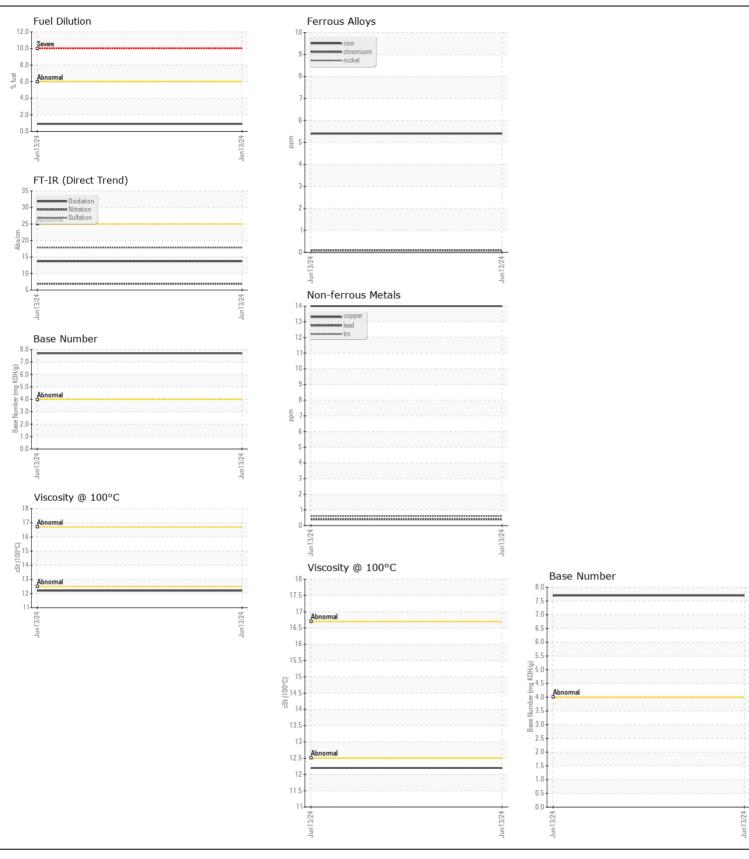
WEAR CONTAMINATION FLUID CONDITION **NORMAL NORMAL NORMAL**



(PJW00664) Ascendum Machinery/250 Hour CSA VOLVO EC380 2188 (S/N 314669) Component Diesel Engine

{not provided} (--- GAL)

| (not provided) (GAE) | | | | | | | |
|---|----------------------------------|-----------------|----------------------------|-----------|-------------|----------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. | Sample Number | | Client Info | | ASC0011238 | | |
| | Sample Date | | Client Info | | 13 Jun 2024 | | |
| | Machine Age | hrs | Client Info | | 6542 | | |
| | 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 All component wear rates are normal. | Iron | ppm | ASTM D5185m | >100 | 5 | | |
| | Chromium | ppm | ASTM D5185m | >10 | <1 | | |
| | Nickel | ppm | ASTM D5185m | >10 | 0 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | >2 | 0 | | |
| | Aluminum | ppm | ASTM D5185m | >10 | 1 | | |
| | Lead | ppm | ASTM D5185m | >20 | <1 | | |
| | Copper | ppm | ASTM D5185m | >15 | 14 | | |
| | Tin | ppm | ASTM D5185m | >10 | <1 | | |
| | Vanadium | ppm | ASTM D5185m | | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | | 5 | | |
| Fuel content negligible. There is no indication of any contamination in the oil. | Potassium | ppm | ASTM D5185m | >20 | <1 | | |
| | Fuel | % | ASTM D3524 | | 0.9 | | |
| | Water | | WC Method | >0.1 | NEG | | |
| | Glycol | | WC Method | | NEG | | |
| | Soot % | % | *ASTM D7844 | >3 | 0.1 | | |
| | Nitration | Abs/cm | *ASTM D7624 | >20 | 6.9 | | |
| | Sulfation | Abs/.1mm | *ASTM D7415 | | 17.8 | | |
| | Silt | scalar | *Visual | NONE | NONE | | |
| | Debris | scalar | *Visual | NONE | NONE | | |
| | Sand/Dirt | scalar | *Visual | NONE | NONE | | |
| | Appearance | scalar | *Visual | NORML | NORML | | |
| | Odor | scalar | *Visual | NORML | NORML | | |
| | Emulsified Water | scalar | *Visual | >0.1 | NEG | | |
| FLUID CONDITION | Cadium | | ASTM D5185m | | 0 | | |
| TEOD CONDITION | Sodium Boron | ppm | | | 2 5 | | |
| The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. | Barium | ppm | ASTM D5185m ASTM D5185m | | 0 | | |
| | Molybdenum | ppm | ASTM D5185m | | 62 | | |
| | • | ppm | | | | | |
| | Manganese Magnesium | ppm | ASTM D5185m ASTM D5185m | | <1 874 | | |
| | Calcium | ppm | ASTM D5185m | | 1129 | | |
| | | ppm | | | | | |
| | Phosphorus | ppm | ASTM D5185m | | 1070 | | |
| | Zinc | ppm | ASTM D5185m | | 1215 | | |
| | Sulfur Oxidation | ppm Abo/ 1mm | ASTM D5185m | - 2F | 3460 | | |
| | | Abs/.1mm | *ASTM D7414 | >20 | 13.7 | | |
| | Base Number (BN) Visc @ 100°C | | | | 7.7 | | |
| | visc @ 100°C | cSt | ASTM D445 | ' | 12.2 | | |







Laboratory Sample No.

Lab Number : 06209829 Unique Number : 11082693

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : ASC0011238

Received **Tested** Diagnosed

Test Package: CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

: 19 Jun 2024 - Wes Davis

: 14 Jun 2024

: 19 Jun 2024

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* - 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)