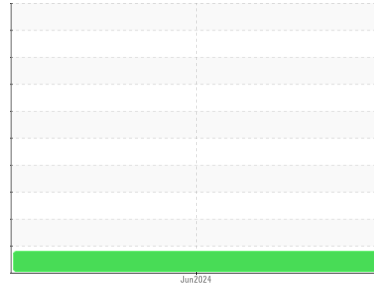


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
(72587Z) Walgreens - Tractor
 Machine Id
[Walgreens - Tractor] 136A624026
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 10W30 (11 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other metal levels are typical for a new component breaking in.

Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

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.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | PCA0128182 | --- | --- |
| Sample Date | Client Info | | 06 Jun 2024 | --- | --- |
| Machine Age | mls | Client Info | 29268 | --- | --- |
| Oil Age | mls | Client Info | 29268 | --- | --- |
| Oil Changed | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|-------------|---------|--------------|----------|
| Iron | ppm | ASTM D5185m | >80 | 79 | --- |
| Chromium | ppm | ASTM D5185m | >5 | 4 | --- |
| Nickel | ppm | ASTM D5185m | >2 | 2 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | --- |
| Silver | ppm | ASTM D5185m | >3 | 1 | --- |
| Aluminum | ppm | ASTM D5185m | >30 | 89 | --- |
| Lead | ppm | ASTM D5185m | >30 | 0 | --- |
| Copper | ppm | ASTM D5185m | >150 | ▲ 235 | --- |
| Tin | ppm | ASTM D5185m | >5 | 9 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|---------|-------------|----------|
| Boron | ppm | ASTM D5185m | 2 | 31 | --- |
| Barium | ppm | ASTM D5185m | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 50 | 42 | --- |
| Manganese | ppm | ASTM D5185m | 0 | 8 | --- |
| Magnesium | ppm | ASTM D5185m | 950 | 539 | --- |
| Calcium | ppm | ASTM D5185m | 1050 | 1811 | --- |
| Phosphorus | ppm | ASTM D5185m | 995 | 757 | --- |
| Zinc | ppm | ASTM D5185m | 1180 | 902 | --- |
| Sulfur | ppm | ASTM D5185m | 2600 | 2384 | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------|---------|------------|----------|
| Silicon | ppm | ASTM D5185m | >20 | 10 | --- |
| Sodium | ppm | ASTM D5185m | | 10 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 237 | --- |
| Glycol | % | *ASTM D2982 | | NEG | --- |

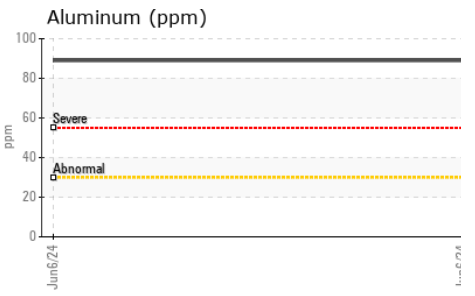
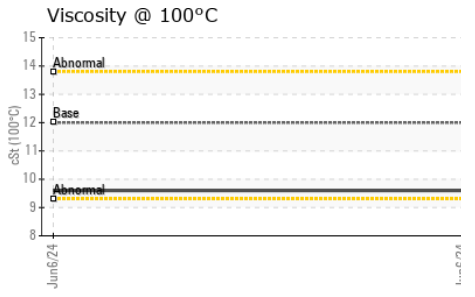
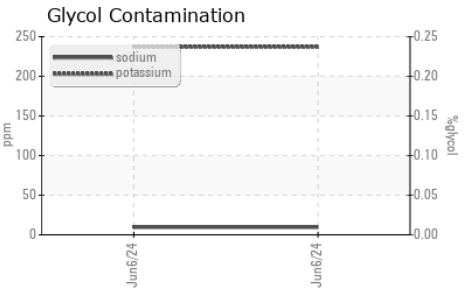
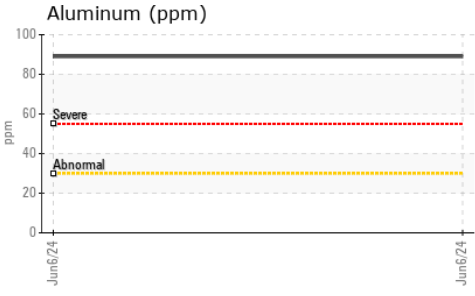
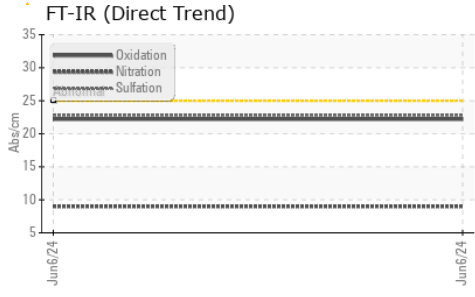
INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-------------|---------|-------------|----------|
| Soot % | % | *ASTM D7844 | >3 | 0.6 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.0 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 22.8 | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-------------|---------|-------------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 22.2 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.0 | --- |

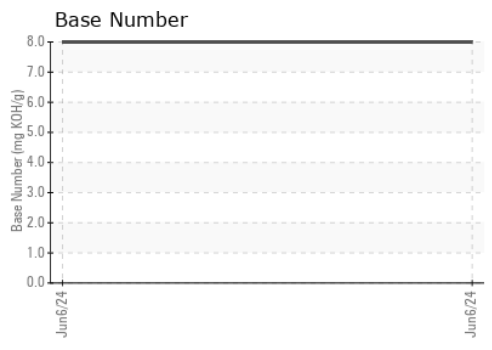
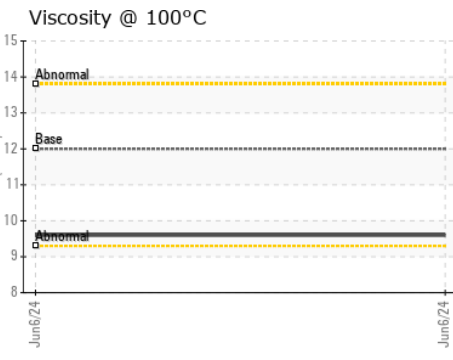
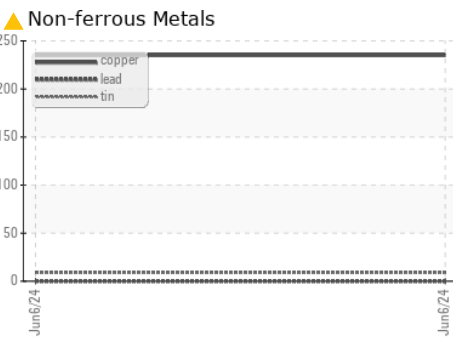
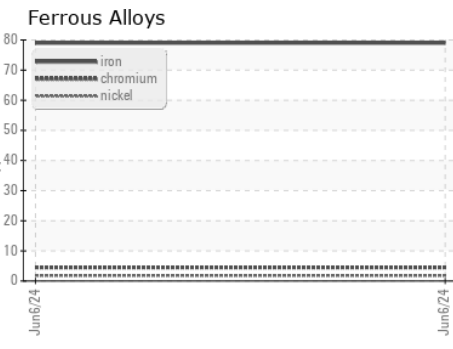
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- |
| 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 | --- |
| Free Water | scalar | *Visual | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|------------|----------|
| Visc @ 100°C | cSt | ASTM D445 | 12.00 | 9.6 | --- |

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0128182 **Received** : 17 Jun 2024
Lab Number : **06211359** **Tested** : 19 Jun 2024
Unique Number : 11084223 **Diagnosed** : 19 Jun 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: Glycol)

Transervice - Shop 1373 - Berkeley-Anderson/Pendergrass
 101 Alliance Parkway
 Willamston, SC
 US 29697
 Contact: Sonny Boucher
 sboucher@transervice.com
 T: (864)226-2304
 F: (864)226-2329

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)