

DEBARKING WASTE Machine Id Waste Shredder (S/N DW205H82)

Hydraulic System

SHELL TELLUS S2 M 68 (150 GAL)

RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

CONTAMINATION

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The system cleanliness is above the acceptable limit for the target ISO 4406 cleanliness code.

| | | | | | | |
|------------------|------------|----------------------------|-----------|-------------|-------------|-------------|
| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Sample Number | | Client Info | | WC0783044 | WC06157632 | WC0895048 |
| Sample Date | | Client Info | | 24 May 2024 | 18 Apr 2024 | 21 Mar 2024 |
| Machine Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | ATTENTION | NORMAL |
| | | | | | | |
| Iron | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Chromium | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Nickel | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | 2 | 0 |
| Lead | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Tin | ppm | ASTM D5185m | >20 | 0 | <1 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >15 | <1 | 1 | <1 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | 1 | 0 |
| Water | PP | WC Method | >0.05 | NEG | NEG | NEG |
| Particles >4µm | | ASTM D7647 | >640 | 1199 | 722 | 479 |
| Particles >6µm | | ASTM D7647 | >160 | A 362 | 172 | 89 |
| Particles >14µm | | ASTM D7647 | >20 | 29 | 10 | 5 |
| Particles >21µm | | ASTM D7647 | >4 | 8 | 2 | 2 |
| Particles >38µm | | ASTM D7647 | >3 | 0 | 0 | 1 |
| Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | 0 |
| Oil Cleanliness | | ISO 4406 (c) | >16/14/11 | A 17/16/12 | 17/15/10 | 16/14/10 |
| 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 | >0.05 | NEG | NEG | NEG |
| 0 | | | | 4 | _ | |
| Sodium | ppm | ASTM D5185m | | <1 | 0 | <1 |
| Boron Barium | ppm | ASTM D5185m ASTM D5185m | | 0 | <1 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 0 1 | 2 | <1 |
| Manganese | ppm ppm | ASTM D5185m | | 0 | 2 | < 1 |
| Magnesium | ppm | ASTM D5185m | | 6 | 10 | 5 |
| Calcium | ppm | ASTM D5185m | | 6 72 | 67 | 71 |
| Phosphorus | ppm | ASTM D5185m | | 341 | 317 | 344 |
| Zinc | ppm | ASTM D5185m | | 439 | 441 | 419 |
| Sulfur | ppm | ASTM D5185m | | 1003 | 839 | 982 |
| Acid Number (AN) | mg KOH/g | ASTM D3103III | | 0.27 | 0.30 | 0.31 |
| | -C+ | | 60 | 65.0 | 66.9 | 66.9 |

Visc @ 40°C cSt ASTM D445 68

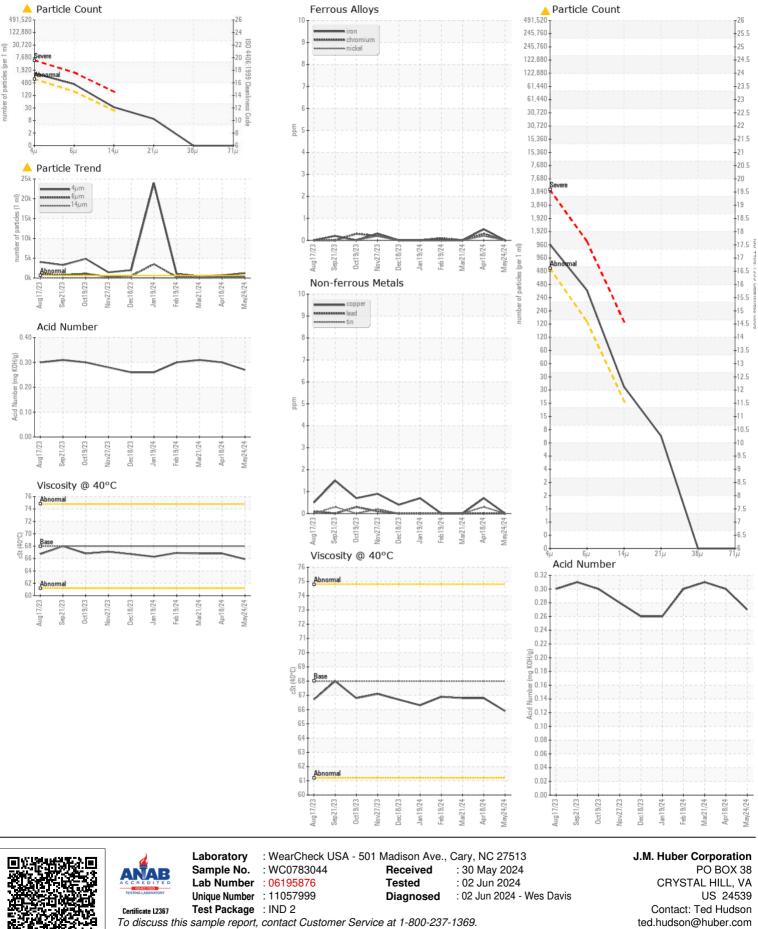
FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

66.8

66.8

65.9



* - 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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