



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

Machine Id
140142
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | IL0034317 | IL0032291 | --- |
| Sample Date | | Client Info | | 24 Apr 2024 | 16 Aug 2023 | --- |
| Machine Age | mls | Client Info | | 216902 | 185076 | --- |
| Oil Age | mls | Client Info | | 25000 | 0 | --- |
| Filter Age | mls | Client Info | | 25000 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | Changed | N/A | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|-------------|------|-----|
| Iron | ppm | ASTM D5185m | >100 | 64 | 59 | --- |
| Chromium | ppm | ASTM D5185m | >20 | 2 | 3 | --- |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 13 | 24 | --- |
| Lead | ppm | ASTM D5185m | >40 | 12 | 12 | --- |
| Copper | ppm | ASTM D5185m | >330 | 0 | <1 | --- |
| Tin | ppm | ASTM D5185m | >15 | 1 | 1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

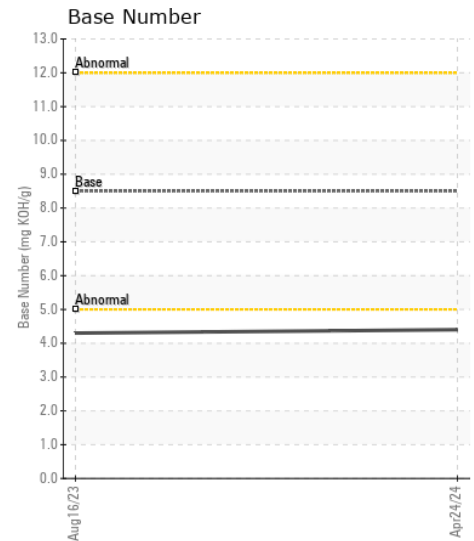
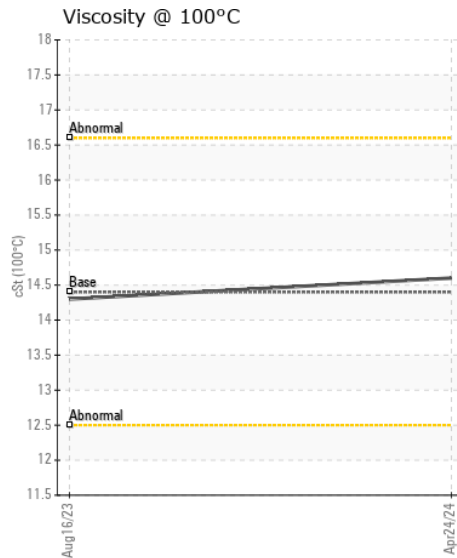
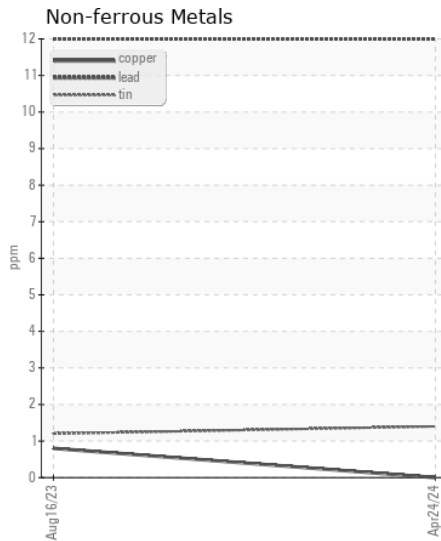
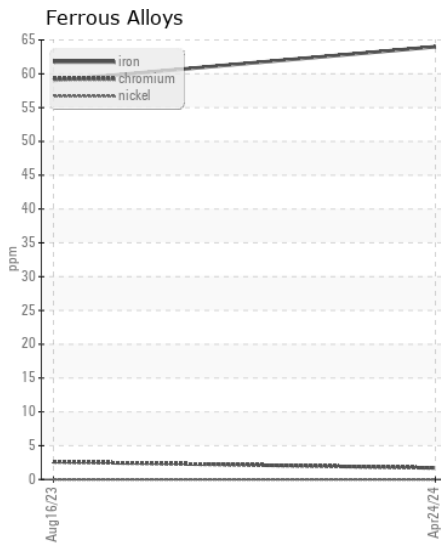
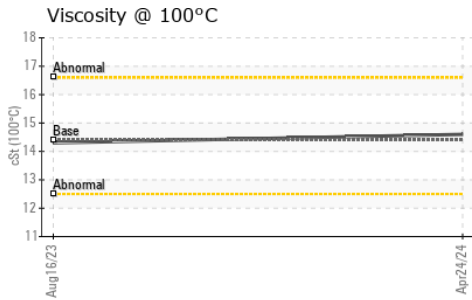
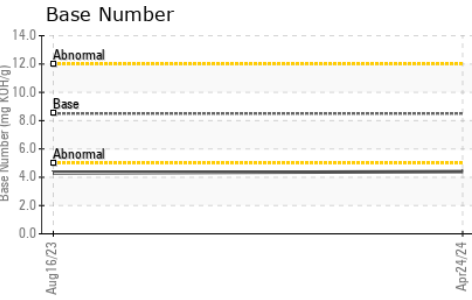
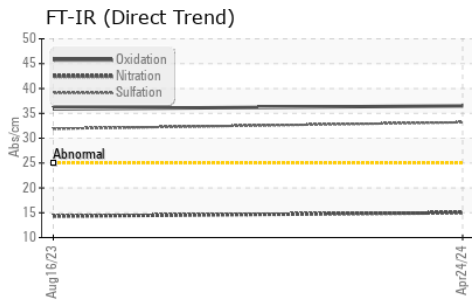
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | 6 | 6 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 26 | 46 | --- |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >3 | 1.1 | 0.7 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 15.0 | 14.3 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 33.2 | 31.9 | --- |
| 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 | --- |

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.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | >158 | 2 | 2 | --- |
| Boron | ppm | ASTM D5185m | 250 | 3 | 22 | --- |
| Barium | ppm | ASTM D5185m | 10 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 100 | 66 | 63 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 450 | 1016 | 912 | --- |
| Calcium | ppm | ASTM D5185m | 3000 | 1206 | 1335 | --- |
| Phosphorus | ppm | ASTM D5185m | 1150 | 1110 | 998 | --- |
| Zinc | ppm | ASTM D5185m | 1350 | 1351 | 1262 | --- |
| Sulfur | ppm | ASTM D5185m | 4250 | 3532 | 3244 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 36.5 | 35.9 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 8.5 | 4.4 | 4.3 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 14.4 | 14.6 | 14.3 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0034317
Lab Number : 06175165
Unique Number : 11021218
Test Package : FLEET

Received : 10 May 2024
Tested : 11 May 2024
Diagnosed : 13 May 2024 - Don Baldrige

RUSH TRUCK CENTER - CHICAGO IDEALEASE
 4655 SOUTH CENTRAL AVENUE
 CHICAGO, IL
 US 60638

Contact: MIKE LINLEY
 linleym@rushtruckcenters.com

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)

T: (708)496-7500
 F: (708)496-8818