WEAR CONTAMINATION FLUID CONDITION

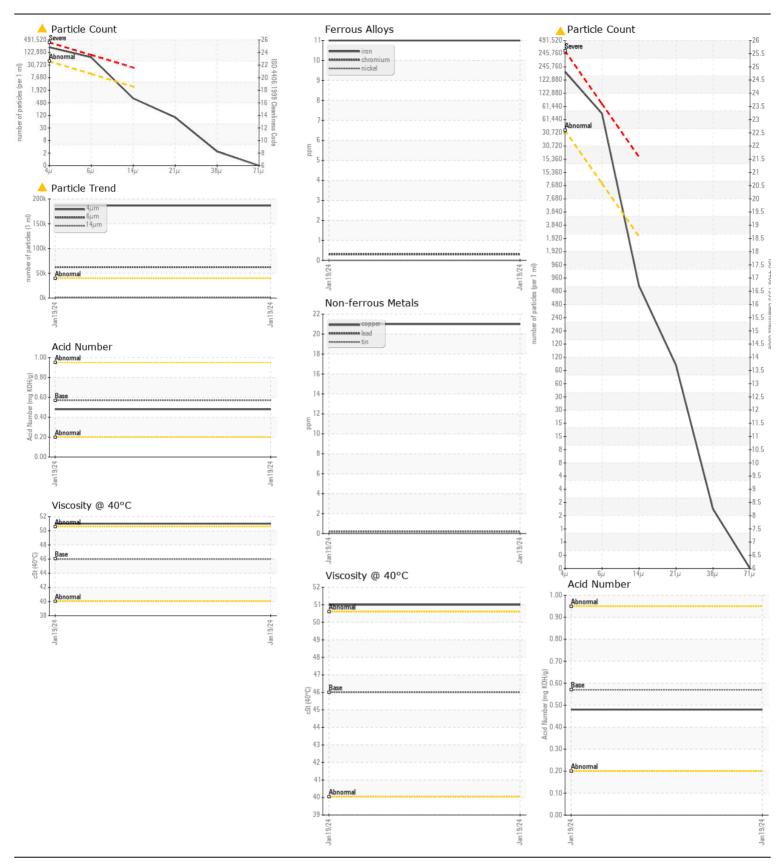
NORMAL ABNORMAL NORMAL



[SPM659984-10] **VOLVO EC300EL 314537**

Component Hydraulic System

Test
No corrective action is recommended at this time. The filter change at he time of sampling has been noted. Resample at the next service interval to monitor. Sample Date Client Info Machine Age hrs Client Info O O O O O O O O O
he time of sampling has been noted. Resample at the next service neterval to monitor. Sample Date Machine Age hrs Client Info 0
National Page Institute Age Institute Ag
Coll Age hrs Cilent Info Chemsel Cilent Info Changed Chang
Oil Changed Client Info N/A
Filter Changed Sample Status Client Info ABNORMAL Changed ABNORMAL Changed ABNORMAL Chromium Chr
VEAR
VEAR
Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m <1 Silver ppm ASTM D5185m >0 1 Aluminum ppm ASTM D5185m >20 1 Lead ppm ASTM D5185m >20 <1 Lead ppm ASTM D5185m >150 21 Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >0 4 Valuer WC Method >0.1 NONE NONE Particles >4µm ASTM D7647 >40000 62308 Particles >14µm ASTM D7647 >640 86 Particles >21µm ASTM D7647 >640 86 Particles >38µm ASTM D7647 >640 0 0 Particles >38µm ASTM D7647 >40 0 0 Oil Cleanliness Iso 4406 (c) >222018 >2523117 Silte Scalar *Visual NONE LIGHT
Chromium ppm ASTM D5185m >10 <1 Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m >10 0 Silver ppm ASTM D5185m >20 1 Aluminum ppm ASTM D5185m >20 1 Lead ppm ASTM D5185m >20 <1 Copper ppm ASTM D5185m >150 21 Tin ppm ASTM D5185m >10 <1 Vanadium ppm ASTM D5185m >0 4 Vanadium ppm ASTM D5185m >0 ASTM D5185m >0 Valuer WC Method >0.1 NONE NONE Valuer WC Method >0.1 NEG Particles >4µm ASTM D7647 >40000 A 186568 Particles >14µm ASTM D7647 >640 86 Particles >21µm ASTM D7647 >640 86 Particles >21µm ASTM D7647 >640 86 Particles >21µm ASTM D7647 >640 86 Particles >38µm ASTM D7647 >640 0 0 Oil Cleanliness Silt Sou 4406 (c) \$222018 \$2523/17 Silte Scalar *Visual NONE LIGHT
Nickel ppm ASTM D5185m >10 0
Titanium ppm ASTM D5185m 0
Silver ppm ASTM D5185m >20 1
Aluminum ppm ASTM D5185m >20 1
Lead ppm ASTM D5185m >20 <1 ··· ··· ··· Copper ppm ASTM D5185m >10 <1 ··· ··· ··· ··· ··· ··· ··· ··· ···
Copper
Tin ppm ASTM D5185m >10 <1
Vanadium ppm ASTM D5185m <1 White Metal scalar *Visual NONE NONE NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE NONE Yellow Metal scalar *Visual NONE Yellow Metal scalar *Visual *Visual NONE Yellow Metal scalar *Visual
White Metal Scalar *Visual NONE
Yellow Metal Scalar *Visual NONE NONE CONTAMINATION Potassium ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 0 Water WC Method >0.1 NEG Particles >4μm ASTM D7647 >40000 186568 Particles >6μm ASTM D7647 >2500 686 Particles >21μm ASTM D7647 >640 86 Particles >38μm ASTM D7647 >4000 2 Particles >71μm ASTM D7647 >4000 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) ≥22/20/18 ≥5/23/17 Silt Scalar *Visual NONE LIGHT
Silicon ppm ASTM D5185m >50 4 Potassium ppm ASTM D5185m >20 0 Water WC Method >0.1 NEG Particles >4µm ASTM D7647 >40000 186568 Particles >14µm ASTM D7647 >2500 686 Particles >21µm ASTM D7647 >640 86 Particles >38µm ASTM D7647 >40 0 Particles >71µm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) >22/20/18 25/23/17 Silt Scalar *Visual NONE LIGHT
Potassium ppm ASTM D5185m >20 0
Potassium ppm ASTM D5185m >20 0
Water WC Method >0.1 NEG Particles >4μm ASTM D7647 >40000 186568 Particles >6μm ASTM D7647 >10000 62308 Particles >14μm ASTM D7647 >2500 686 Particles >21μm ASTM D7647 >640 86 Particles >38μm ASTM D7647 >160 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) ≥22/0/18 ≥25/23/17 Silt scalar *Visual NONE LIGHT
Particles >4μm
Particles >6μm ASTM D7647 >10000 ▲ 62308 Particles >14μm ASTM D7647 >2500 686 Particles >21μm ASTM D7647 >640 86 Particles >38μm ASTM D7647 >160 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) >22/20/18 25/23/17 Silt scalar *Visual NONE LIGHT
Particles >14μm ASTM D7647 >2500 686 Particles >21μm ASTM D7647 >640 86 Particles >38μm ASTM D7647 >160 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) >22/20/18 Δ 25/23/17 Silt scalar *Visual NONE LIGHT
Particles >38μm ASTM D7647 >160 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) ≥22/20/18 Δ 25/23/17 Silt scalar *Visual NONE LIGHT
Particles >38μm ASTM D7647 >160 2 Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) >22/20/18 Δ 25/23/17 Silt scalar *Visual NONE LIGHT
Particles >71μm ASTM D7647 >40 0 Oil Cleanliness ISO 4406 (c) >22/20/18 ▲ 25/23/17 Silt scalar *Visual NONE LIGHT
Oil Cleanliness ISO 4406 (c) >22/20/18 ▲ 25/23/17 Silt scalar *Visual NONE LIGHT
Silt scalar *Visual NONE LIGHT
Sand/Dirt scalar *Visual NONE NONE
Appearance scalar *Visual NORML
Odor scalar *Visual NORML
Emulsified Water scalar *Visual >0.1 NEG
FLUID CONDITION Sodium ppm ASTM D5185m <1
Boron ppm ASTM D5185m 5 0
The AN level is acceptable for this fluid. The condition of the oil is Barium ppm ASTM D5185m 5 O Suitable for further service.
Molybdenum ppm ASTM D5185m 5 <1
Manganese ppm ASTM D5185m 2
Magnesium ppm ASTM D5185m 25 4
Calcium ppm ASTM D5185m 200 86
Phosphorus ppm ASTM D5185m 300 331
Zinc ppm ASTM D5185m 370 376
Sulfur ppm ASTM D5185m 2500 832
Acid Number (AN) mg KOH/g ASTM D8045 0.57 0.48
Visc @ 40°C cSt ASTM D445 46 51.0





Certificate L2367

Laboratory Sample No.

: VCP420978 Lab Number : 06075666 : 10857757 **Unique Number** Test Package : MOB 2

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 31 Jan 2024 Recieved Diagnosed : 01 Feb 2024 : Don Baldridge Diagnostician

ALTA EQUIPMENT COMPANY 5151 DR MARTIN LUTHER KING BLVD

FORT MYERS, FL US 33905

Contact: TODD LARK

tlark@altaequipfl.com T:

F: (239)481-3302

* - 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)

Contact/Location: TODD LARK - VOLVO0090