



OIL ANALYSIS REPORT

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

Area
FUEL
Machine Id
444
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (42 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | PCA0109607 | --- | --- |
| Sample Date | | Client Info | | 16 Apr 2024 | --- | --- |
| Machine Age | mls | Client Info | | 297789 | --- | --- |
| Oil Age | mls | Client Info | | 16000 | --- | --- |
| Filter Age | mls | Client Info | | 16000 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >200 | 32 | --- | --- |
| Chromium | ppm | ASTM D5185m | >6 | 2 | --- | --- |
| Nickel | ppm | ASTM D5185m | >3 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | >2 | 4 | --- | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >50 | 14 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >50 | 6 | --- | --- |
| Tin | ppm | ASTM D5185m | >6 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

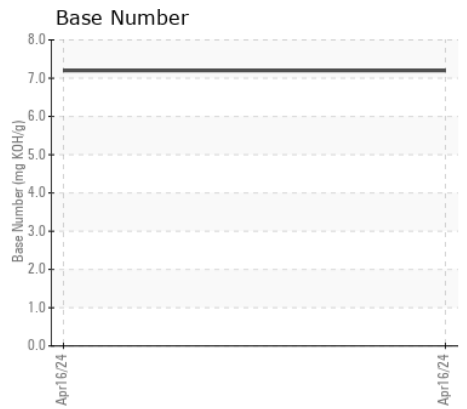
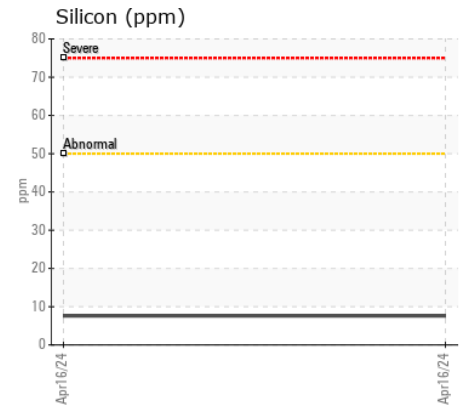
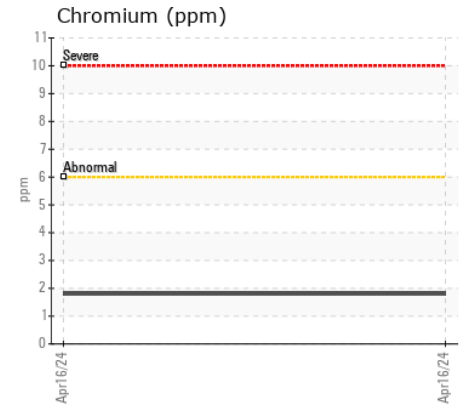
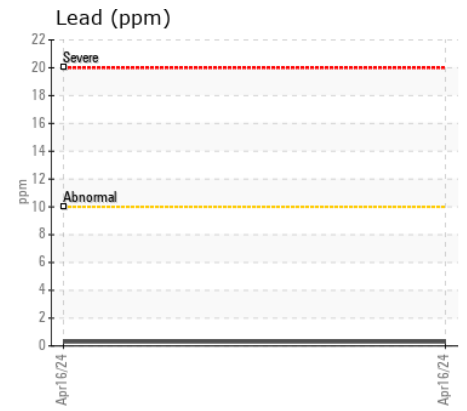
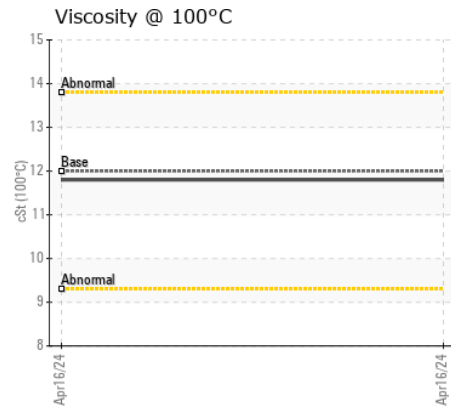
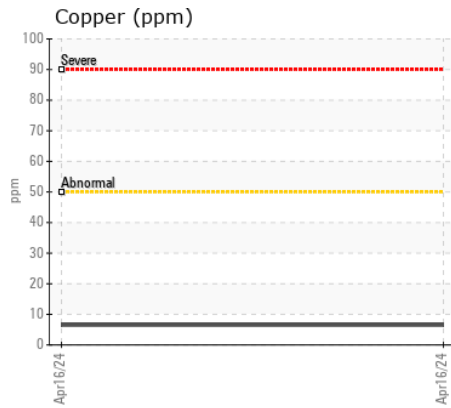
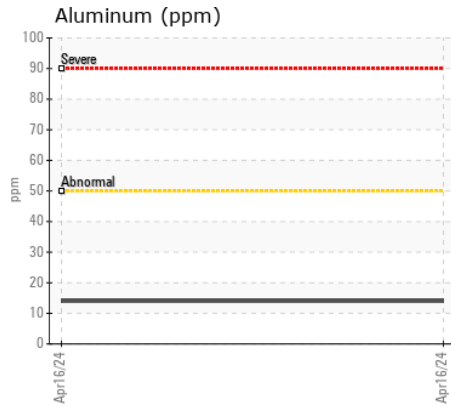
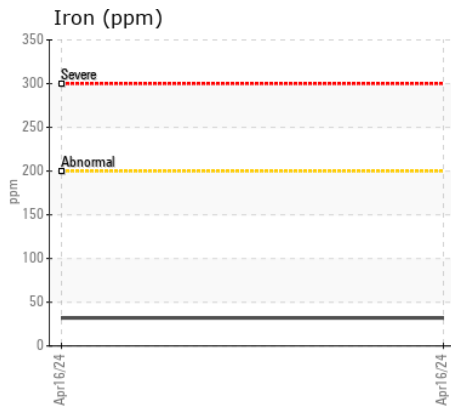
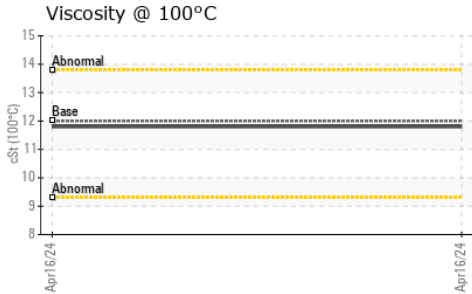
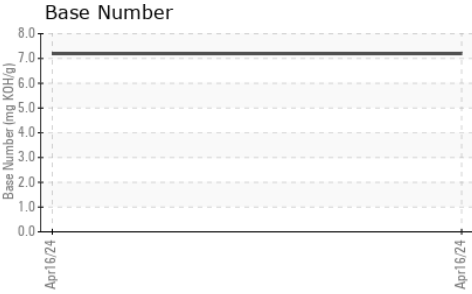
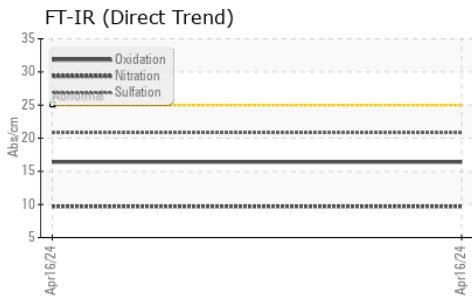
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >50 | 8 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 9 | --- | --- |
| Fuel | | WC Method | >3.0 | <1.0 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.6 | --- | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.7 | --- | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 20.8 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | 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 | --- | --- |
| Boron | ppm | ASTM D5185m | 2 | 10 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 50 | 65 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0 | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 950 | 825 | --- | --- |
| Calcium | ppm | ASTM D5185m | 1050 | 1284 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 995 | 1099 | --- | --- |
| Zinc | ppm | ASTM D5185m | 1180 | 1267 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 2600 | 3416 | --- | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 16.4 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.2 | --- | --- |
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 11.8 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109607
Lab Number : 06155072
Unique Number : 10990495
Test Package : MOB 2

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Wes Davis

DENNIS K BURKE INC - INTERNAL SAMPLES
 555 CONSTITUTION DR
 TAUNTON, MA
 US 02780
 Contact: GREG DUNKER

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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