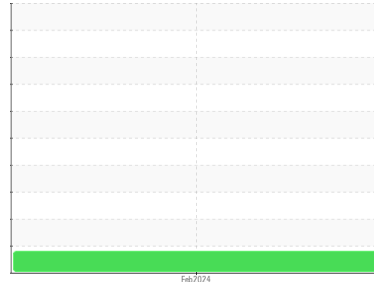


# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**

Area  
**(2725868) Dairy Farms of America-Tractor**  
 Machine Id  
**[Dairy Farms of America-Tractor] 268A23312**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (11 GAL)**



## DIAGNOSIS

**Recommendation**  
 Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

**Wear**  
 The lead level is abnormal. All other 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 acceptable for the time in service.

## SAMPLE INFORMATION

| method        | limit/base      | current            | history1 | history2 |
|---------------|-----------------|--------------------|----------|----------|
| Sample Number | Client Info     | <b>PCA0103933</b>  | ---      | ---      |
| Sample Date   | Client Info     | <b>16 Feb 2024</b> | ---      | ---      |
| Machine Age   | mls Client Info | <b>457031</b>      | ---      | ---      |
| Oil Age       | mls Client Info | <b>40000</b>       | ---      | ---      |
| Oil Changed   | Client Info     | <b>Changed</b>     | ---      | ---      |
| Sample Status |                 | <b>ABNORMAL</b>    | ---      | ---      |

## CONTAMINATION

| method | limit/base     | current        | history1 | history2 |
|--------|----------------|----------------|----------|----------|
| Fuel   | WC Method >2.0 | <b>&lt;1.0</b> | ---      | ---      |
| Water  | WC Method >0.2 | <b>NEG</b>     | ---      | ---      |
| Glycol | WC Method      | <b>NEG</b>     | ---      | ---      |

## WEAR METALS

| method       | limit/base       | current      | history1 | history2 |
|--------------|------------------|--------------|----------|----------|
| Iron ppm     | ASTM D5185m >100 | <b>43</b>    | ---      | ---      |
| Chromium ppm | ASTM D5185m >20  | <b>3</b>     | ---      | ---      |
| Nickel ppm   | ASTM D5185m >4   | <b>&lt;1</b> | ---      | ---      |
| Titanium ppm | ASTM D5185m      | <b>0</b>     | ---      | ---      |
| Silver ppm   | ASTM D5185m >3   | <b>0</b>     | ---      | ---      |
| Aluminum ppm | ASTM D5185m >20  | <b>4</b>     | ---      | ---      |
| Lead ppm     | ASTM D5185m >40  | <b>▲ 84</b>  | ---      | ---      |
| Copper ppm   | ASTM D5185m >330 | <b>23</b>    | ---      | ---      |
| Tin ppm      | ASTM D5185m >15  | <b>2</b>     | ---      | ---      |
| Vanadium ppm | ASTM D5185m      | <b>&lt;1</b> | ---      | ---      |
| Cadmium ppm  | ASTM D5185m      | <b>0</b>     | ---      | ---      |

## ADDITIVES

| method         | limit/base       | current     | history1 | history2 |
|----------------|------------------|-------------|----------|----------|
| Boron ppm      | ASTM D5185m 2    | <b>47</b>   | ---      | ---      |
| Barium ppm     | ASTM D5185m 0    | <b>0</b>    | ---      | ---      |
| Molybdenum ppm | ASTM D5185m 50   | <b>116</b>  | ---      | ---      |
| Manganese ppm  | ASTM D5185m 0    | <b>1</b>    | ---      | ---      |
| Magnesium ppm  | ASTM D5185m 950  | <b>987</b>  | ---      | ---      |
| Calcium ppm    | ASTM D5185m 1050 | <b>1803</b> | ---      | ---      |
| Phosphorus ppm | ASTM D5185m 995  | <b>1203</b> | ---      | ---      |
| Zinc ppm       | ASTM D5185m 1180 | <b>1448</b> | ---      | ---      |
| Sulfur ppm     | ASTM D5185m 2600 | <b>3108</b> | ---      | ---      |

## CONTAMINANTS

| method        | limit/base      | current  | history1 | history2 |
|---------------|-----------------|----------|----------|----------|
| Silicon ppm   | ASTM D5185m >25 | <b>8</b> | ---      | ---      |
| Sodium ppm    | ASTM D5185m     | <b>4</b> | ---      | ---      |
| Potassium ppm | ASTM D5185m >20 | <b>2</b> | ---      | ---      |

## INFRA-RED

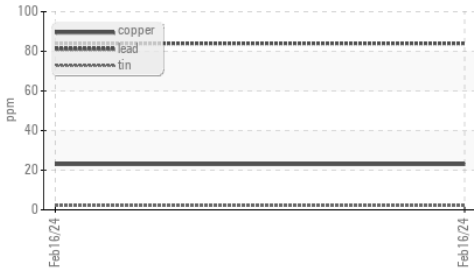
| method    | limit/base      | current     | history1 | history2 |
|-----------|-----------------|-------------|----------|----------|
| Soot %    | *ASTM D7844 >3  | <b>0.8</b>  | ---      | ---      |
| Nitration | *ASTM D7624 >20 | <b>13.9</b> | ---      | ---      |
| Sulfation | *ASTM D7415 >30 | <b>30.4</b> | ---      | ---      |

## FLUID DEGRADATION

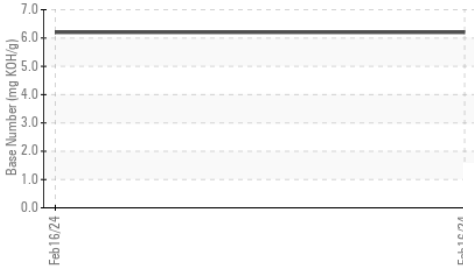
| method           | limit/base               | current     | history1 | history2 |
|------------------|--------------------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm *ASTM D7414 >25 | <b>29.5</b> | ---      | ---      |
| Base Number (BN) | mg KOH/g ASTM D2896      | <b>6.2</b>  | ---      | ---      |

# OIL ANALYSIS REPORT

### ▲ Non-ferrous Metals



### Base Number



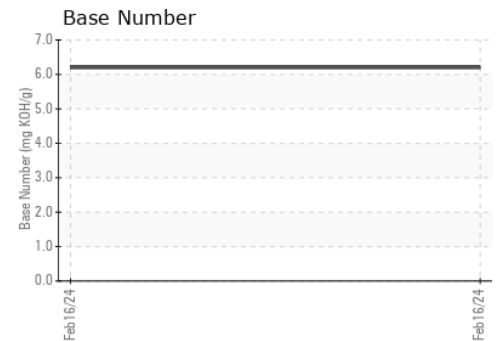
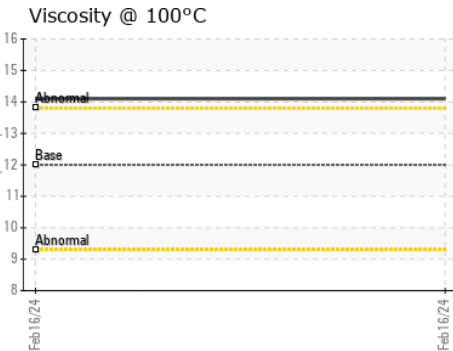
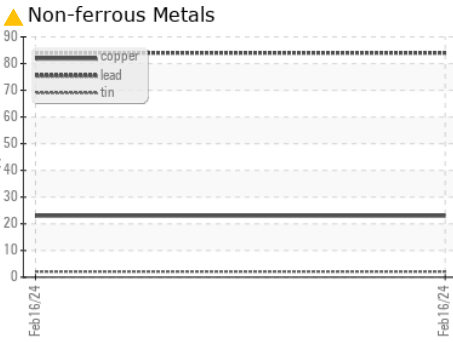
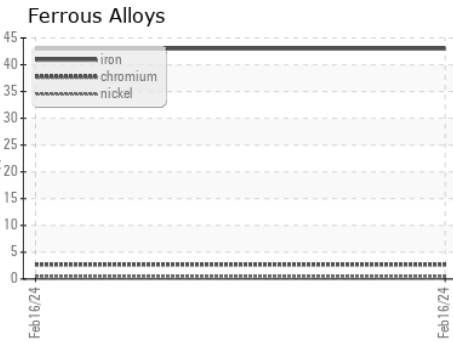
### Viscosity @ 100°C



| VISUAL           | method | limit/base | current | history1     | history2 |
|------------------|--------|------------|---------|--------------|----------|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Yellow Metal     | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Precipitate      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Silt             | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Debris           | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Sand/Dirt        | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      |
| Appearance       | scalar | *Visual    | NORML   | <b>NORML</b> | ---      |
| Odor             | scalar | *Visual    | NORML   | <b>NORML</b> | ---      |
| Emulsified Water | scalar | *Visual    | >0.2    | <b>NEG</b>   | ---      |
| Free Water       | scalar | *Visual    |         | <b>NEG</b>   | ---      |

| FLUID PROPERTIES | method | limit/base | current | history1    | history2 |
|------------------|--------|------------|---------|-------------|----------|
| Visc @ 100°C     | cSt    | ASTM D445  | 12.00   | <b>14.1</b> | ---      |

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0103933  
**Lab Number** : **06100694**  
**Unique Number** : 10898924  
**Test Package** : FLEET  
**Received** : 26 Feb 2024  
**Tested** : 27 Feb 2024  
**Diagnosed** : 28 Feb 2024 - Sean Felton

**Transervice - Shop 2680 - LeMars**  
 1330 12th Ave SW  
 LeMars, IA  
 US 51031  
 Contact: Stacey Rabey  
 srabey@transervice.com  
 T: (712)501-9908  
 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)