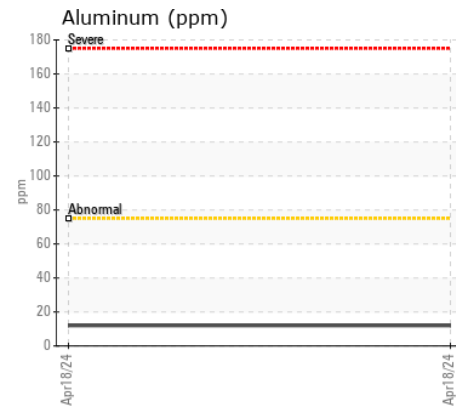
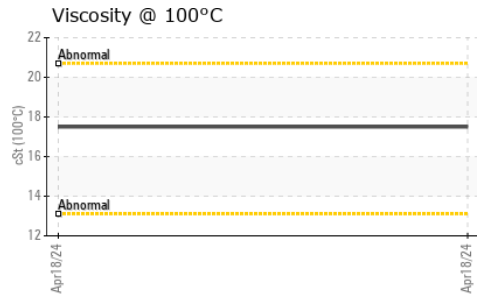
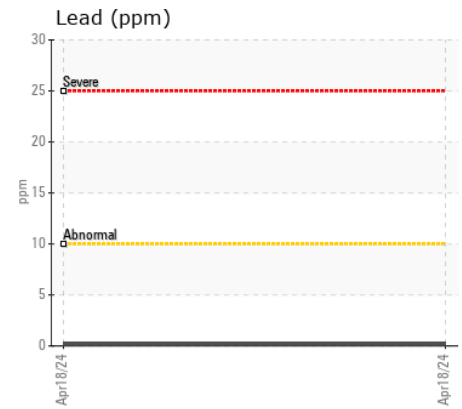
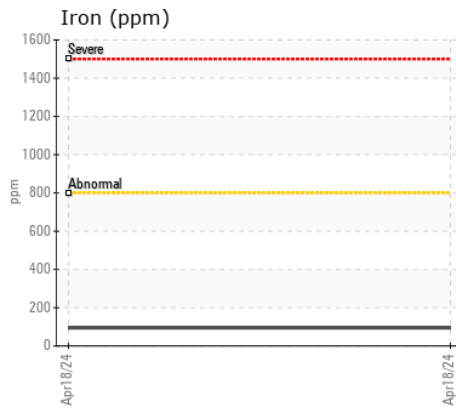
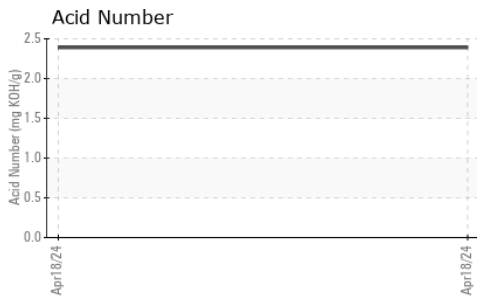
There is no indication of any contamination in the oil.

|                  |        |             |       |       |     |     |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon          | ppm    | ASTM D5185m | >400  | 36    | --- | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <1    | --- | --- |
| Water            |        | WC Method   | >0.2  | NEG   | --- | --- |
| Silt             | scalar | *Visual     | NONE  | LIGHT | --- | --- |
| 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 |  | 3    | --- | --- |
| Boron                | ppm      | ASTM D5185m |  | 0    | --- | --- |
| Barium               | ppm      | ASTM D5185m |  | <1   | --- | --- |
| Molybdenum           | ppm      | ASTM D5185m |  | 0    | --- | --- |
| Manganese            | ppm      | ASTM D5185m |  | 1    | --- | --- |
| Magnesium            | ppm      | ASTM D5185m |  | 9    | --- | --- |
| Calcium              | ppm      | ASTM D5185m |  | 3127 | --- | --- |
| Phosphorus           | ppm      | ASTM D5185m |  | 1063 | --- | --- |
| Zinc                 | ppm      | ASTM D5185m |  | 1322 | --- | --- |
| Sulfur               | ppm      | ASTM D5185m |  | 9023 | --- | --- |
| Acid Number (AN)     | mg KOH/g | ASTM D8045  |  | 2.39 | --- | --- |
| Visc @ 40°C          | cSt      | ASTM D445   |  | 207  | --- | --- |
| Visc @ 100°C         | cSt      | ASTM D445   |  | 17.5 | --- | --- |
| Viscosity Index (VI) | Scale    | ASTM D2270  |  | 90   | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06196007  
**Lab Number** : 06196007  
**Unique Number** : 11058130  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**Received** : 30 May 2024  
**Tested** : 02 Jun 2024  
**Diagnosed** : 02 Jun 2024 - Don Baldrige

**KASKI LOGGING**  
 22411 HE CEDAR CREEK RD  
 AMBOY, WA  
 US 98601  
 Contact: NATHAN BYRD

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: