



CONSTRUCTION EQUIPMENT

VOLVO EC480EL 315166 - DIESEL ENGINE



Sample No: VCP449246
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No:



SAMPLE INFORMATION

Sample Number	VCP449246	VCP415830	---	---
Sample Date	22 Dec 2023	21 Sep 2023	---	---
Machine Hours	1242	2223	---	---
Oil Hours	0	2223	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ATTENTION	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	▲ 12.0	▲ 11.8	---	---
Base Number (BN)	mg KOH/g	■ 7.4	■ 4.6	---	---
Oxidation (PA)	%	79	57	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	■ 0.1	■ 0.1	---	---
Nitration (PA)	%	67	65	---	---
Sulfation (PA)	%	61	60	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 0.8	---	---
Silicon	ppm	■ 12	▲ 27	---	---
Sodium	ppm	■ 0	■ 1	---	---
Potassium	ppm	■ 2	■ 2	---	---



WEAR METALS

Iron	ppm	■ 8	■ 18	---	---
Copper	ppm	▲ 47	▲ 137	---	---
Lead	ppm	■ 0	■ 2	---	---
Tin	ppm	■ <1	■ 3	---	---
Aluminum	ppm	■ 2	■ 3	---	---
Chromium	ppm	■ <1	■ 0	---	---
Molybdenum	ppm	■ 45	■ 27	---	---
Nickel	ppm	■ <1	■ <1	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	■ 0	■ 0	---	---
Manganese	ppm	■ <1	■ 2	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

Calcium	ppm	■ 1702	■ 2132	---	---
Magnesium	ppm	■ 411	82	---	---
Zinc	ppm	■ 1059	■ 1101	---	---
Phosphorus	ppm	■ 895	■ 898	---	---
Barium	ppm	■ 0	■ 0	---	---
Boron	ppm	■ 17	■ 0	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level has decreased, but is still abnormal. 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: 10806374
Signed: Jonathan Hester
Report Date: 29 Dec 2023



CONSTRUCTION EQUIPMENT



GRAPHS

