



CONSTRUCTION EQUIPMENT

SW1032515 RFP VOLVO L200H 3003 - DIESEL ENGINE



Sample No: VCP439167
Oil Type: DIESEL ENGINE OIL SAE 15W40
Job No: SW1032515 RFP



SAMPLE INFORMATION

Sample Number	VCP439167	---	---	---
Sample Date	05 Apr 2024	---	---	---
Machine Hours	528	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

ARNOLD MACHINERY COMPANY
 4323 EAST WINSLOW AVENUE
 PHOENIX, AZ
 US 85040
 Contact: RANDY PRZEKURAT
 randyp@arnoldmachinery.com
 T:
 F: (602)414-1904

OIL CONDITION

Visc @ 100°C	cSt	● 11.4	---	---	---
Base Number (BN)	mg KOH/g	■ 5.8	---	---	---
Oxidation (PA)	%	■ 58	---	---	---

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	■ 0.4	---	---	---
Nitration (PA)	%	■ 78	---	---	---
Sulfation (PA)	%	■ 52	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 0.5	---	---	---
Silicon	ppm	■ 24	---	---	---
Sodium	ppm	■ 6	---	---	---
Potassium	ppm	■ 31	---	---	---

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). 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.

WEAR METALS

Iron	ppm	■ 18	---	---	---
Copper	ppm	▲ 463	---	---	---
Lead	ppm	■ 6	---	---	---
Tin	ppm	■ 2	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 83	---	---	---
Nickel	ppm	■ 1	---	---	---
Titanium	ppm	■ 0	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

Calcium	ppm	■ 2250	---	---	---
Magnesium	ppm	■ 26	---	---	---
Zinc	ppm	■ 1141	---	---	---
Phosphorus	ppm	■ 1008	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 57	---	---	---

Depot: VOLVO6174
Unique No: 10980954
Signed: Jonathan Hester
Report Date: 22 Apr 2024



CONSTRUCTION EQUIPMENT



VOLVO GRAPHS

