



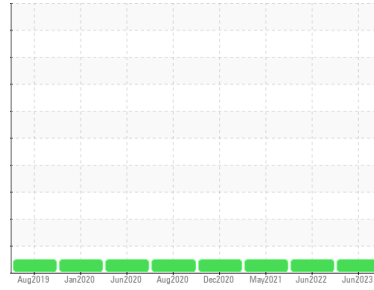
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[BECELC]
 Machine Id
FORD F250 6.7L POWERSTROKE
 Component
Diesel Engine
 Fluid
ALPHA LUBRICANTS PREMIUM 15W40 (3 GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Alpha Lubricants Premium 15w40)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | WC0472444 | WC0472466 | WC0472452 |
| Sample Date | Client Info | | 07 Jun 2023 | 25 Jun 2022 | 11 May 2021 |
| Machine Age | mls | Client Info | 227392 | 208767 | 184454 |
| Oil Age | mls | Client Info | 18625 | 24313 | 10369 |
| Oil Changed | Client Info | | Changed | Changed | Changed |
| Sample Status | | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | WC Method | | NEG | NEG | NEG |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >100 | 36 | 38 | 18 |
| Chromium | ppm | ASTM D5185m >20 | 2 | 2 | 1 |
| Nickel | ppm | ASTM D5185m >2 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m >2 | 0 | <1 | <1 |
| Silver | ppm | ASTM D5185m >2 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m >25 | 11 | 9 | 3 |
| Lead | ppm | ASTM D5185m >40 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m >330 | 3 | 4 | 2 |
| Tin | ppm | ASTM D5185m >15 | <1 | <1 | <1 |
| Antimony | ppm | ASTM D5185m | --- | --- | 0 |
| Vanadium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 1 | 4 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 12 | 50 | 36 |
| Manganese | ppm | ASTM D5185m | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 21 | 14 | 19 |
| Calcium | ppm | ASTM D5185m | 4185 | 4112 | 4125 |
| Phosphorus | ppm | ASTM D5185m | 973 | 932 | 919 |
| Zinc | ppm | ASTM D5185m | 1164 | 1119 | 1086 |
| Sulfur | ppm | ASTM D5185m | 3835 | 4593 | 3444 |

CONTAMINANTS

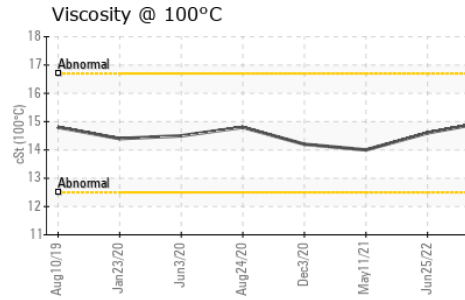
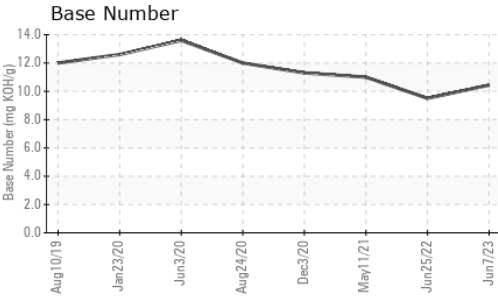
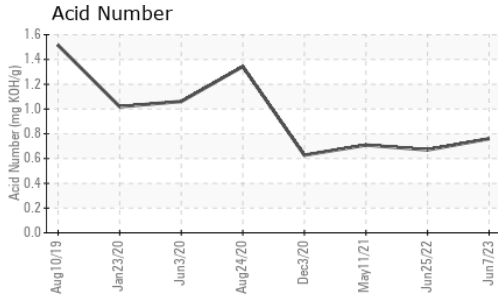
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 14 | 17 | 10 |
| Sodium | ppm | ASTM D5185m | <1 | 4 | 4 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 3 | <1 |

INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 >3 | 0.5 | 0.5 | 1.7 |
| Nitration | Abs/cm | *ASTM D7624 >20 | 11.1 | 11.5 | 11 |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | 43.1 | 43.5 | 42.7 |



OIL ANALYSIS REPORT

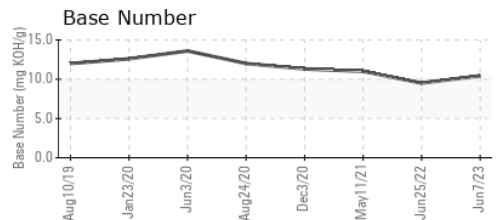
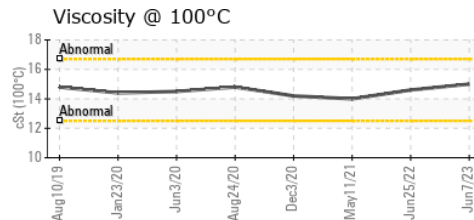
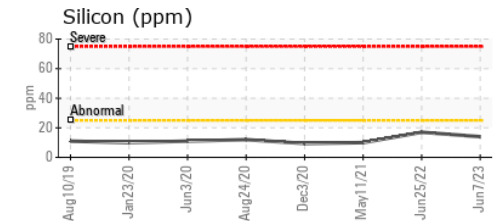
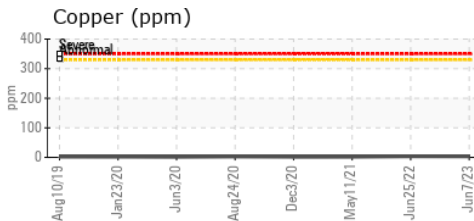
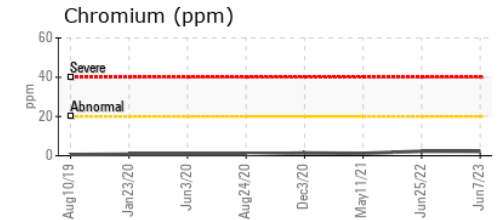
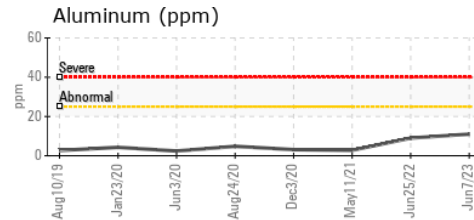
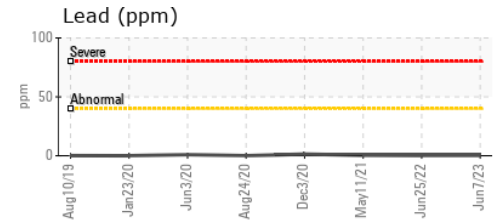
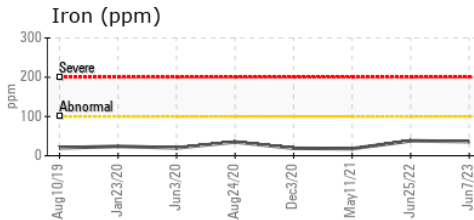


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|--------------|----------|----------|
| Oxidation | Abs./1mm | *ASTM D7414 | >25 | 41.6 | 42.5 | 40.9 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.76 | 0.67 | 0.709 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 10.44 | 9.50 | 11.0 |

| 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 @ 100°C | cSt | ASTM D445 | | 15.0 | 14.6 | 14.0 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0472444 Received : 17 Nov 2023
 Lab Number : 06011082 Diagnosed : 20 Nov 2023
 Unique Number : 10750226 Diagnostician : Sean Felton
 Test Package : MOB 2

BECKER LAND GRADING
 9673 N STATE HWY 71
 EL CAMPO, TX
 US 77437

Contact: DALYN BECKER
 dalyn@beckerlandgrading.com
 T: (979)253-4531

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)

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