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

**NORMAL NORMAL NORMAL** 

Machine Id **223-1603** 

Component Rear Diesel Engine

| RECOMMENDATION   | Test                 | UOM      | Method        | Limit/Abn | Current     | History1 | History2 |
|--|----------------------|----------|---------------|-----------|-------------|----------|----------|
| Resample at the next service interval to monitor. Please specify the | Sample Number        |          | Client Info   |           | PC0084993   |          |          |
| component make and model with your next sample.                      | Sample Date          |          | Client Info   |           | 13 Feb 2024 |          |          |
|  | Machine Age          | hrs      | Client Info   |           | 11339       |          |          |
|  | Oil Age              | hrs      | Client Info   |           | 500         |          |          |
|  | Filter Age           | hrs      | Client Info   |           | 500         |          |          |
|  | Oil Changed          |          | Client Info   |           | Changed     |          |          |
|  | Filter Changed       |          | Client Info   |           | Changed     |          |          |
|  | Sample Status        |          |               |           | NORMAL      |          |          |
| WEAR   | Iron                 | ppm      | ASTM D5185(m) | >100      | 22          |          |          |
|  | Chromium             | ppm      | ASTM D5185(m) |           | <1          |          |          |
| All component wear rates are normal.                                 | Nickel               | ppm      | ASTM D5185(m) |           | <1          |          |          |
|  | Titanium             | ppm      | ASTM D5185(m) |           | 0           |          |          |
|  | Silver               | ppm      | ASTM D5185(m) | >3        | 0           |          |          |
|  | Aluminum             | ppm      | ASTM D5185(m) | >20       | 4           |          |          |
|  | Lead                 | ppm      | ASTM D5185(m) | >40       | 5           |          |          |
|  | Copper               | ppm      | ASTM D5185(m) | >330      | 4           |          |          |
|  | Tin                  | ppm      | ASTM D5185(m) | >15       | <1          |          |          |
|  | Vanadium             | ppm      | ASTM D5185(m) |           | 0           |          |          |
| CONTAMINATION  | Silicon              | ppm      | ASTM D5185(m) | >25       | 11          |          |          |
| There is no indication of any contamination in the oil.              | Potassium            | ppm      | ASTM D5185(m) | >20       | 3           |          |          |
|  | Fuel                 |          | WC Method     | >5        | <1.0        |          |          |
|  | Water                |          | WC Method     | >0.2      | NEG         |          |          |
|  | Glycol               |          | WC Method     |           | NEG         |          |          |
|  | Soot %               | %        | ASTM D7844*   | >3        | 0.8         |          |          |
|  | Nitration            | Abs/cm   | ASTM D7624*   | >20       | 9.9         |          |          |
|  | Sulfation            | Abs/.1mm | ASTM D7415*   | >30       | 23.1        |          |          |
|  | Emulsified Water     | scalar   | Visual*       | >0.2      | NEG         |          |          |
| FLUID CONDITION  | Sodium               | ppm      | ASTM D5185(m) | >158      | 5           |          |          |
| The condition of the oil is acceptable for the time in service.      | Boron                | ppm      | ASTM D5185(m) | 250       | 85          |          |          |
|  | Barium               | ppm      | ASTM D5185(m) | 10        | 0           |          |          |
|  | Molybdenum           | ppm      | ASTM D5185(m) | 100       | 131         |          |          |
|  | Manganese            | ppm      | ASTM D5185(m) |           | 0           |          |          |
|  | Magnesium            | ppm      | ASTM D5185(m) |           | 473         |          |          |
|  | Calcium              | ppm      | ASTM D5185(m) | 3000      | 1641        |          |          |
|  | Phosphorus           | ppm      | ASTM D5185(m) |           | 845         |          |          |
|  | Zinc                 | ppm      | ASTM D5185(m) |           | 1002        |          |          |
|  | Sulfur               | ppm      | ASTM D5185(m) |           | 2523        |          |          |
|  | Oxidation            | Abs/.1mm | ASTM D7414*   |           | 18.6        |          |          |
|  | Visc @ 40°C          | cSt      | ASTM D7279(m) |           | 96.6        |          |          |
|  | Visc @ 100°C         | cSt      | ASTM D7279(m) | 14.4      | 13.3        |          |          |
|  | Viscosity Index (VI) | Scale    | ASTM D2270*   | 126       | 136         |          |          |

Report Id: LAVCLI [WCAMIS] 02618635 (Generated: 02/28/2024 14:43:21) Rev: 1

Contact/Location: Doug Francis - LAVCLI





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No.

: PC0084993 Lab Number : 02618635

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Unique Number : 5735745

Received **Tested** 

: 28 Feb 2024 Diagnosed

: 28 Feb 2024 - Kevin Marson

: 28 Feb 2024

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

LAVIS CONTRACTING 37462A HURON ROAD CLINTON, ON

CA NOM 1L0 Contact: Doug Francis dfrancis@lavis.ca T: (519)482-3694 F: (519)482-7886