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

**NORMAL NORMAL NORMAL** 

[AFTER]

## **MANITOU 1080873**

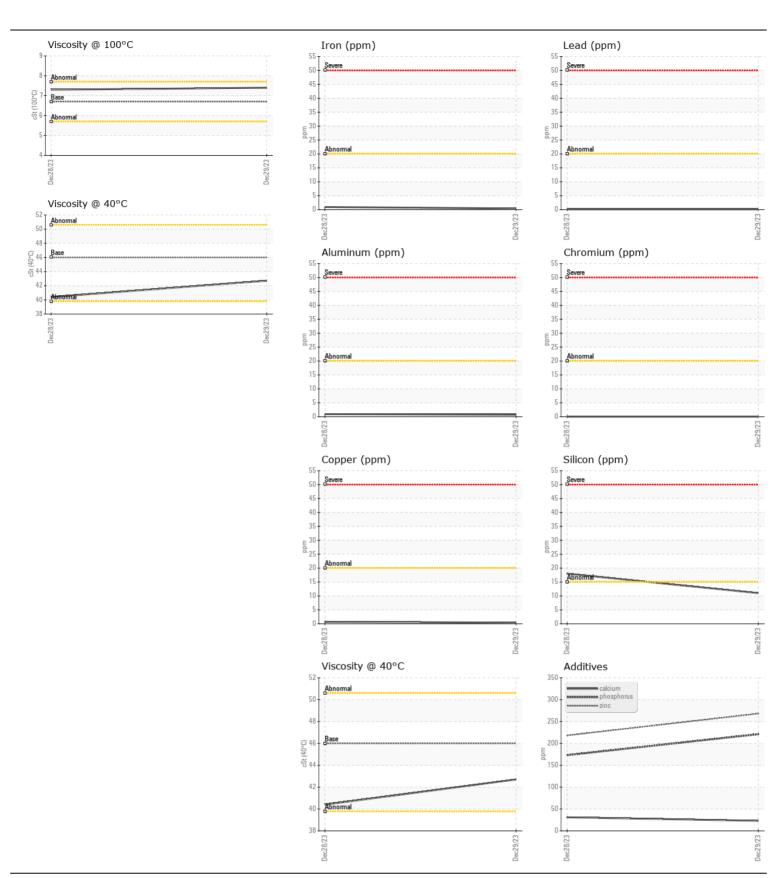
Component Hydraulic System

| RECOMMENDATION                                                                                                                                                                                                                                                                          | Test               | UOM              | Method            | Limit/Abn | Current     | History1    | History2 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------|-------------------|-----------|-------------|-------------|----------|
| Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid. | Sample Number      |                  | Client Info       |           | PC0078218   | PC0078221   |          |
|                                                                                                                                                                                                                                                                                         | Sample Date        |                  | Client Info       |           | 29 Dec 2023 | 28 Dec 2023 |          |
|                                                                                                                                                                                                                                                                                         | Machine Age        | hrs              | Client Info       |           | 113         | 113         |          |
|                                                                                                                                                                                                                                                                                         | Oil Age            | hrs              | Client Info       |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Filter Age         | hrs              | Client Info       |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Oil Changed        |                  | Client Info       |           | N/A         | N/A         |          |
|                                                                                                                                                                                                                                                                                         | Filter Changed     |                  | Client Info       |           | N/A         | N/A         |          |
|                                                                                                                                                                                                                                                                                         | Sample Status      |                  |                   |           | NORMAL      | NORMAL      |          |
| WEAR                                                                                                                                                                                                                                                                                    | Iron               | ppm              | ASTM D5185(m)     | >20       | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Chromium           | ppm              | ASTM D5185(m)     |           | 0           | 0           |          |
| All component wear rates are normal.                                                                                                                                                                                                                                                    | Nickel             | ppm              | ASTM D5185(m)     |           | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Titanium           | ppm              | ASTM D5185(m)     | 720       | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Silver             | ppm              | ASTM D5185(m)     |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Aluminum           | ppm              | ASTM D5185(m)     | >20       | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Lead               | ppm              | ASTM D5185(m)     |           | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Copper             | ppm              | ASTM D5185(m)     |           | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Tin                | ppm              | ASTM D5185(m)     |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Vanadium           | ppm              | ASTM D5185(m)     |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | White Metal        | scalar           | Visual*           | NONE      | NONE        | NONE        |          |
|                                                                                                                                                                                                                                                                                         | Yellow Metal       | scalar           | Visual*           | NONE      | NONE        | NONE        |          |
| CONTAMINATION                                                                                                                                                                                                                                                                           | 0.11.              |                  | AOTH DELOS        |           |             | 40          |          |
| CONTAMINATION  There is no indication of any contamination in the component(unconfirmed).                                                                                                                                                                                               | Silicon            | ppm              | ASTM D5185(m)     | >15       | 11          | 18          |          |
|                                                                                                                                                                                                                                                                                         | Potassium          | ppm              | ASTM D5185(m)     |           | 0<br>NEO    | 0<br>NEG    |          |
|                                                                                                                                                                                                                                                                                         | Water<br>Silt      | cooler           | WC Method Visual* | >0.05     | NEG<br>NONE | NONE        |          |
|                                                                                                                                                                                                                                                                                         | Debris             | scalar<br>scalar | Visual*           | NONE      | NONE        | NONE        |          |
|                                                                                                                                                                                                                                                                                         | Sand/Dirt          | scalar           | Visual*           | NONE      | NONE        | NONE        |          |
|                                                                                                                                                                                                                                                                                         | Appearance         | scalar           | Visual*           | NORML     | NORML       | NORML       |          |
|                                                                                                                                                                                                                                                                                         | Odor               | scalar           | Visual*           | NORML     | NORML       | NORML       |          |
|                                                                                                                                                                                                                                                                                         | Emulsified Water   | scalar           | Visual*           | >0.05     | NEG         | NEG         |          |
| U UD COUDITION                                                                                                                                                                                                                                                                          |                    |                  |                   |           |             |             |          |
| FLUID CONDITION                                                                                                                                                                                                                                                                         | Sodium             | ppm              | ASTM D5185(m)     | -         | 0           | 0           |          |
| The condition of the oil is acceptable for the time in service.                                                                                                                                                                                                                         | Boron              | ppm              | ASTM D5185(m)     |           | <1          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Barium             | ppm              | ASTM D5185(m)     |           | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Molybdenum         | ppm              | ASTM D5185(m)     | 5         | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Manganese          | ppm              | ASTM D5185(m)     | ٥٢        | 0           | 0           |          |
|                                                                                                                                                                                                                                                                                         | Magnesium          | ppm              | ASTM D5185(m)     |           | 31          | <1          |          |
|                                                                                                                                                                                                                                                                                         | Calcium            | ppm              | ASTM D5185(m)     | 200       | 23          | 31          |          |
|                                                                                                                                                                                                                                                                                         | Phosphorus<br>Zinc | ppm              | ASTM D5185(m)     |           | 221         | 173<br>218  |          |
|                                                                                                                                                                                                                                                                                         | Sulfur             | ppm              | ASTM D5185(m)     |           | 268<br>2569 | 4517        |          |
|                                                                                                                                                                                                                                                                                         | Visc @ 40°C        | ppm              | ASTM D5185(m)     |           | 42.7        | 40.4        |          |
|                                                                                                                                                                                                                                                                                         | VISC @ 40°C        | cSt              | ASTM D7279(m)     | 40        | 42./        | 40.4        |          |
|                                                                                                                                                                                                                                                                                         | Visc @ 100°C       | cSt              | ASTM D7279(m)     | 6.7       | 7.4         | 7.3         |          |

Viscosity Index (VI) Scale ASTM D2270\* 97

146

138





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number

: PC0078218 : 02606588

: 5707674

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

: 04 Jan 2024 : 04 Jan 2024 Diagnostician : Wes Davis

Test Package : MOB 1 ( Additional Tests: KV100, 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.

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