



CONSTRUCTION EQUIPMENT

489 VOLVO EWR130E 320192 - DIESEL ENGINE



Sample No: VCP412790
Oil Type: MOBIL 15W40
Job No: 489



SAMPLE INFORMATION

Sample Number	VCP412790	---	---	---
Sample Date	18 Oct 2023	---	---	---
Machine Hours	454	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

VCES- VOLVO CONSTRUCTION EQUIPMENT
 12345 MAPLEVIEW STREET
 LAKESIDE, CA
 US 92040
 Contact: Mark Stewart
 mark.stewart@vcesvolvo.com
 T: X
 F: X



OIL CONDITION

Visc @ 100°C	cSt	▲ 10.9	---	---	---
Base Number (BN)	mg KOH/g	■ 9.5	---	---	---
Oxidation (PA)	%	82	---	---	---



CONTAMINATION

Soot %	%	■ 0.2	---	---	---
Nitration (PA)	%	56	---	---	---
Sulfation (PA)	%	60	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.8	---	---	---
Silicon	ppm	■ 27	---	---	---
Sodium	ppm	■ 4	---	---	---
Potassium	ppm	■ 8	---	---	---



WEAR METALS

Iron	ppm	■ 97	---	---	---
Copper	ppm	■ 11	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ 3	---	---	---
Aluminum	ppm	▲ 71	---	---	---
Chromium	ppm	■ 14	---	---	---
Molybdenum	ppm	■ 35	---	---	---
Nickel	ppm	▲ 10	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 4	---	---	---
Vanadium	ppm	0	---	---	---



ADDITIVES

Calcium	ppm	■ 1562	---	---	---
Magnesium	ppm	■ 546	---	---	---
Zinc	ppm	■ 1146	---	---	---
Phosphorus	ppm	■ 938	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 48	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The aluminum level is abnormal. The nickel level is abnormal. All other metal levels are typical for a new component breaking in. Fuel content negligible. 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: VOLVO4488
Unique No: 10722521
Signed: Jonathan Hester
Report Date: 03 Nov 2023



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GRAPHS

