# Power generation products

OIL ANALYSIS REPORT

# [86494] 200 UNIVERSITY AVE TORONTO ROOF GWL REALTY ADVISORS 116132

## Rear Diesel Engine

ESSO XD-3 EXTRA 15W40 (40 LTR)

#### RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

#### **WEAR**

Area

Metal levels are typical for a new component breaking in.

| $\mathbf{col}$ | NTAN | <b>MINIA</b> | TION |
|----------------|------|--------------|------|
|                |      |              |      |

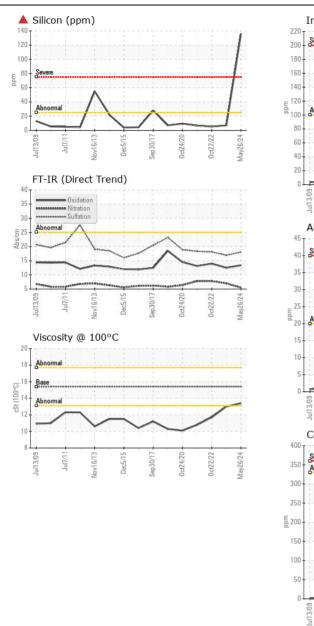
High silicon level indicates possible contamination with silicone-based oil or silicone-based fitting compound/grease and/or dirt. Advise investigate any possible cross-contamination with silicone-based oil, or any points that are sealed/greased with silicone-based compound/grease.

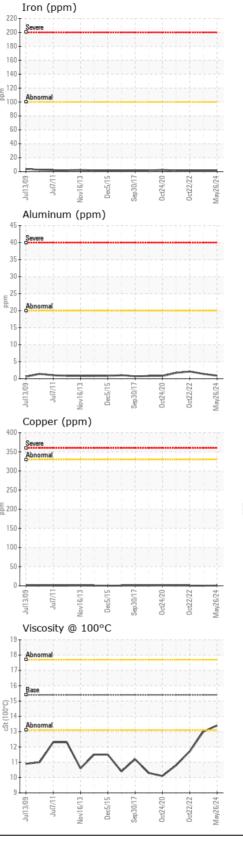
### FLUID CONDITION

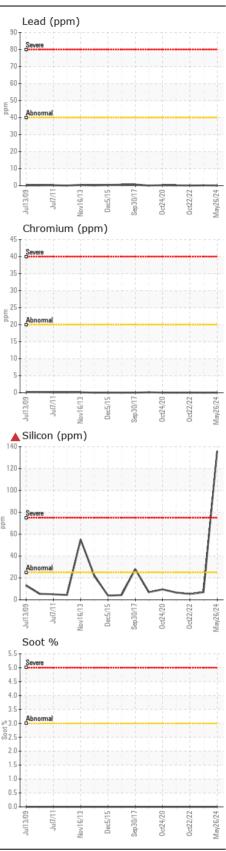
The oil is no longer serviceable due to the presence of contaminants.

| <br>                 |          |               |           | $\sim$      |             |             |
|----------------------|----------|---------------|-----------|-------------|-------------|-------------|
| Test                 | UOM      | Method        | Limit/Abn | Current     | History1    | History2    |
| Sample Number        |          | Client Info   |           | PN0006069   | PN0004774   | PN0004041   |
| Sample Date          |          | Client Info   |           | 26 May 2024 | 28 May 2023 | 22 Oct 2022 |
| Machine Age          | hrs      | Client Info   |           | 588         | 569         | 561         |
| Oil Age              | hrs      | Client Info   |           | 569         | 0           | 0           |
| Filter Age           | hrs      | Client Info   |           | 569         | 0           | 0           |
| Oil Changed          |          | Client Info   |           | Changed     | Changed     | Changed     |
| Filter Changed       |          | Client Info   |           | Not Changd  | Not Changd  | Changed     |
| Sample Status        |          |               |           | SEVERE      | MARGINAL    | ABNORMAL    |
| <br>Iron             |          | ASTM D5185(m) | >100      | 1           | 2           | 1           |
| Chromium             | ppm      | ASTM D5185(m) | >20       | 0           | 0           | 0           |
| Nickel               | ppm      | ASTM D5185(m) | >20       | 0           | 0           | 0           |
| Titanium             | ppm      | ASTM D5185(m) | >4        | 0           |             | 0           |
| Silver               | ppm      |               | . 0       |             | 0           | 0           |
|                      | ppm      | ASTM D5185(m) | >3        | 0<br><1     | 0           |             |
| Aluminum             | ppm      | ASTM D5185(m) | >20       |             | 1           | 2           |
| Lead                 | ppm      | ASTM D5185(m) | >40       | 0           | <1          | 0           |
| Copper               | ppm      | ASTM D5185(m) | >330      | <1          | <1          | <1          |
| Tin                  | ppm      | ASTM D5185(m) | >15       | 0           | 0           | 0           |
| <br>Vanadium         | ppm      | ASTM D5185(m) |           | 0           | 0           | 0           |
| Silicon              | ppm      | ASTM D5185(m) | >25       | <b>1</b> 36 | 7           | 5           |
| Potassium            | ppm      | ASTM D5185(m) | >20       | <1          | <1          | 1           |
| Fuel                 |          | WC Method     | >5        | <1.0        | <b>4</b> .1 | ▲ 7.2       |
| Water                |          | WC Method     | >0.2      | NEG         | NEG         | NEG         |
| Glycol               |          | WC Method     |           | NEG         | NEG         | NEG         |
| Soot %               | %        | ASTM D7844*   | >3        | 0           | 0           | 0           |
| Nitration            | Abs/cm   | ASTM D7624*   | >20       | 5.5         | 7.0         | 7.8         |
| Sulfation            | Abs/.1mm | ASTM D7415*   | >30       | 18.0        | 16.9        | 18.1        |
| <br>Emulsified Water | scalar   | Visual*       | >0.2      | NEG         | NEG         | NEG         |
| Sodium               | ppm      | ASTM D5185(m) | >192      | 1           | 2           | 3           |
| Boron                | ppm      | ASTM D5185(m) |           | 21          | 71          | 70          |
| Barium               | ppm      | ASTM D5185(m) |           | 0           | 0           | 0           |
| Molybdenum           | ppm      | ASTM D5185(m) |           | 46          | 23          | 77          |
| Manganese            | ppm      | ASTM D5185(m) |           | 0           | 0           | 0           |
| Magnesium            | ppm      | ASTM D5185(m) |           | 666         | 45          | 51          |
| Calcium              | ppm      | ASTM D5185(m) | 3780      | 1330        | 2081        | 1991        |
| Phosphorus           | ppm      | ASTM D5185(m) | 1370      | 966         | 1037        | 997         |
| Zinc                 | ppm      | ASTM D5185(m) | 1500      | 1086        | 1064        | 1031        |
| Sulfur               | ppm      | ASTM D5185(m) | 3800      | 2634        | 3296        | 2991        |
| Oxidation            | Abs/.1mm | ASTM D7414*   | >25       | 13.4        | 12.5        | 14.0        |
| Visc @ 100°C         | cSt      | ASTM D7279(m) | 15.4      | 13.4        | 13.0        | ▲ 11.7      |
|                      |          | · /           |           |             |             |             |

Contact/Location: Brett Kinkley - POWMIS







Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : PN0006069 Received : 30 May 2024 Lab Number : 02638824 : 30 May 2024 Tested ISO 17025:2017 Accredited : 30 May 2024 - Kevin Marson Unique Number : 5787986 Diagnosed Laboratory Test Package : MOB 1 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.

POWER STATION INC.

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