



OIL ANALYSIS REPORT

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

Machine Id
447
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | WC0906251 | WC0868037 | WC0792833 |
| Sample Date | | Client Info | | 10 Jul 2024 | 14 Nov 2023 | 21 Apr 2023 |
| Machine Age | mls | Client Info | | 199506 | 190443 | 184605 |
| Oil Age | mls | Client Info | | 0 | 0 | 0 |
| Filter Age | mls | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Filter Changed | | Client Info | | Not Changd | Not Changd | Not Changd |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >100 | 19 | 91 | 81 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 2 | 2 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | 1 | <1 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 4 | 10 | 8 |
| Lead | ppm | ASTM D5185m | >40 | <1 | 1 | 0 |
| Copper | ppm | ASTM D5185m | >330 | 2 | 5 | 3 |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

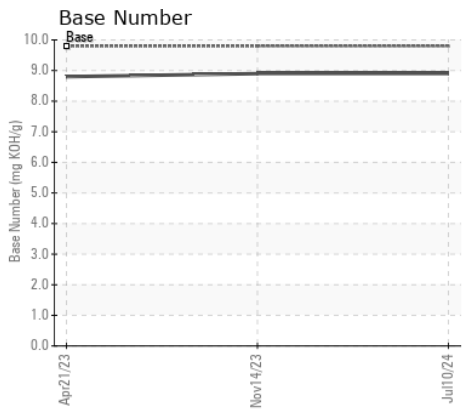
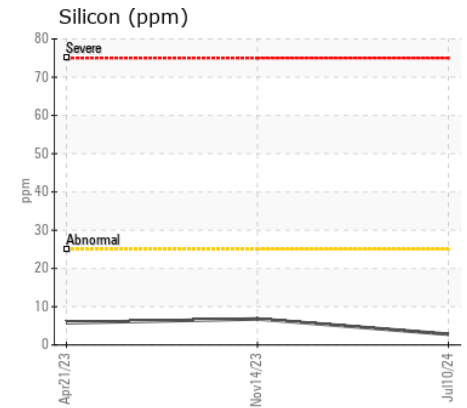
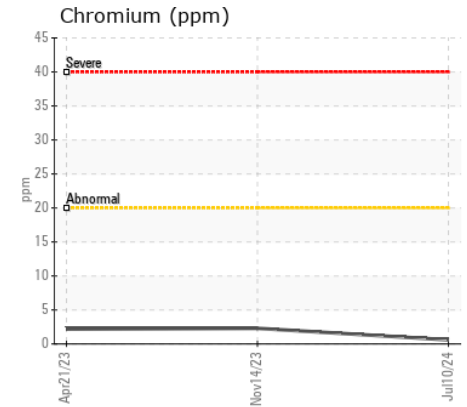
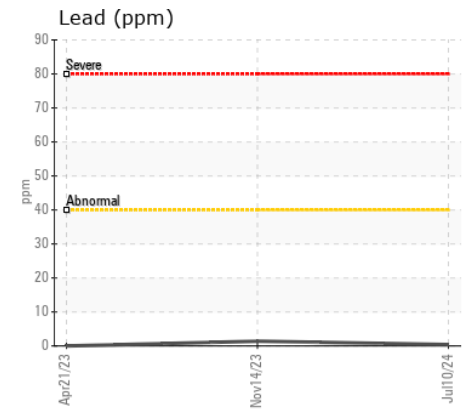
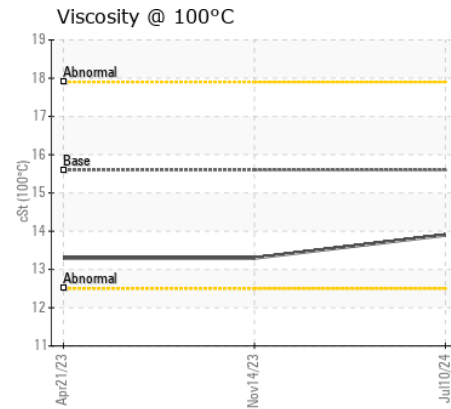
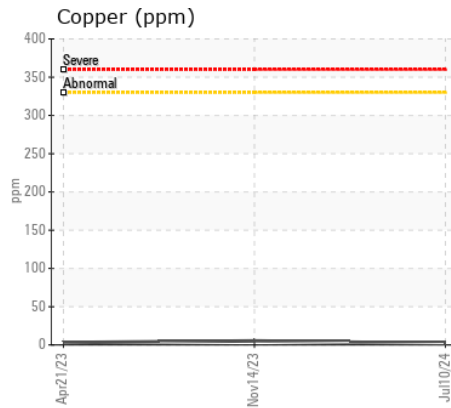
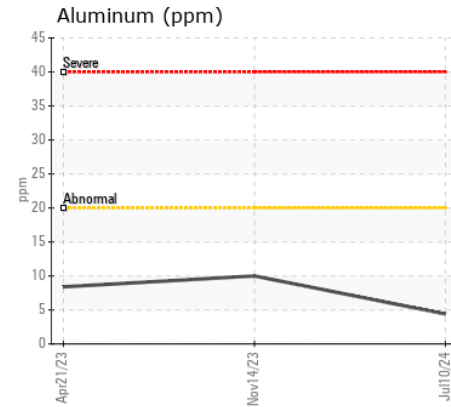
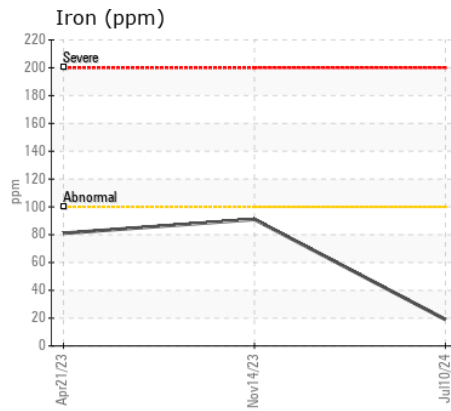
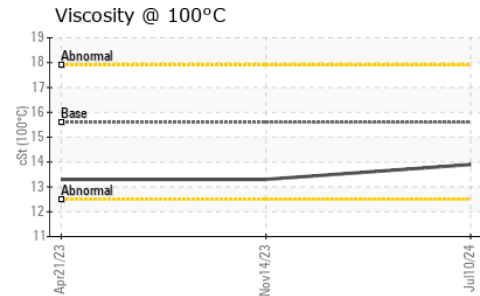
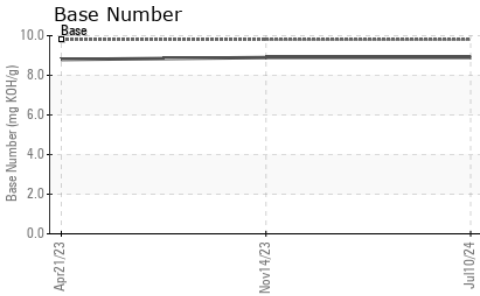
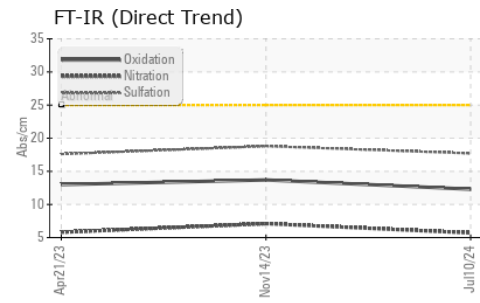
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >25 | 3 | 7 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 3 | <1 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.7 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.7 | 7.1 | 5.8 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.7 | 18.8 | 17.6 |
| 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 |

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 | | <1 | 1 | 2 |
| Boron | ppm | ASTM D5185m | | 1 | 10 | 14 |
| Barium | ppm | ASTM D5185m | | 0 | 9 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 51 | 62 | 60 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | 1 |
| Magnesium | ppm | ASTM D5185m | | 788 | 764 | 797 |
| Calcium | ppm | ASTM D5185m | | 1308 | 1204 | 1165 |
| Phosphorus | ppm | ASTM D5185m | | 1060 | 998 | 958 |
| Zinc | ppm | ASTM D5185m | | 1228 | 1161 | 1201 |
| Sulfur | ppm | ASTM D5185m | | 2966 | 3423 | 3332 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 12.3 | 13.7 | 13.0 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 9.8 | 8.9 | 8.9 | 8.8 |
| Visc @ 100°C | cSt | ASTM D445 | 15.6 | 13.9 | 13.3 | 13.3 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0906251 **Received** : 12 Jul 2024
Lab Number : 06234706 **Tested** : 15 Jul 2024
Unique Number : 11123540 **Diagnosed** : 15 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

WAYNE CO SCHOOL BUS GARAGE
 1603 SALEM CHURCH RD
 GOLDSBORO, NC
 US 27530
 Contact: BRANDON BRIGGS
 brandonbriggs@wcps.org
 T:
 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)