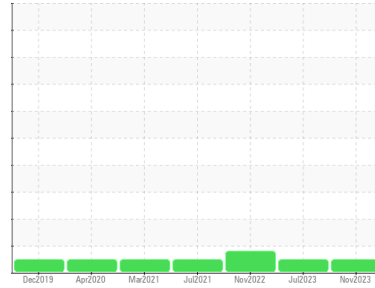


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
302610

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with 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 | | | PCA0097371 | PCA0097330 | PCA0071746 |
| Sample Date | Client Info | | | 22 Nov 2023 | 26 Jul 2023 | 21 Nov 2022 |
| Machine Age | mls Client Info | | | 200865 | 181165 | 143892 |
| Oil Age | mls Client Info | | | 19700 | 37273 | 45657 |
| Oil Changed | Client Info | | | Not Chngd | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | ABNORMAL |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | | <1.0 | <1.0 | <1.0 |
| 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 | >100 | 18 | 39 | 51 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 2 | 2 |
| Nickel | ppm | ASTM D5185m | >4 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185m | | 2 | 17 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 10 | 15 | ▲ 21 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 1 | 3 | 3 |
| Tin | ppm | ASTM D5185m | >15 | 2 | 2 | 2 |
| Antimony | ppm | ASTM D5185m | | --- | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | | 0 | <1 | 0 |

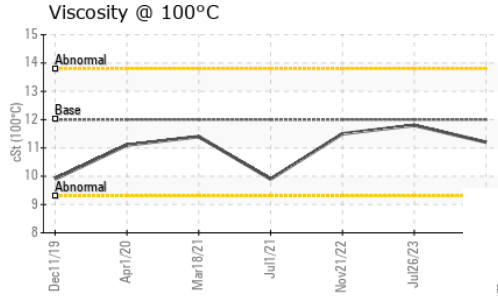
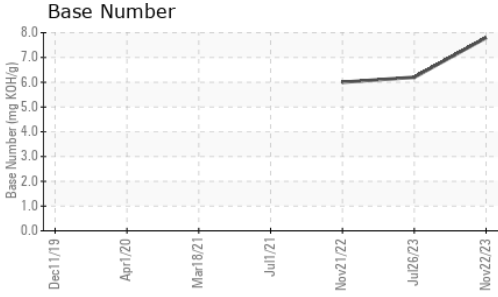
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185m | 2 | 4 | 8 | 4 |
| Barium | ppm | ASTM D5185m | 0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 50 | 63 | 55 | 60 |
| Manganese | ppm | ASTM D5185m | 0 | <1 | 1 | <1 |
| Magnesium | ppm | ASTM D5185m | 950 | 1060 | 896 | 931 |
| Calcium | ppm | ASTM D5185m | 1050 | 1233 | 1248 | 1330 |
| Phosphorus | ppm | ASTM D5185m | 995 | 1181 | 1035 | 956 |
| Zinc | ppm | ASTM D5185m | 1180 | 1331 | 1261 | 1231 |
| Sulfur | ppm | ASTM D5185m | 2600 | 3465 | 3172 | 3228 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | 4 | 6 | 6 |
| Sodium | ppm | ASTM D5185m | | 2 | 6 | 5 |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 11 | 11 |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 | >3 | 0.8 | 1.2 | 1.2 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 10.8 | 13.6 | 14.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.2 | 26.2 | 27.3 |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 18.4 | 23.2 | 24.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.8 | 6.2 | 6.0 |

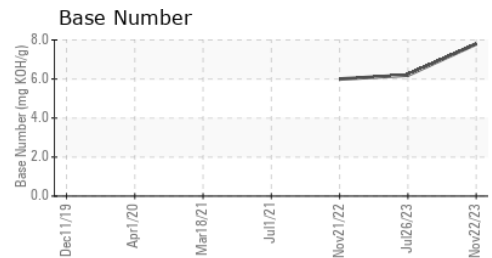
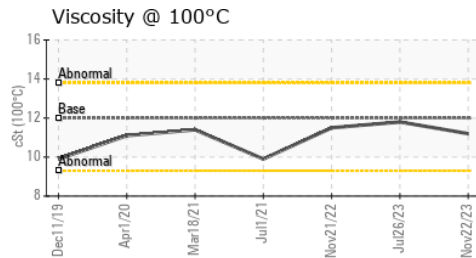
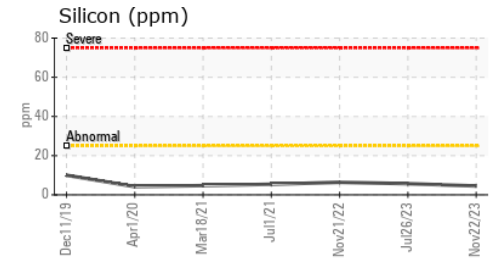
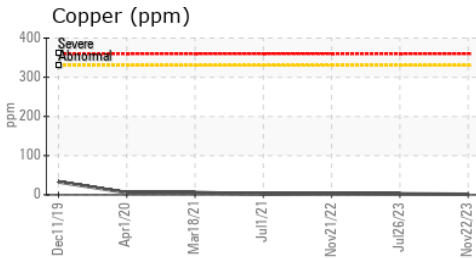
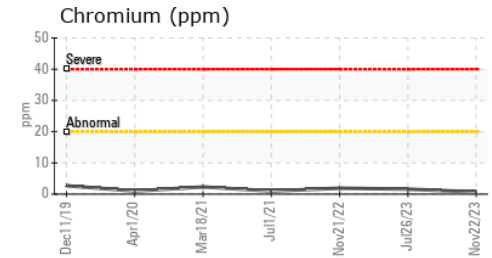
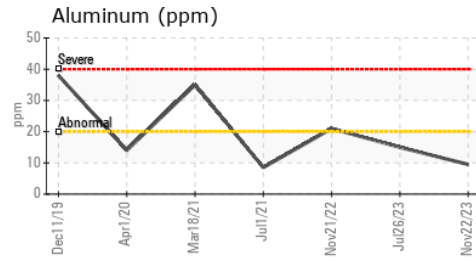
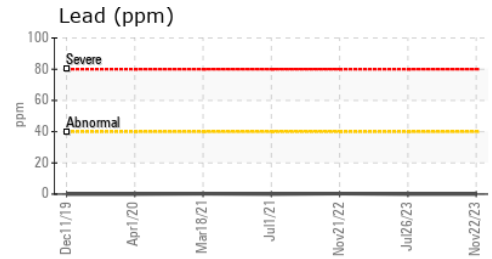
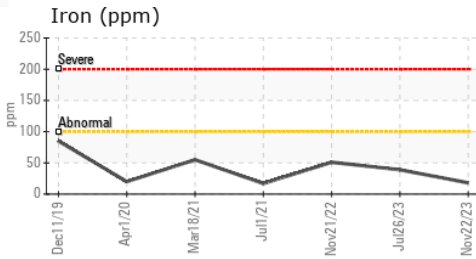
OIL ANALYSIS REPORT



| 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 | 12.00 | 11.2 | 11.8 |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0097371 **Received** : 29 Dec 2023
Lab Number : 06047599 **Diagnosed** : 02 Jan 2024
Unique Number : 10808207 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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)

MILLER TRUCK LEASING #123
 66 KELLER AVENUE
 LANCASTER, PA
 US 17601

Contact: RON ROBERTS
 roberts@millertransgroup.com
 T: (717)945-6205
 F: (717)945-5818