



# OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Area  
**3000 Series**  
 Machine Id  
**Navistar 3270**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 10W30 (26 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0915491</b>   | WC0854833   | WC0813056   |
| Sample Date    |     | Client Info |           | <b>24 Mar 2024</b> | 21 Sep 2023 | 07 May 2023 |
| Machine Age    | mls | Client Info |           | <b>449985</b>      | 438226      | 428661      |
| Oil Age        | mls | Client Info |           | <b>11759</b>       | 9565        | 7793        |
| Filter Age     | mls | Client Info |           | <b>11759</b>       | 9565        | 7793        |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## WEAR

All component wear rates are normal.

|              |        |               |      |              |      |     |
|--------------|--------|---------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185(m) | >75  | <b>42</b>    | 30   | 25  |
| Chromium     | ppm    | ASTM D5185(m) | >5   | <b>2</b>     | 2    | 2   |
| Nickel       | ppm    | ASTM D5185(m) | >4   | <b>&lt;1</b> | <1   | <1  |
| Titanium     | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | 0    | <1  |
| Silver       | ppm    | ASTM D5185(m) | >2   | <b>0</b>     | <1   | 1   |
| Aluminum     | ppm    | ASTM D5185(m) | >15  | <b>6</b>     | 6    | 5   |
| Lead         | ppm    | ASTM D5185(m) | >25  | <b>2</b>     | 6    | 8   |
| Copper       | ppm    | ASTM D5185(m) | >100 | <b>53</b>    | 167  | 275 |
| Tin          | ppm    | ASTM D5185(m) | >4   | <b>0</b>     | <1   | <1  |
| Vanadium     | ppm    | ASTM D5185(m) |      | <b>0</b>     | 0    | 0   |
| White Metal  | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | --- |
| Yellow Metal | scalar | Visual*       | NONE | <b>NONE</b>  | NONE | --- |

## CONTAMINATION

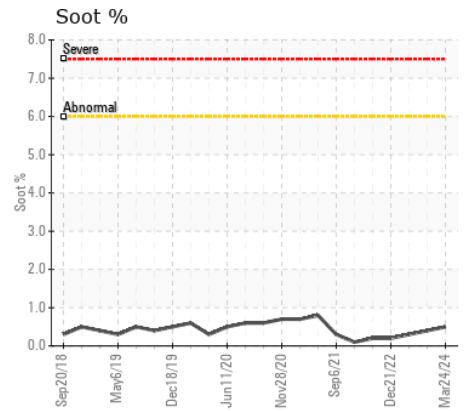
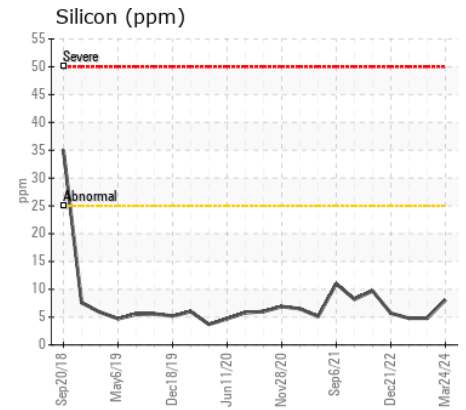
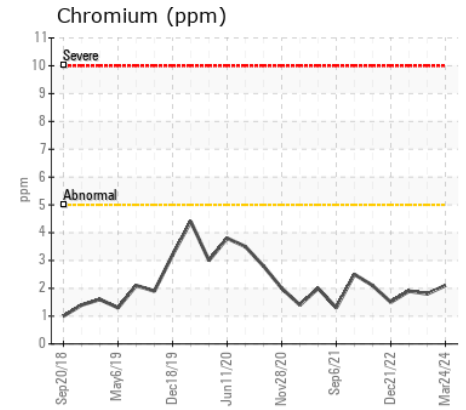
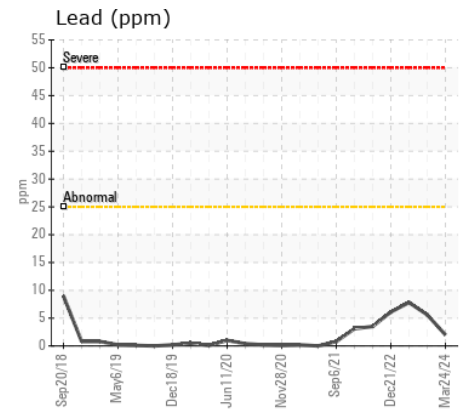
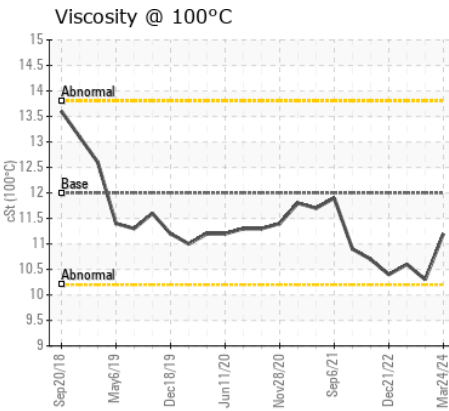
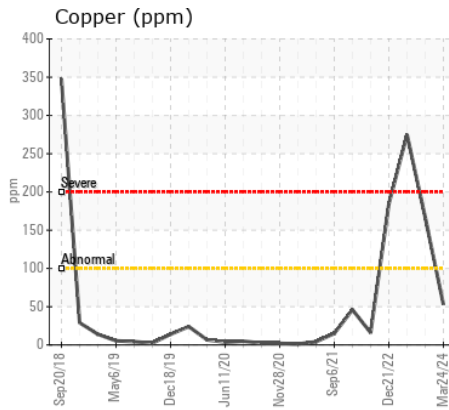
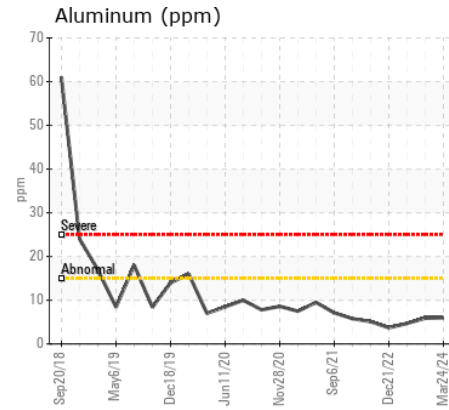
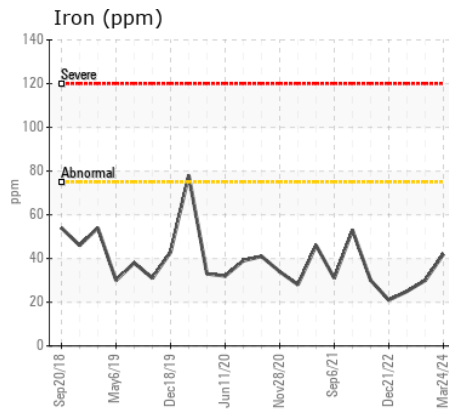
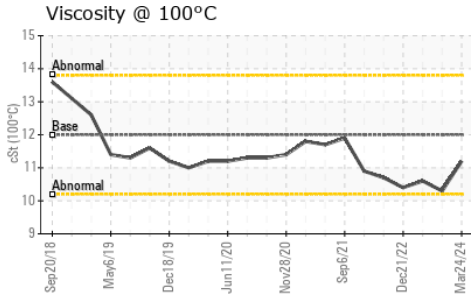
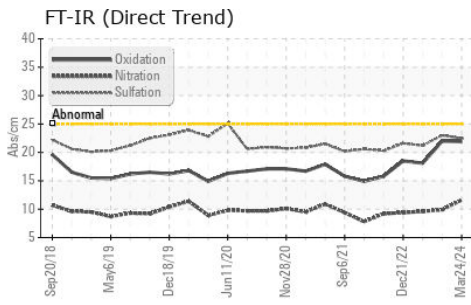
There is no indication of any contamination in the oil.

|                  |          |               |       |                |       |       |
|------------------|----------|---------------|-------|----------------|-------|-------|
| Silicon          | ppm      | ASTM D5185(m) | >25   | <b>8</b>       | 5     | 5     |
| Potassium        | ppm      | ASTM D5185(m) | >20   | <b>2</b>       | 1     | <1    |
| Fuel             |          | WC Method     | >3.0  | <b>&lt;1.0</b> | <1.0  | <1.0  |
| Water            |          | WC Method     | >0.2  | <b>NEG</b>     | NEG   | NEG   |
| Glycol           |          | WC Method     |       | <b>NEG</b>     | NEG   | 0.0   |
| Soot %           | %        | ASTM D7844*   | >6    | <b>0.5</b>     | 0.4   | 0.3   |
| Nitration        | Abs/cm   | ASTM D7624*   | >20   | <b>11.6</b>    | 9.9   | 9.6   |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30   | <b>22.5</b>    | 23.0  | 21.2  |
| Silt             | scalar   | Visual*       | NONE  | <b>NONE</b>    | NONE  | ---   |
| Debris           | scalar   | Visual*       | NONE  | <b>VLITE</b>   | NONE  | ---   |
| Sand/Dirt        | scalar   | Visual*       | NONE  | <b>NONE</b>    | NONE  | ---   |
| Appearance       | scalar   | Visual*       | NORML | <b>NORML</b>   | NORML | ---   |
| Odor             | scalar   | Visual*       | NORML | <b>NORML</b>   | NORML | NORML |
| Emulsified Water | scalar   | Visual*       | >0.2  | <b>NEG</b>     | NEG   | NEG   |

## FLUID CONDITION

The condition of the oil is acceptable for the time in service.

|              |          |               |       |             |      |      |
|--------------|----------|---------------|-------|-------------|------|------|
| Sodium       | ppm      | ASTM D5185(m) |       | <b>4</b>    | 3    | 4    |
| Boron        | ppm      | ASTM D5185(m) | 2     | <b>5</b>    | 3    | 9    |
| Barium       | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | <1   | 0    |
| Molybdenum   | ppm      | ASTM D5185(m) | 50    | <b>59</b>   | 59   | 60   |
| Manganese    | ppm      | ASTM D5185(m) | 0     | <b>0</b>    | <1   | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 950   | <b>938</b>  | 925  | 922  |
| Calcium      | ppm      | ASTM D5185(m) | 1050  | <b>1042</b> | 1024 | 1087 |
| Phosphorus   | ppm      | ASTM D5185(m) | 995   | <b>893</b>  | 957  | 1043 |
| Zinc         | ppm      | ASTM D5185(m) | 1180  | <b>1127</b> | 1155 | 1155 |
| Sulfur       | ppm      | ASTM D5185(m) | 2600  | <b>2191</b> | 2245 | 2441 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25   | <b>21.9</b> | 22.0 | 18.1 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 12.00 | <b>11.2</b> | 10.3 | 10.6 |



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0915491 **Received** : 05 Apr 2024  
**Lab Number** : 02626913 **Tested** : 05 Apr 2024  
**Unique Number** : 5760045 **Diagnosed** : 05 Apr 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: Visual )

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.