



# OIL ANALYSIS REPORT

|                 |           |
|-----------------|-----------|
| WEAR            | NORMAL    |
| CONTAMINATION   | ATTENTION |
| FLUID CONDITION | NORMAL    |

Area  
**DEBARKING WASTE**  
Machine Id  
**Waste Shredder (S/N DW205H82)**  
Component  
**Hydraulic System**  
Fluid  
**SHELL TELLUS S2 M 68 (150 GAL)**

## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>WC0834626</b>   | WC0782989   | WC06042656  |
| Sample Date    |     | Client Info |           | <b>19 Feb 2024</b> | 19 Jan 2024 | 18 Dec 2023 |
| Machine Age    | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | N/A         | N/A         |
| Sample Status  |     |             |           | <b>ATTENTION</b>   | SEVERE      | ABNORMAL    |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |      |
|--------------|--------|-------------|------|--------------|------|------|
| Iron         | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0    | 0    |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | 0    | 0    |
| Nickel       | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0    | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0    | 0    |
| Lead         | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0    | 0    |
| Copper       | ppm    | ASTM D5185m | >20  | <b>0</b>     | <1   | <1   |
| Tin          | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | <1   |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | NONE |

## CONTAMINATION

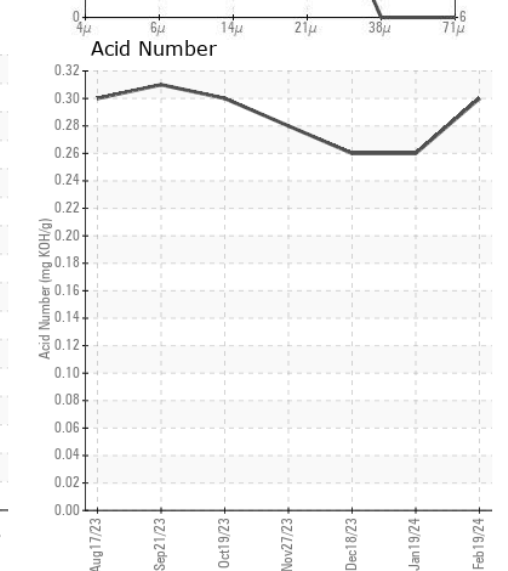
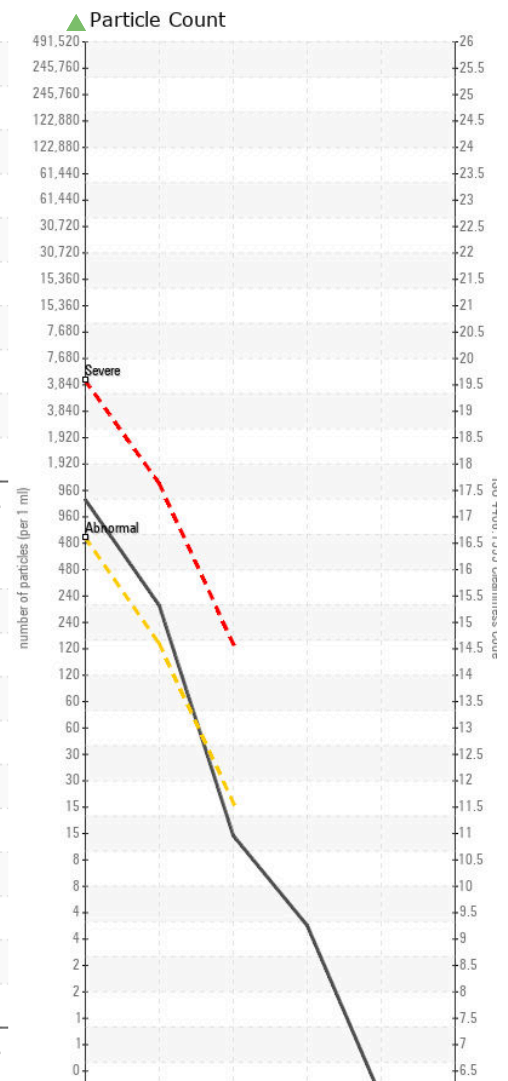
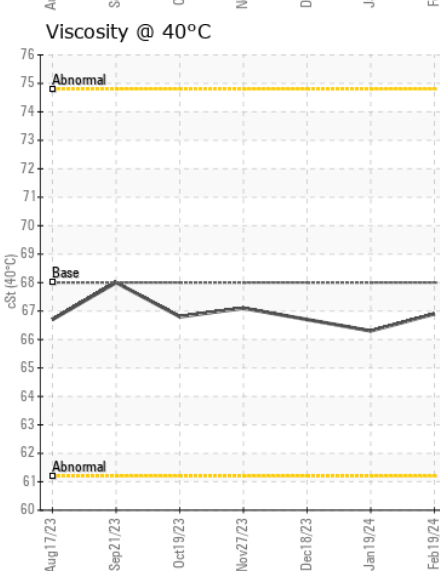
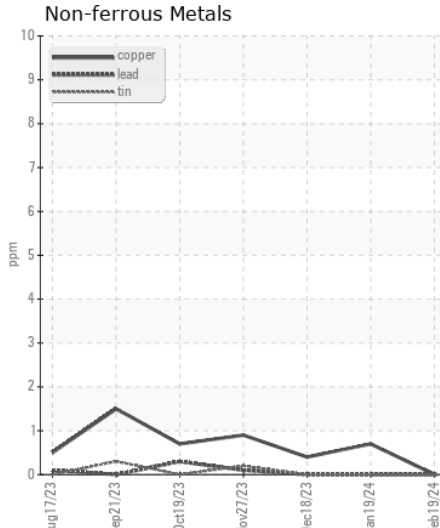
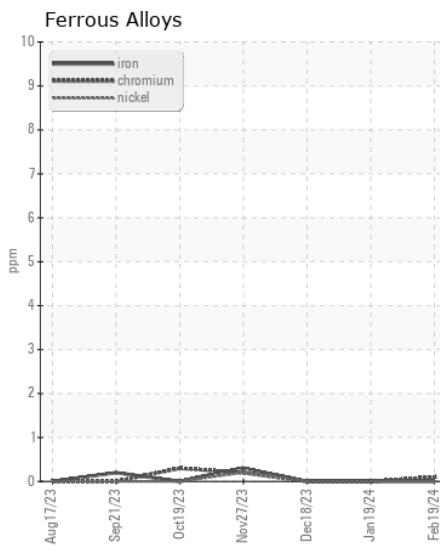
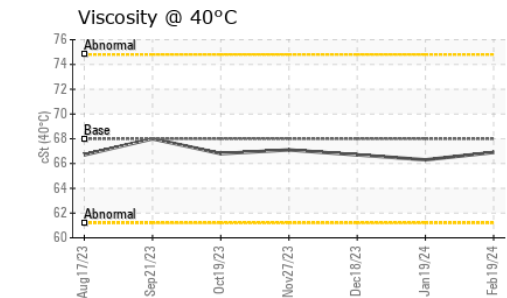
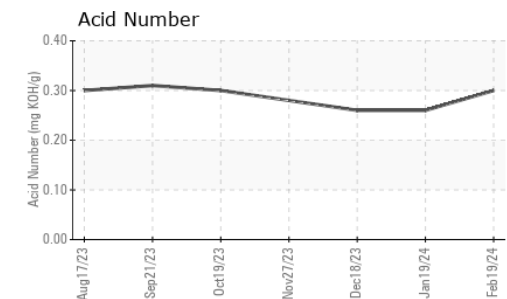
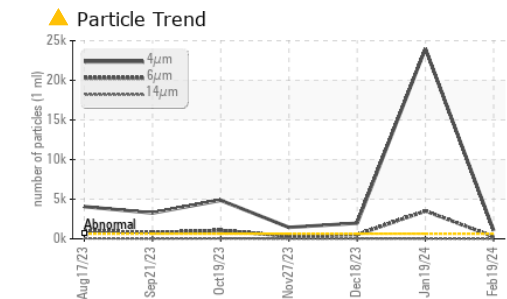
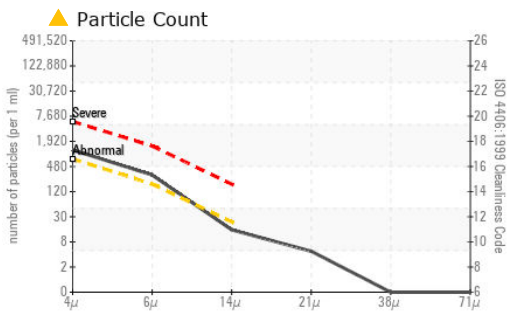
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

|                  |        |              |           |                   |            |            |
|------------------|--------|--------------|-----------|-------------------|------------|------------|
| Silicon          | ppm    | ASTM D5185m  | >15       | <b>&lt;1</b>      | <1         | 2          |
| Potassium        | ppm    | ASTM D5185m  | >20       | <b>0</b>          | 0          | 0          |
| Water            |        | WC Method    | >0.05     | <b>NEG</b>        | NEG        | NEG        |
| Particles >4µm   |        | ASTM D7647   | >640      | <b>▲ 1053</b>     | ● 23993    | ▲ 1974     |
| Particles >6µm   |        | ASTM D7647   | >160      | <b>▲ 264</b>      | ● 3518     | ▲ 531      |
| Particles >14µm  |        | ASTM D7647   | >20       | <b>13</b>         | ▲ 27       | ▲ 34       |
| Particles >21µm  |        | ASTM D7647   | >4        | <b>4</b>          | 4          | ▲ 8        |
| Particles >38µm  |        | ASTM D7647   | >3        | <b>0</b>          | 0          | 1          |
| Particles >71µm  |        | ASTM D7647   | >3        | <b>0</b>          | 0          | 1          |
| Oil Cleanliness  |        | ISO 4406 (c) | >16/14/11 | <b>▲ 17/15/11</b> | ● 22/19/12 | ▲ 18/16/12 |
| Silt             | scalar | *Visual      | NONE      | <b>NONE</b>       | NONE       | NONE       |
| Debris           | scalar | *Visual      | NONE      | <b>NONE</b>       | NONE       | NONE       |
| Sand/Dirt        | scalar | *Visual      | NONE      | <b>NONE</b>       | NONE       | NONE       |
| Appearance       | scalar | *Visual      | NORML     | <b>NORML</b>      | NORML      | NORML      |
| Odor             | scalar | *Visual      | NORML     | <b>NORML</b>      | NORML      | NORML      |
| Emulsified Water | scalar | *Visual      | >0.05     | <b>NEG</b>        | NEG        | NEG        |

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                  |          |             |    |              |      |      |
|------------------|----------|-------------|----|--------------|------|------|
| Sodium           | ppm      | ASTM D5185m |    | <b>&lt;1</b> | 1    | <1   |
| Boron            | ppm      | ASTM D5185m |    | <b>&lt;1</b> | <1   | 0    |
| Barium           | ppm      | ASTM D5185m |    | <b>0</b>     | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m |    | <b>&lt;1</b> | <1   | 1    |
| Manganese        | ppm      | ASTM D5185m |    | <b>0</b>     | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m |    | <b>10</b>    | 10   | 5    |
| Calcium          | ppm      | ASTM D5185m |    | <b>70</b>    | 88   | 63   |
| Phosphorus       | ppm      | ASTM D5185m |    | <b>334</b>   | 320  | 332  |
| Zinc             | ppm      | ASTM D5185m |    | <b>437</b>   | 422  | 424  |
| Sulfur           | ppm      | ASTM D5185m |    | <b>823</b>   | 785  | 828  |
| Acid Number (AN) | mg KOH/g | ASTM D8045  |    | <b>0.30</b>  | 0.26 | 0.26 |
| Visc @ 40°C      | cSt      | ASTM D445   | 68 | <b>66.9</b>  | 66.3 | 66.7 |



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0834626 **Received** : 22 Feb 2024  
**Lab Number** : 06097638 **Tested** : 23 Feb 2024  
**Unique Number** : 10890491 **Diagnosed** : 23 Feb 2024 - Wes Davis  
**Test Package** : IND 2

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

\* - 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)