



CONSTRUCTION EQUIPMENT

VOLVO EC380EL 315682 - DIESEL ENGINE



Sample No: VCP450776
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP450776	VCP441084	---	---
Sample Date	17 Jun 2024	29 Jan 2024	---	---
Machine Hours	1607	618	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

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



OIL CONDITION

Visc @ 100°C	cSt	● 12.3	● 10.5	---	---
Base Number (BN)	mg KOH/g	■ 6.2	■ 4.5	---	---
Oxidation (PA)	%	87	70	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.1	■ 0.1	---	---
Nitration (PA)	%	83	88	---	---
Sulfation (PA)	%	63	61	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 1.2	---	---
Silicon	ppm	■ 6	■ 25	---	---
Sodium	ppm	■ 2	■ 4	---	---
Potassium	ppm	■ <1	■ 6	---	---



WEAR METALS

Iron	ppm	■ 6	■ 10	---	---
Copper	ppm	▲ 45	▲ 276	---	---
Lead	ppm	■ 0	■ 2	---	---
Tin	ppm	■ 0	■ 2	---	---
Aluminum	ppm	■ <1	■ 3	---	---
Chromium	ppm	■ 0	■ 0	---	---
Molybdenum	ppm	■ 41	■ 88	---	---
Nickel	ppm	■ 0	■ <1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	■ 0	■ 0	---	---
Manganese	ppm	■ <1	■ 3	---	---
Vanadium	ppm	0	<1	---	---



ADDITIVES

Calcium	ppm	■ 1685	■ 2158	---	---
Magnesium	ppm	■ 439	20	---	---
Zinc	ppm	■ 1021	■ 1240	---	---
Phosphorus	ppm	■ 821	■ 1047	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 7	■ 20	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level has decreased, but is still abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Depot: VOLVO0090
Unique No: 11087181
Signed: Sean Felton
Report Date: 21 Jun 2024



CONSTRUCTION EQUIPMENT



GRAPHS

