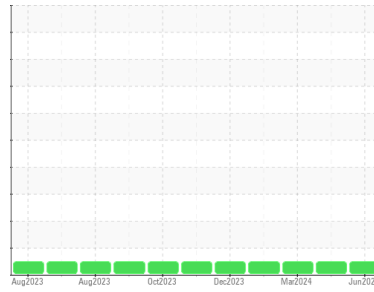




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
627
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

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 oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | | AK0000033 | AK0000004 | AK0000013 |
| Sample Date | Client Info | | | 10 Jun 2024 | 04 May 2024 | 27 Mar 2024 |
| Machine Age | mls | Client Info | | 458291 | 446686 | 430450 |
| Oil Age | mls | Client Info | | 49722 | 38117 | 21881 |
| Oil Changed | Client Info | | | Not Changed | Not Changed | Not Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| 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 | >90 | 23 | 17 | 10 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | 2 | 1 |
| Lead | ppm | ASTM D5185m | >40 | 2 | 1 | <1 |
| Copper | ppm | ASTM D5185m | >330 | <1 | 1 | 0 |
| Tin | ppm | ASTM D5185m | >15 | <1 | 1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | 0 | 0 |

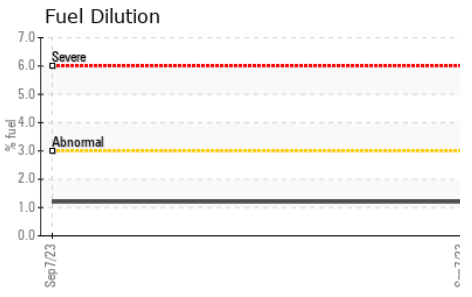
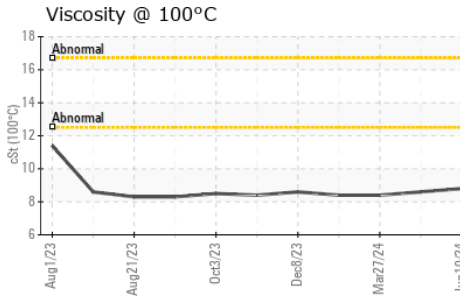
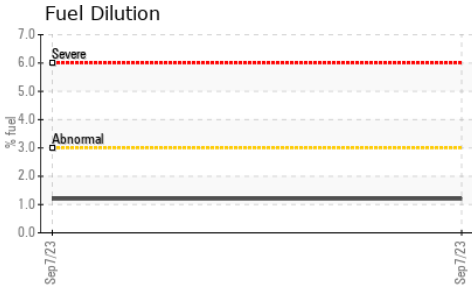
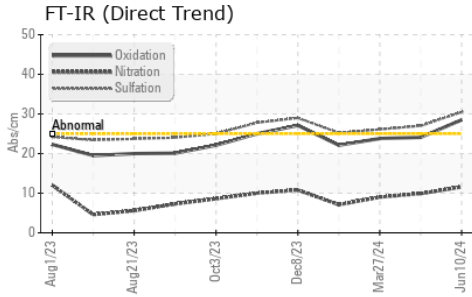
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | 1 | 1 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 63 | 67 | 59 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 1031 | 1002 | 949 |
| Calcium | ppm | ASTM D5185m | | 1235 | 1140 | 1063 |
| Phosphorus | ppm | ASTM D5185m | | 1144 | 1136 | 1030 |
| Zinc | ppm | ASTM D5185m | | 1306 | 1343 | 1230 |
| Sulfur | ppm | ASTM D5185m | | 3277 | 3167 | 3257 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | 4 | 4 | 4 |
| Sodium | ppm | ASTM D5185m | | 2 | 2 | 1 |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 1 | <1 |
| Fuel | % | ASTM D3524 | >3.0 | <1.0 | <1.0 | <1.0 |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 | >6 | 0.6 | 0.4 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 11.6 | 9.9 | 9.0 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 30.5 | 27.0 | 26.1 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 28.5 | 24.1 | 23.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 5.21 | 6.1 | 7.7 |

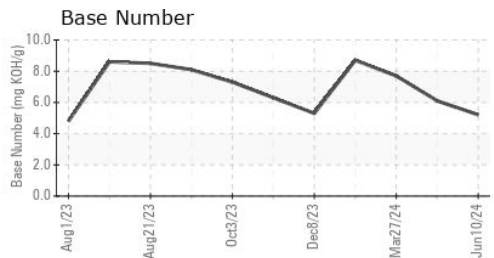
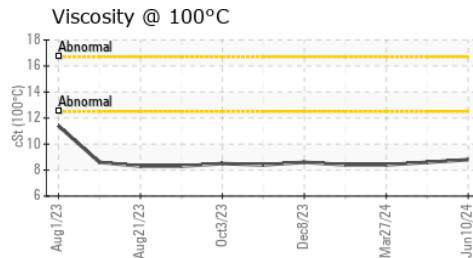
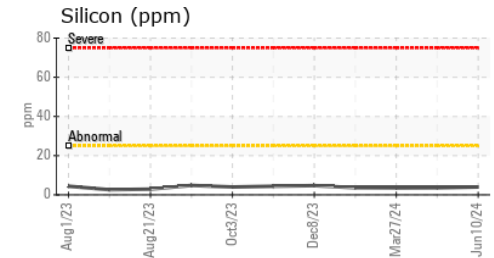
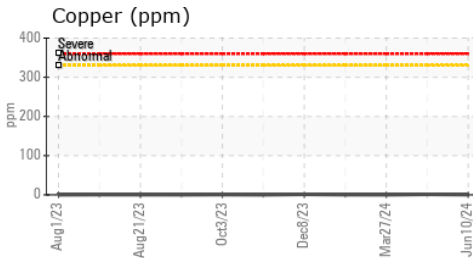
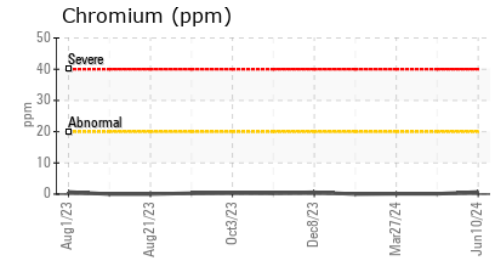
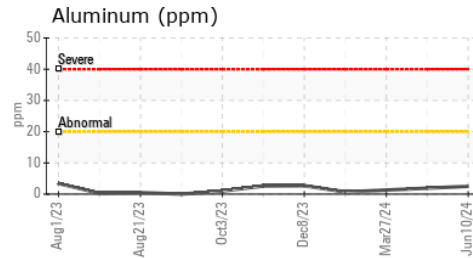
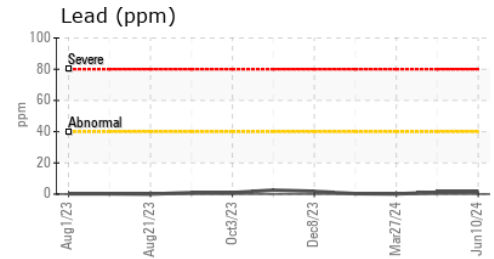
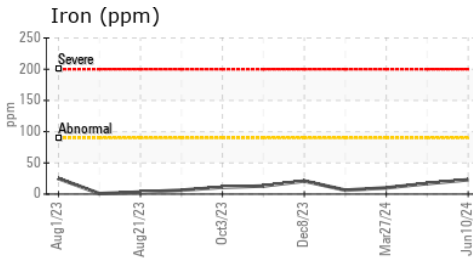
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE | NONE |
| Silt | scalar | *Visual | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | NEG |
| Free Water | scalar | *Visual | | NEG | NEG |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|------------|----------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 8.8 | 8.6 | 8.4 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : AK0000033 **Received** : 15 Jul 2024
Lab Number : 06237441 **Tested** : 16 Jul 2024
Unique Number : 11126275 **Diagnosed** : 16 Jul 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests : FuelDilution)

MEYER LOGISTICS
 560 EAST 25TH ST
 JASPER, IN
 US 47546

Contact: KEN FROMME
 kenny.fromme@meyerdistributing.com
 T: (812)639-9224

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)