



OIL ANALYSIS REPORT

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

Machine Id
KENWORTH T800 727 (S/N BXS08100)
 Component
Diesel Engine
 Fluid
SHELL ROTELLA T 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | WC0878855 | WC0878916 | --- |
| Sample Date | | Client Info | | 09 Apr 2024 | 18 Feb 2024 | --- |
| Machine Age | mls | Client Info | | 176132 | 175549 | --- |
| Oil Age | mls | Client Info | | 0 | 0 | --- |
| Filter Age | mls | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | Changed | Changed | --- |
| Sample Status | | | | ABNORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron | ppm | ASTM D5185m | >100 | 6 | 14 | --- |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | --- |
| Nickel | ppm | ASTM D5185m | >4 | 0 | <1 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | --- |
| Silver | ppm | ASTM D5185m | >3 | 0 | <1 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 1 | 1 | --- |
| Lead | ppm | ASTM D5185m | >40 | <1 | 1 | --- |
| Copper | ppm | ASTM D5185m | >330 | 56 | 55 | --- |
| Tin | ppm | ASTM D5185m | >15 | 0 | 1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

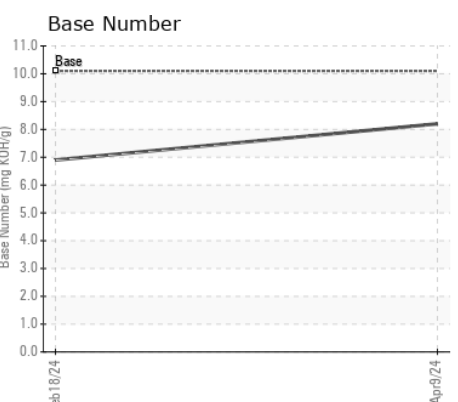
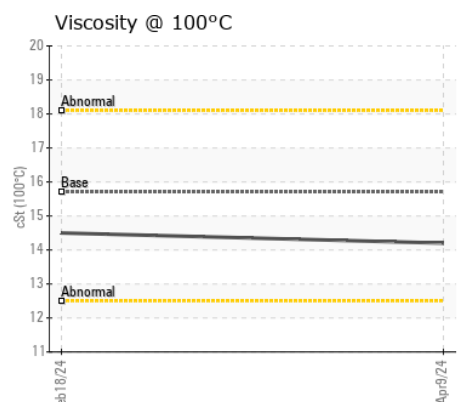
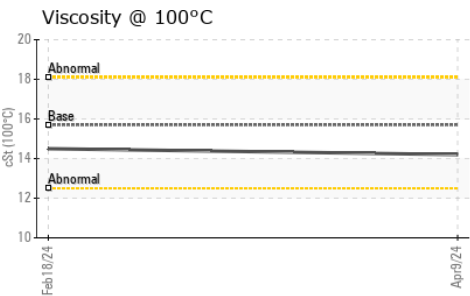
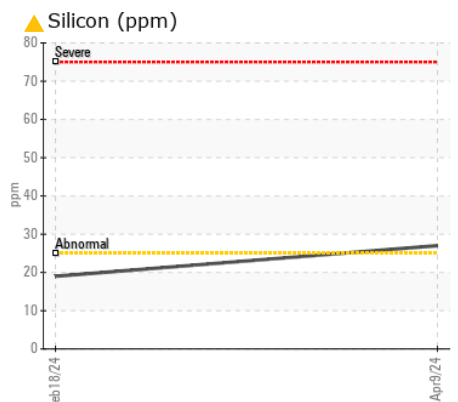
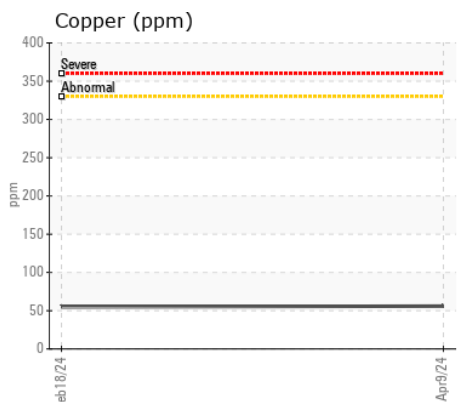
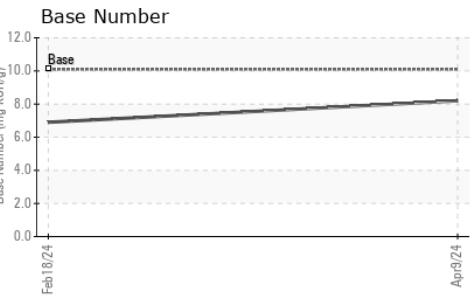
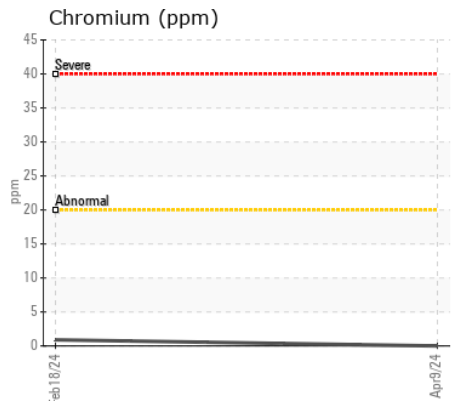
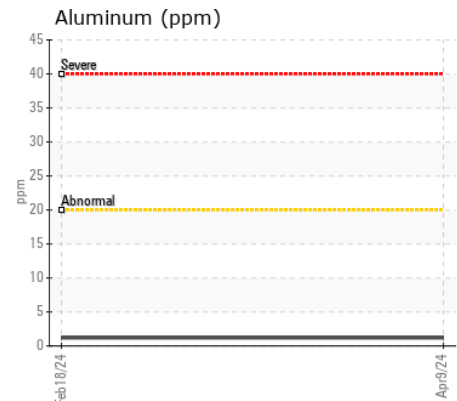
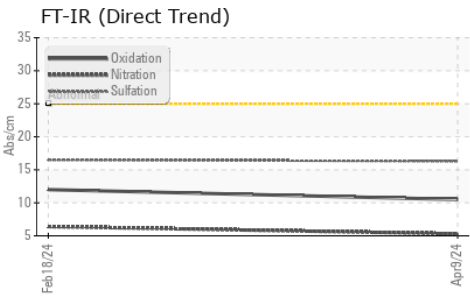
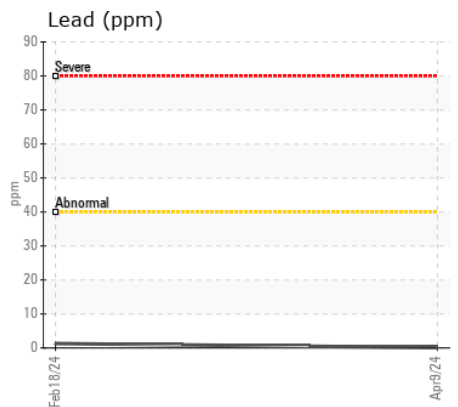
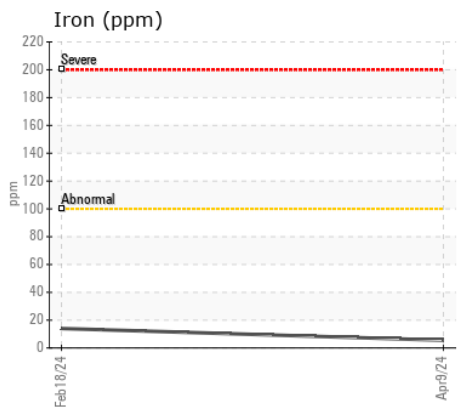
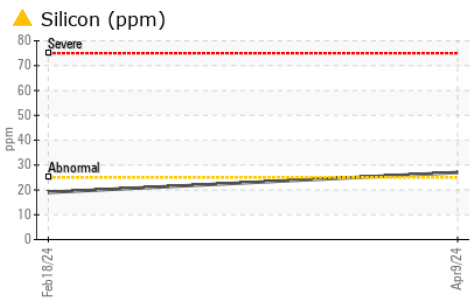
Elemental level of silicon (Si) above normal indicating ingress of seal material.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | ▲ 27 | 19 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 3 | --- |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.3 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.3 | 6.4 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 16.3 | 16.5 | --- |
| 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 acceptable for the time in service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | | 2 | 0 | --- |
| Boron | ppm | ASTM D5185m | 316 | 31 | 30 | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 1.2 | 22 | 25 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | 1 | --- |
| Magnesium | ppm | ASTM D5185m | 24 | 207 | 252 | --- |
| Calcium | ppm | ASTM D5185m | 2292 | 2041 | 1721 | --- |
| Phosphorus | ppm | ASTM D5185m | 1064 | 964 | 878 | --- |
| Zinc | ppm | ASTM D5185m | 1160 | 1120 | 1020 | --- |
| Sulfur | ppm | ASTM D5185m | 4996 | 4214 | 3705 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 10.5 | 12.0 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10.1 | 8.2 | 6.9 | --- |
| Visc @ 100°C | cSt | ASTM D445 | 15.7 | 14.2 | 14.5 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0878855 **Received** : 12 Apr 2024
Lab Number : 06147136 **Tested** : 15 Apr 2024
Unique Number : 10977214 **Diagnosed** : 16 Apr 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: TBN)

JOHNSON BREEDERS
 3425 HWY 117N
 ROSE HILL, NC
 US 28458
 Contact: GREG JONES
 gregory.jones@houseofraeford.com
 T: (910)289-6884
 F:

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)