

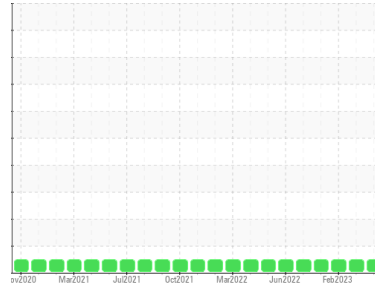


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR D6 8178 (S/N KEW00465)
 Component
Left Final Drive
 Fluid
TDTO FLUID SAE 50 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0837162 | WC0816165 | WC0775944 |
| Sample Date | Client Info | | 15 Aug 2023 | 24 May 2023 | 02 Feb 2023 |
| Machine Age | hrs | Client Info | 11325 | 10892 | 10319 |
| Oil Age | hrs | Client Info | 433 | 572 | 449 |
| Oil Changed | Client Info | | Changed | Changed | Changed |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >800 | 16 | 20 | 21 |
| Chromium | ppm | ASTM D5185m >10 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m >5 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m >15 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >75 | <1 | 0 | 0 |
| Lead | ppm | ASTM D5185m >10 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >75 | 0 | 0 | 0 |
| Tin | ppm | ASTM D5185m >8 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m 37 | 198 | 178 | 136 |
| Barium | ppm | ASTM D5185m 7 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m 5 | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m 40 | 4 | <1 | 3 |
| Calcium | ppm | ASTM D5185m 2650 | 113 | 151 | 762 |
| Phosphorus | ppm | ASTM D5185m 1050 | 359 | 369 | 390 |
| Zinc | ppm | ASTM D5185m 1075 | 23 | 40 | 215 |
| Sulfur | ppm | ASTM D5185m 5750 | 2094 | 2524 | 2260 |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|------------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m >400 | 5 | 3 | 5 |
| Sodium | ppm | ASTM D5185m | 0 | <1 | 1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | <1 | 0 |

VISUAL

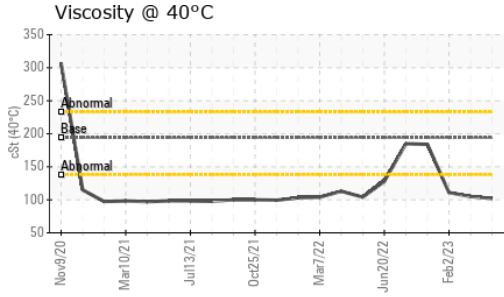
| | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal | scalar | *Visual NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual NONE | NONE | NONE | NONE |
| Precipitate | scalar | *Visual NONE | NONE | NONE | NONE |
| 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 |
| Free Water | scalar | *Visual | NEG | NEG | NEG |

FLUID PROPERTIES

| | method | limit/base | current | history1 | history2 |
|-------------|--------|---------------|------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 194 | 102 | 105 | 111 |

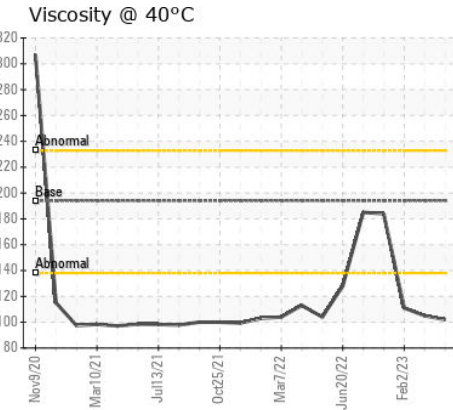
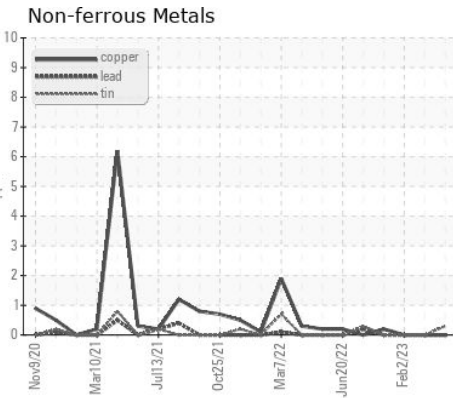
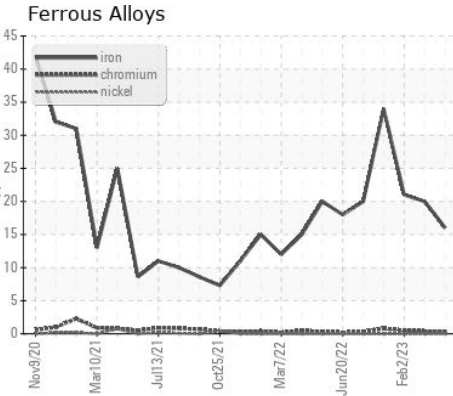


OIL ANALYSIS REPORT



| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|----------|----------|----------|
| Color | | | no image | no image | no image |
| Bottom | | | no image | no image | no image |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0837162 **Received** : 23 Aug 2023
Lab Number : 05932337 **Diagnosed** : 24 Aug 2023
Unique Number : 10617608 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: PQ)

TRADER CONSTRUCTION CO.
 PO DRAWER 1578
 NEW BERN, NC
 US 28563
 Contact: MIKE WYATT
 mw Wyatt@traderconstruction.com
 T: (252)633-1399
 F: (252)638-4871

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)