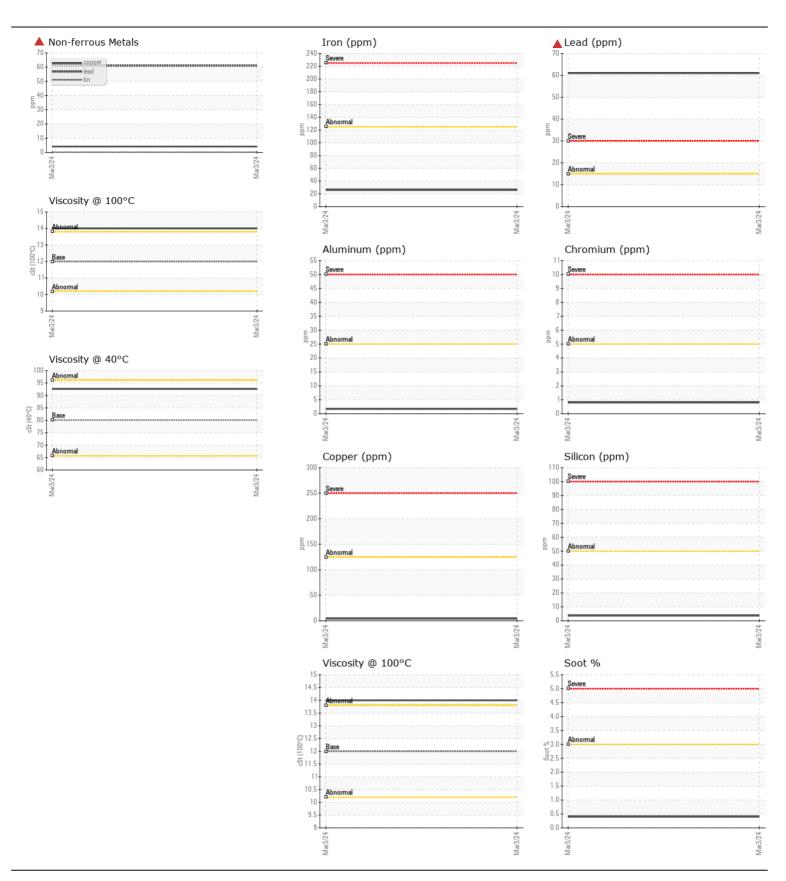
**WEAR** CONTAMINATION **FLUID CONDITION** 

**SEVERE NORMAL NORMAL** 

## JCB 8330 1420

Component Diesel Engine

| PETRO CANADA DURON SHP 10W30 ( GAL)  |                      |          |                               |           |             |          |          |
|--|----------------------|----------|-------------------------------|-----------|-------------|----------|----------|
| RECOMMENDATION   | Test                 | UOM      | Method                        | Limit/Abn | Current     | History1 | History2 |
| We advise that you monitor for an abnormal oil pressure drop and noise. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. | Sample Number        |          | Client Info                   |           | PC0083171   |          |          |
|  | Sample Date          |          | Client Info                   |           | 03 Mar 2024 |          |          |
|  | Machine Age          | hrs      | Client Info                   |           | 3504        |          |          |
|  | Oil Age              | hrs      | Client Info                   |           | 500         |          |          |
|  | Filter Age           | hrs      | Client Info                   |           | 500         |          |          |
|  | Oil Changed          |          | Client Info                   |           | Changed     |          |          |
|  | Filter Changed       |          | Client Info                   |           | Changed     |          |          |
|  | Sample Status        |          |                               |           | SEVERE      |          |          |
| WEAR   | Iron                 | nnm      | ASTM D5185(m)                 | ×105      | 26          |          |          |
|  | Chromium             | ppm      | ASTM D5185(m)                 |           | <1          |          |          |
| Lead ppm levels are severe. Bearing wear is indicated.   | Nickel               | ppm      | ASTM D5185(m)                 |           |             |          |          |
|  | Titanium             | ppm      | ASTM D5185(m)                 | >4        | <1<br>0     |          |          |
|  | Silver               | ppm      | \ /                           | . 0       |             |          |          |
|  | Aluminum             | ppm      | ASTM D5185(m) ASTM D5185(m)   | >3        | 0           |          |          |
|  | Lead                 | ppm      | ASTM D5185(m)                 |           | 2<br>▲ 61   |          |          |
|  | Copper               | ppm      | ASTM D5185(III) ASTM D5185(m) | >13       | 4           |          |          |
|  | Tin                  | ppm      | ASTM D5185(m)                 |           | <1<br><1    |          |          |
|  | Vanadium             | ppm      | ASTM D5185(m)                 | >4        | 0           |          |          |
| <u></u>  | variadium            | ppm      | A31W D3103(III)               |           |             |          |          |
| CONTAMINATION  | Silicon              | ppm      | ASTM D5185(m)                 | >50       | 4           |          |          |
| There is no indication of any contamination in the oil.  | Potassium            | ppm      | ASTM D5185(m)                 | >20       | 2           |          |          |
| There is no maistain or any contamination in the on.   | Fuel                 |          | WC Method                     | >5        | <1.0        |          |          |
|  | Water                |          | WC Method                     | >0.2      | NEG         |          |          |
|  | Glycol               |          | WC Method                     |           | NEG         |          |          |
|  | Soot %               | %        | ASTM D7844*                   | >3        | 0.4         |          |          |
|  | Nitration            | Abs/cm   | ASTM D7624*                   | >20       | 12.0        |          |          |
|  | Sulfation            | Abs/.1mm | ASTM D7415*                   | >30       | 25.2        |          |          |
|  | Emulsified Water     | scalar   | Visual*                       | >0.2      | NEG         |          |          |
| FLUID CONDITION  | Sodium               | ppm      | ASTM D5185(m)                 |           | 4           |          |          |
|  | Boron                | ppm      | ASTM D5185(m)                 | 2         | 14          |          |          |
| The oil is no longer serviceable as a result of the abnormal and/or severe wear.   | Barium               | ppm      | ASTM D5185(m)                 |           | 0           |          |          |
| 551516 116411  | Molybdenum           | ppm      | ASTM D5185(m)                 |           | 66          |          |          |
|  | Manganese            | ppm      | ASTM D5185(m)                 |           | 0           |          |          |
|  | Magnesium            | ppm      | ASTM D5185(m)                 |           | 1183        |          |          |
|  | Calcium              | ppm      | ASTM D5185(m)                 | 1050      | 1125        |          |          |
|  | Phosphorus           | ppm      | ASTM D5185(m)                 | 995       | 1138        |          |          |
|  | Zinc                 | ppm      |                               | 1180      | 1380        |          |          |
|  | Sulfur               | ppm      | ASTM D5185(m)                 | 2600      | 2975        |          |          |
|  | Oxidation            | Abs/.1mm | ASTM D7414*                   |           | 22.4        |          |          |
|  | Visc @ 40°C          | cSt      | ASTM D7279(m)                 | 80.1      | 92.6        |          |          |
|  | Visc @ 100°C         | cSt      | ASTM D7279(m)                 | 12.00     | 14.0        |          |          |
|  | Viscosity Index (VI) |          | ASTM D2270*                   | 144       | 154         |          |          |
|  | . , ,                |          |                               |           |             |          |          |





CALA ISO 17025:2017 Accredited

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Sample No.

: PC0083171 Lab Number : 02620749

Unique Number : 5737859

Test Package : MOB 1 ( Additional Tests: KV40, VI )

Received

Diagnosed

**Tested** 

: 08 Mar 2024

: 08 Mar 2024

: 08 Mar 2024 - Kevin Marson

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.

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