

WEAR CONTAMINATION FLUID CONDITION

SEVERE SEVERE ATTENTION



310571 VOLVO EC480E 310571

| Right Final Drive | | | | | | | |
|---|------------------|--------|-------------|-----------|------------------|-------------|-------------|
| CHEVRON DELO GEAR ESI OIL | . 80W90 (| - GAL | _) | | | | |
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. | Sample Number | | Client Info | | DJJ0018903 | DJJ0010136 | DJJ0001721 |
| | Sample Date | | Client Info | | 11 Feb 2024 | 21 Apr 2021 | 02 Oct 2020 |
| | Machine Age | hrs | Client Info | | 0 | 4876 | 4359 |
| | Oil Age | hrs | Client Info | | 0 | 1000 | 1000 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | N/A | Not Changd | Not Changd |
| | Filter Changed | | Client Info | | N/A | N/A | N/A |
| | Sample Status | | | | SEVERE | NORMAL | NORMAL |
| WEAR | Iron | ppm | ASTM D5185m | >500 | 3665 | 658 | 289 |
| Gear wear is indicated. | Chromium | ppm | ASTM D5185m | >10 | 3 6 | 8 | 4 |
| | Nickel | ppm | ASTM D5185m | >10 | 5 | <1 | 0 |
| | Titanium | ppm | ASTM D5185m | | 16 | 3 | <1 |
| | Silver | ppm | ASTM D5185m | >2 | 0 | <1 | <1 |
| | Aluminum | ppm | ASTM D5185m | >100 | 116 | 20 | 7 |
| | Lead | ppm | ASTM D5185m | >50 | 4 | <1 | 0 |
| | Copper | ppm | ASTM D5185m | >50 | 6 | 2 | <1 |
| | Tin | ppm | ASTM D5185m | >10 | 0 | <1 | 0 |
| | Vanadium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >100 | 803 | 108 | 35 |
| Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. | Potassium | ppm | ASTM D5185m | >20 | 20 | 3 | 2 |
| | Water | | WC Method | >0.25 | 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 | >0.25 | NEG | NEG | NEG |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 10 | 2 | <1 |
| Confirm oil type. The oil is no longer serviceable due to the presence of contaminants. | Boron | ppm | ASTM D5185m | 15 | 159 | 122 | 105 |
| | Barium | ppm | ASTM D5185m | 0 | 14 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | 0 | 9 | 6 | 6 |
| | Manganese | ppm | ASTM D5185m | | ▲ 32 | 7 | 3 |
| | Magnesium | ppm | ASTM D5185m | 0 | 56 | 27 | 28 |
| | Calcium | ppm | ASTM D5185m | | ▲ 651 | 140 | 96 |
| | Phosphorus | ppm | ASTM D5185m | | & 819 | 955 | 883 |
| | Zinc | ppm | ASTM D5185m | 0 | 98 | 90 | 86 |

Sulfur

Visc @ 40°C

13020

128

24552

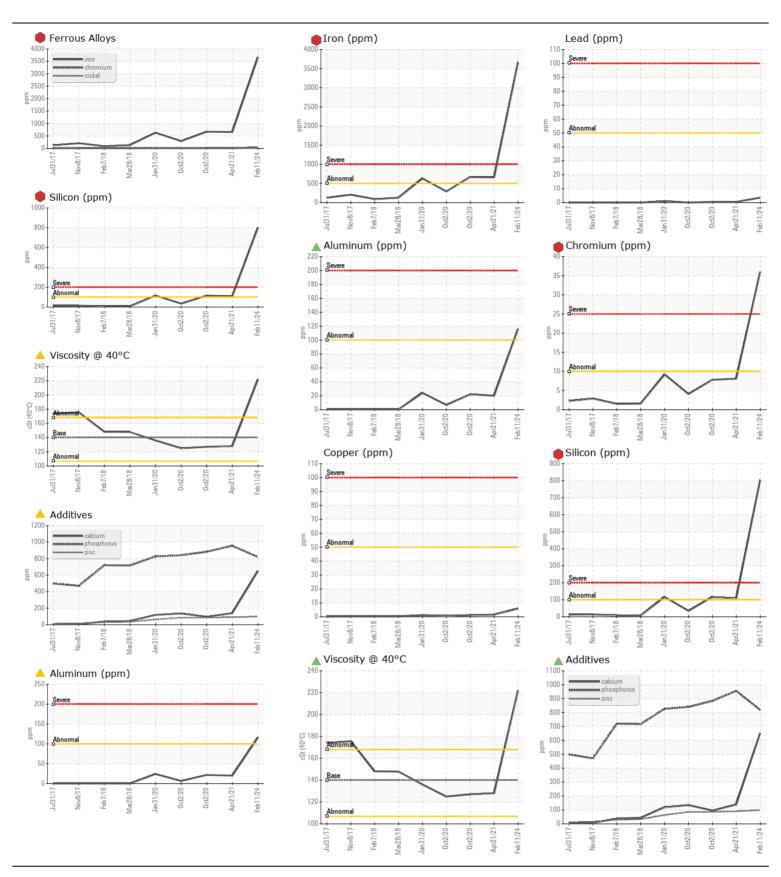
222

ASTM D5185m 22000

ASTM D445 140

ppm

14918





Certificate L2367

Laboratory Sample No.

Lab Number : 06086336

: DJJ0018903 Unique Number: 10873781

Test Package : MOBCE

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 12 Feb 2024 Received : 13 Feb 2024 **Tested**

: 13 Feb 2024 - Sean Felton Diagnosed

TEXAS PORT RECYCLING - HOUSTON PORT 8945 MANCHESTER ST

HOUSTON, TX US 77012

Contact: Dale Shaw

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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)