# POWER GENERATION PRODUCTS

OIL ANALYSIS REPORT

WEAR NORMAL CONTAMINATION MARGINAL FLUID CONDITION NORMAL

## [85751] 21 FIRST AVE, ORANGEVILLE BELL CANADA 06VF174849

#### **Right Diesel Engine**

### ESSO XD-3 EXTRA SAE 40 (22 LTR)

#### RECOMMENDATION

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| W | R |
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|   |   |

Area

Metal levels are typical for a new component breaking in.

### **CONTAMINATION**

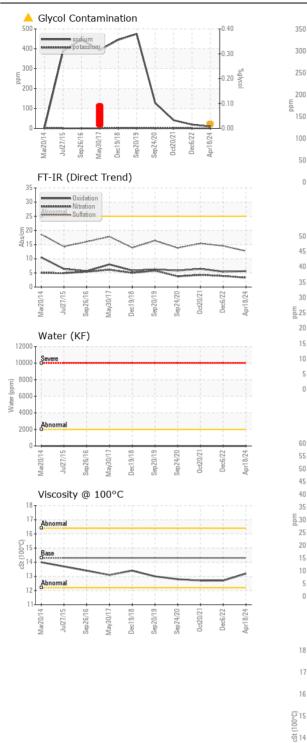
Test for glycol is positive. There is a light concentration of glycol present in the oil. The water content is negligible.

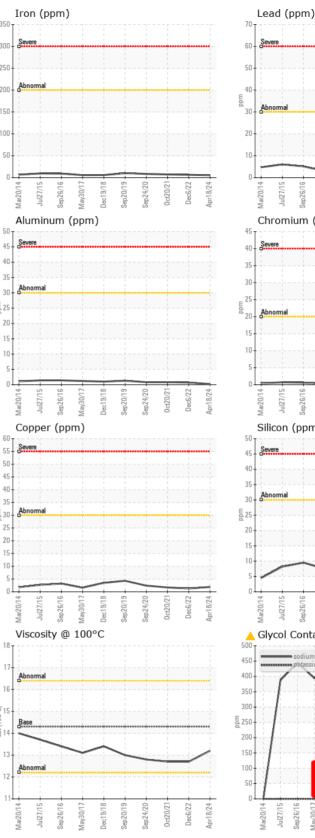
| Test             | UOM      | Method        | Limit/Abn | Current     | History1    | History2    |
|------------------|----------|---------------|-----------|-------------|-------------|-------------|
| Sample Number    |          | Client Info   |           | PN0006033   | PN0004273   | PN0002917   |
| Sample Date      |          | Client Info   |           | 18 Apr 2024 | 06 Dec 2022 | 20 Oct 2021 |
| Machine Age      | hrs      | Client Info   |           | 789         | 762         | 734         |
| Oil Age          | hrs      | Client Info   |           | 27          | 29          | 0           |
| Filter Age       | hrs      | Client Info   |           | 27          | 29          | 0           |
| Oil Changed      |          | Client Info   |           | Changed     | Changed     | Changed     |
| Filter Changed   |          | Client Info   |           | Changed     | Changed     | Changed     |
| Sample Status    |          |               |           | MARGINAL    | NORMAL      | NORMAL      |
| Iron             |          |               | . 000     | E           | c           | 7           |
| Iron             | ppm      | ASTM D5185(m) | >200      | 5           | 6           | 7           |
| Chromium         | ppm      | ASTM D5185(m) | >20       | 0           | <1          | <1          |
| Nickel           | ppm      | ASTM D5185(m) | >2        | 0           | 0           | 0           |
| Titanium         | ppm      | ASTM D5185(m) | >2        | 0           | 0           | 0           |
| Silver           | ppm      | ASTM D5185(m) | >2        | 0           | 0           | 0           |
| Aluminum         | ppm      | ASTM D5185(m) | >30       | <1          | <1          | <1          |
| Lead             | ppm      | ASTM D5185(m) | >30       | 1           | 3           | 3           |
| Copper           | ppm      | ASTM D5185(m) | >30       | 2           | 1           | 2           |
| Tin              | ppm      | ASTM D5185(m) | >15       | <1          | 2           | 2           |
| Vanadium         | ppm      | ASTM D5185(m) |           | 0           | 0           | 0           |
| Silicon          | ppm      | ASTM D5185(m) | >30       | 3           | 4           | 5           |
| Potassium        | ppm      | ASTM D5185(m) | >20       | 0           | 0           | 1           |
| Fuel             |          | WC Method     | >3.0      | <1.0        | <1.0        | <1.0        |
| Water            | %        | ASTM D6304*   | >0.2      | 0.00        |             |             |
| ppm Water        | ppm      | ASTM D6304*   | >2000     | 0           |             |             |
| Glycol           | %        | ASTM D7922*   |           | <b>0.03</b> | NEG         | NEG         |
| Soot %           | %        | ASTM D7844*   | >3        | 0           | 0           | 0           |
| Nitration        | Abs/cm   | ASTM D7624*   | >20       | 3.3         | 3.9         | 4.3         |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30       | 12.7        | 14.5        | 15.4        |
| Emulsified Water | scalar   | Visual*       | >0.2      | .2%         | NEG         | NEG         |
| Sodium           | ppm      | ASTM D5185(m) |           | 9           | 19          | 41          |
| Boron            | ppm      | ASTM D5185(m) |           | 4           | 9           | 16          |
| Barium           | ppm      | ASTM D5185(m) |           | 0           | 0           | 0           |
| Molybdenum       | ppm      | ASTM D5185(m) |           | 2           | 10          | 17          |
| Manganese        | ppm      | ASTM D5185(m) |           | 0           | <1          | <1          |
| Magnesium        | ppm      | ASTM D5185(m) |           | 710         | 27          | 38          |
| Calcium          | ppm      | ASTM D5185(m) | 2550      | 1583        | 3733        | 3026        |
| Phosphorus       | ppm      | ASTM D5185(m) | 1000      | 964         | 753         | 821         |
| Zinc             | ppm      | ASTM D5185(m) | 1120      | 1096        | 765         | 888         |
| Sulfur           | ppm      | ASTM D5185(m) |           | 2506        | 2497        | 2767        |
| Oxidation        | Abs/.1mm | ASTM D7414*   | >25       | 5.6         | 5.4         | 6.4         |
| Visc @ 100°C     | cSt      | ASTM D7279(m) | 14.3      | 13.2        | 12.7        | 12.7        |
|                  |          |               |           |             |             |             |

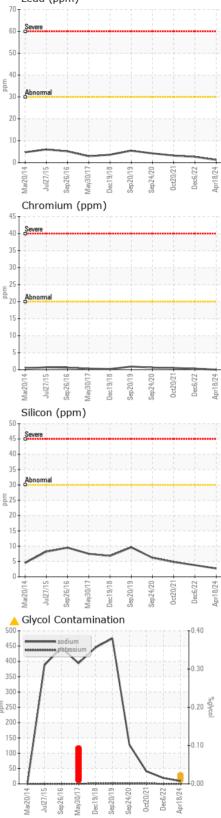
## FLUID CONDITION

The condition of the oil is acceptable for the time in service. The oil is no longer serviceable due to the presence of contaminants.

Contact/Location: Brett Kinkley - POWMIS







Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : PN0006033 Received : 26 Apr 2024 Lab Number : 02631524 Tested : 30 Apr 2024 ISO 17025:2017 Accredited : 30 Apr 2024 - Wes Davis Unique Number : 5772677 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: Glycol, KF) 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.

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