WEAR CONTAMINATION FLUID CONDITION

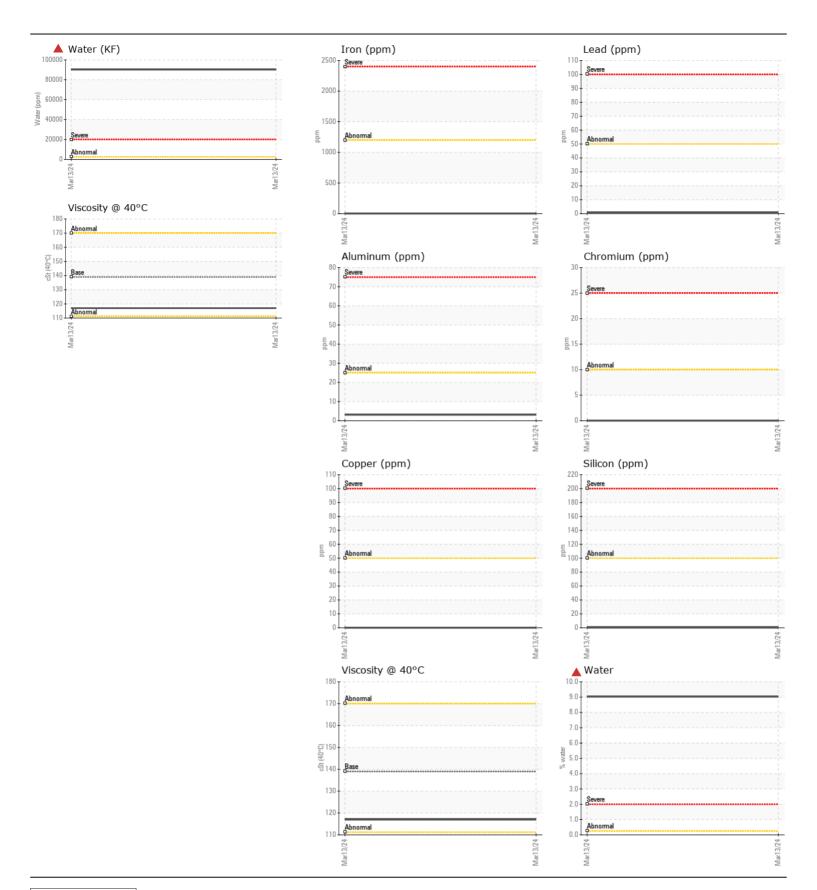
NORMAL SEVERE NORMAL



[41355 CHEROKEE] VOLVO EC250EL 310021

Swing Drive

| VOLVO PREMIUM GEAR OIL 80 | 744-90 GE-3 | .\ | <u>^_</u> / | | | | |
|---|--|--|--|--|--|------------------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| We advise that you check for the source of water entry. The oil change | Sample Number | | Client Info | | VCP444302 | | |
| at the time of sampling has been noted. We recommend an early | Sample Date | | Client Info | | 13 Mar 2024 | | |
| resample to monitor this condition. | Machine Age | hrs | Client Info | | 6931 | | |
| | Oil Age | hrs | Client Info | | 0 | | |
| | Filter Age | hrs | Client Info | | 0 | | |
| | Oil Changed | | Client Info | | Changed | | |
| | Filter Changed | | Client Info | | N/A | | |
| | Sample Status | | | | SEVERE | | |
| WEAR | Iron | ppm | ASTM D5185m | >1200 | 0 | | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185m | >10 | 0 | | |
| | Nickel | ppm | ASTM D5185m | >10 | 0 | | |
| | Titanium | ppm | ASTM D5185m | | 0 | | |
| | Silver | ppm | ASTM D5185m | | 0 | | |
| | Aluminum | ppm | ASTM D5185m | >25 | 3 | | |
| | Lead | ppm | ASTM D5185m | >50 | <1 | | |
| | Copper | ppm | ASTM D5185m | >50 | 0 | | |
| | Tin | ppm | ASTM D5185m | >10 | 0 | | |
| | Vanadium | ppm | ASTM D5185m | | 0 | | |
| | White Metal | scalar | *Visual | NONE | NONE | | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | | |
| | | | | | | | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >100 | <1 | | |
| CONTAMINATION There is a high concentration of water present in the cil. | Silicon Potassium | ppm | ASTM D5185m ASTM D5185m | | <1 9 | | |
| CONTAMINATION There is a high concentration of water present in the oil. | | | | | | | |
| | Potassium | ppm | ASTM D5185m | >20 | 9 | | |
| | Potassium Water | ppm % | ASTM D5185m ASTM D6304 | >20 >0.25 | 9 ▲ 9.03 | | |
| | Potassium Water ppm Water | ppm % | ASTM D5185m ASTM D6304 ASTM D6304 | >20 >0.25 >2500 | 9 ▲ 9.03 ▲ 90300 | | |
| | Potassium Water ppm Water Silt | ppm % ppm scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual | >20 >0.25 >2500 NONE | 9 ▲ 9.03 ▲ 90300 NONE | | |
| | Potassium Water ppm Water Silt Debris | ppm % ppm scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual | >20 >0.25 >2500 NONE NONE | 9 ▲ 9.03 ▲ 90300 NONE NONE | | |
| | Potassium Water ppm Water Silt Debris Sand/Dirt | ppm % ppm scalar scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual | >20 >0.25 >2500 NONE NONE | 9 ▲ 9.03 ▲ 90300 NONE NONE | | |
| | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance | ppm % ppm scalar scalar scalar scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual | >20 >0.25 >2500 NONE NONE NONE | 9 9.03 90300 NONE NONE NONE NORML | | |
| There is a high concentration of water present in the oil. | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor | ppm % ppm scalar scalar scalar scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual | >20 >0.25 >2500 NONE NONE NONE NORML | 9 • 9.03 • 90300 NONE NONE NONE NORML NORML | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water | ppm % ppm scalar scalar scalar scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *Visual | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 | 9 • 9.03 • 90300 NONE NONE NONE NORML NORML • 0.2% | | |
| There is a high concentration of water present in the oil. | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium | ppm % ppm scalar scalar scalar scalar scalar scalar | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML ▲ 0.2% | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron | ppm % ppm scalar scalar scalar scalar scalar ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML A 0.2% | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium | ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML ▲ 0.2% 0 25 0 | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum | ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 0.8 0.0 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML ▲ 0.2% 0 25 0 0 | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese | ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 0.8 0.0 31 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML 0.2% 0 25 0 0 0 | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium | ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 0.8 0.0 31 38 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML △ 0.2% 0 25 0 0 7 | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *Tisual *Visual *Tisual *Tis | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 0.8 0.0 31 38 1077 46 | 9 • 9.03 • 90300 • NONE • NONE • NORML • NORML • 0.2% 0 25 0 0 0 7 0 | | |
| There is a high concentration of water present in the oil. FLUID CONDITION | Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus | ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp | ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual *ASTM D5185m ASTM D5185m | >20 >0.25 >2500 NONE NONE NORML NORML >0.25 379 0.0 0.8 0.0 31 38 1077 46 23526 | 9 ▲ 9.03 ▲ 90300 NONE NONE NORML NORML ▲ 0.2% 0 25 0 0 7 0 116 | | |





Certificate L2367

Laboratory Sample No.

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

: VCP444302 Lab Number : 06121171 Unique Number: 10930004

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

Received **Tested** Diagnosed Test Package: MOB 1 (Additional Tests: KF)

: 18 Mar 2024 : 19 Mar 2024 : 20 Mar 2024 - Don Baldridge

215 - ASCENDUM MACHINERY INC - CAYCE 2303 AIRPORT BLVD

CAYCE, SC US 29033

T: (803)394-6783

Contact: ROBBY HERLONG robby.herlong@ascendummachinery.com

* - 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) F: (803)791-9920