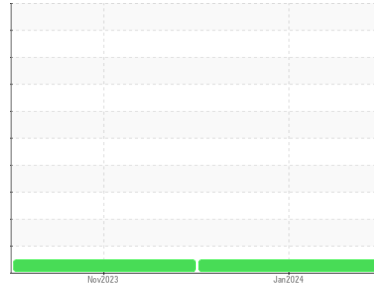


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(N/A) Preferred Service-Yard Horse
Machine Id
[Preferred Service-Yard Horse] 192A039076
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W30 (16 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

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 | | | PCA0115803 | PCA0109427 | --- |
| Sample Date | Client Info | | | 30 Jan 2024 | 14 Nov 2023 | --- |
| Machine Age | hrs | Client Info | | 34522 | 33822 | --- |
| Oil Age | hrs | Client Info | | 700 | 0 | --- |
| Oil Changed | Client Info | | | Changed | N/A | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | | <1.0 | <1.0 | --- |
| Water | WC Method | >0.2 | | NEG | NEG | --- |
| Glycol | WC Method | | | NEG | NEG | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >100 | 24 | 29 | --- |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 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 | 2 | 2 | --- |
| Lead | ppm | ASTM D5185m | >40 | 0 | <1 | --- |
| Copper | ppm | ASTM D5185m | >330 | <1 | <1 | --- |
| Tin | ppm | ASTM D5185m | >15 | 0 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | <1 | --- |

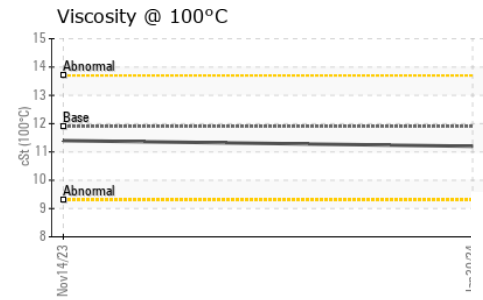
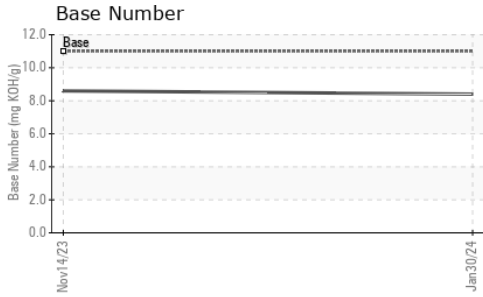
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|-------------|----------|----------|
| Boron | ppm | ASTM D5185m | 0 | 1 | 0 | --- |
| Barium | ppm | ASTM D5185m | 0 | 2 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 64 | 64 | 62 | --- |
| Manganese | ppm | ASTM D5185m | 0 | 0 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | 1160 | 1020 | 951 | --- |
| Calcium | ppm | ASTM D5185m | 820 | 1044 | 1081 | --- |
| Phosphorus | ppm | ASTM D5185m | 1160 | 974 | 1063 | --- |
| Zinc | ppm | ASTM D5185m | 1260 | 1306 | 1245 | --- |
| Sulfur | ppm | ASTM D5185m | 3000 | 2972 | 3015 | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >25 | 2 | 3 | --- |
| Sodium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 3 | --- |

| INFRA-RED | | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 | >3 | 1.2 | 2.3 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.6 | 9.3 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.4 | 21.6 | --- |

| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.1 | 14.7 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 11.0 | 8.4 | 8.6 | --- |

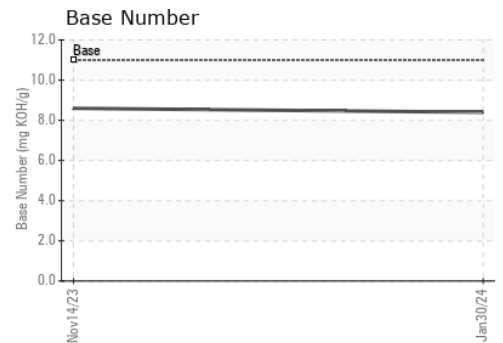
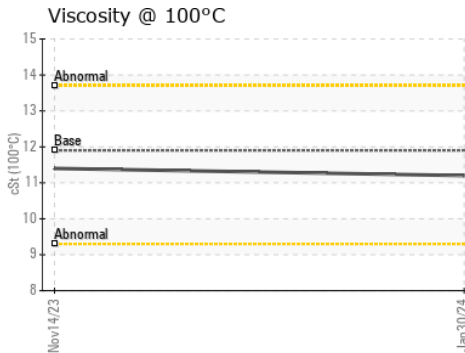
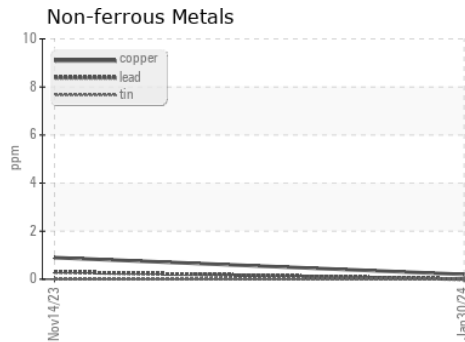
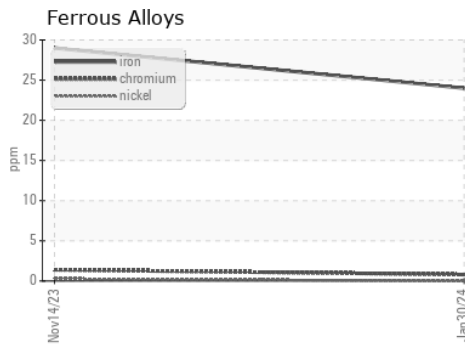
OIL ANALYSIS REPORT



| 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 | 11.9 | 11.2 | 11.4 | --- |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0115803
Lab Number : **06082261**
Unique Number : 10869706
Test Package : FLEET

Received : 07 Feb 2024
Tested : 07 Feb 2024
Diagnosed : 07 Feb 2024 - Wes Davis

Transervice - Shop 1920 - Preferred Service
 1955 W. North Avenue, Bldg K
 Melrose Park, IL
 US 60160
 Contact: Tom Lindeman
 tlindemann@transervice.com
 T: (630)376-8946
 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)