**WEAR CONTAMINATION FLUID CONDITION** 

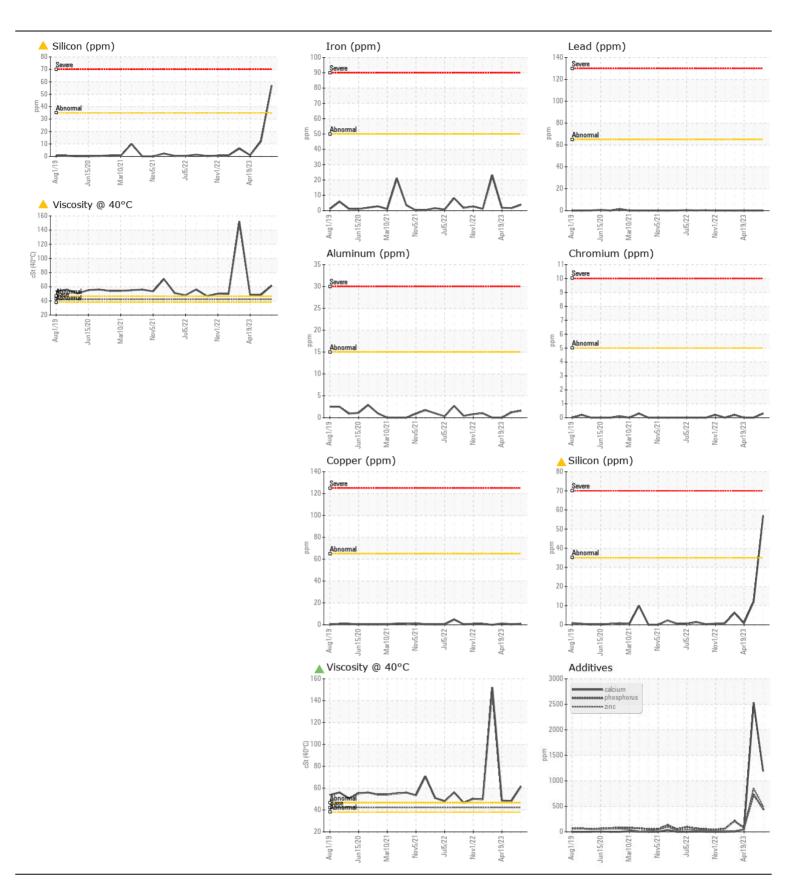
**NORMAL ABNORMAL ATTENTION** 

## **Ascendum Machinery/250 Hour Service**

## **SANDVIK 16712**

Component Compressor

| RECOMMENDATION  | Test               | UOM    | Method          | Limit/Abn | Current     | History1    | History2    |
|---|--------------------|--------|-----------------|-----------|-------------|-------------|-------------|
| Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. | Sample Number      |        | Client Info     |           | ASC0001535  | ASC0005441  | VCP0006659  |
|   | Sample Date        |        | Client Info     |           | 17 Jan 2024 | 20 Oct 2023 | 19 Apr 2023 |
|   | Machine Age        | hrs    | Client Info     |           | 11392       | 10901       | 9909        |
|   | Oil Age            | hrs    | Client Info     |           | 491         | 992         | 361         |
|   | Filter Age         | hrs    | Client Info     |           | 0           | 0           | 361         |
|   | Oil Changed        |        | Client Info     |           | Changed     | Changed     | Changed     |
|   | Filter Changed     |        | Client Info     |           | Changed     | Changed     | Changed     |
|   | Sample Status      |        |                 |           | ABNORMAL    | NORMAL      | ABNORMA     |
| WEAR  | Iron               | ppm    | ASTM D5185m     | >50       | 4           | 2           | 2           |
| All component wear rates are normal.  | Chromium           | ppm    | ASTM D5185m     | >5        | <1          | 0           | 0           |
|   | Nickel             | ppm    | ASTM D5185m     |           | 0           | 0           | 0           |
|   | Titanium           | ppm    | ASTM D5185m     |           | <1          | 0           | 0           |
|   | Silver             | ppm    | ASTM D5185m     |           | 0           | 0           | 0           |
|   | Aluminum           | ppm    | ASTM D5185m     | >15       | 2           | 1           | 0           |
|   | Lead               | ppm    | ASTM D5185m     | >65       | 0           | 0           | 0           |
|   | Copper             | ppm    | ASTM D5185m     | >65       | <1          | <1          | 1           |
|   | Tin                | ppm    | ASTM D5185m     | >10       | 0           | <1          | 0           |
|   | Vanadium           | ppm    | ASTM D5185m     |           | 0           | 0           | 0           |
|   | White Metal        | scalar | *Visual         | NONE      | NONE        | NONE        | NONE        |
|   | Yellow Metal       | scalar | *Visual         | NONE      | NONE        | NONE        | NONE        |
| CONTAMINATION   | Silicon            | ppm    | ASTM D5185m     | >35       | <u> </u>    | 12          | <1          |
| Elemental level of silicon (Si) above normal indicating ingress of seal material.                               | Potassium          | ppm    | ASTM D5185m     |           | 27          | 2           | <1          |
|   | Water              |        | WC Method       | >0.1      | NEG         | NEG         | NEG         |
|   | Silt               | scalar | *Visual         | NONE      | NONE        | NONE        | NONE        |
|   | Debris             | scalar | *Visual         | NONE      | NONE        | NONE        | NONE        |
|   | Sand/Dirt          | scalar | *Visual         | NONE      | NONE        | NONE        | NONE        |
|   | Appearance         | scalar | *Visual         | NORML     | NORML       | NORML       | NORML       |
|   | Odor               | scalar | *Visual         | NORML     | NORML       | NORML       | NORML       |
|   | Emulsified Water   | scalar | *Visual         | >0.1      | NEG         | NEG         | 0.2%        |
| FLUID CONDITION   | Sodium             | ppm    | ASTM D5185m     |           | 12          | 8           | 2           |
| Viscosity of sample indicates oil is within ISO 68 range, advise investigate. Confirm oil type.                 | Boron              | ppm    | ASTM D5185m     |           | 28          | 3           | 0           |
|   | Barium             | ppm    | ASTM D5185m     |           | 4           | 0           | 0           |
|   | Molybdenum         | ppm    | ASTM D5185m     |           | 11          | 1           | 0           |
|   | Manganese          | ppm    | ASTM D5185m     |           | 0           | 0           | 0           |
|   | Magnesium          | ppm    | ASTM D5185m     |           | 35          | 19          | 2           |
|   | Calcium            | ppm    | ASTM D5185m     |           | 1189        | 2530        | 49          |
|   |                    |        | ASTM D5185m     |           | 451         | 732         | 79          |
|   | Phosphorus         | ppm    | AOTIVI DOTOSIII |           | -           |             |             |
|   | Phosphorus<br>Zinc | ppm    | ASTM D5185m     |           | 503         | 851         | 46          |
|   | •                  |        |                 |           |             |             |             |







Certificate L2367

Laboratory Sample No. Lab Number **Unique Number** 

: 06073395 : 10850072 Test Package : MOBCE

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ASC0001535 : 29 Jan 2024 Recieved : 01 Feb 2024 Diagnosed Diagnostician

: Jonathan Hester

**MARTIN MARIETTA** 4551 BEATTIES FORD ROAD CHARLOTTE, NC US 28216 Contact: TIM BYLES

tim.byles@martinmarrietta.com T: (704)392-1333

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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