



CONSTRUCTION EQUIPMENT

688707 VOLVO L220H 3481 - DIESEL ENGINE



Sample No: VCP446984
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 688707



SAMPLE INFORMATION

Sample Number	VCP446984	VCP382093	---	---
Sample Date	12 Apr 2024	21 Aug 2023	---	---
Machine Hours	1047	508	---	---
Oil Hours	500	508	---	---
Oil Changed	N/A	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

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 56195 PONTIAC TRAIL
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OIL CONDITION

Visc @ 100°C	cSt	█ 12.7	● 11.4	---	---
Base Number (BN)	mg KOH/g	█ 7.6	█ 5.6	---	---
Oxidation (PA)	%	57	56	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.2	█ 0.2	---	---
Nitration (PA)	%	63	75	---	---
Sulfation (PA)	%	53	51	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	█ 0.5	---	---
Silicon	ppm	█ 9	█ 27	---	---
Sodium	ppm	█ 1	█ 3	---	---
Potassium	ppm	█ 4	█ 6	---	---



WEAR METALS

Iron	ppm	█ 10	█ 13	---	---
Copper	ppm	▲ 55	▲ 333	---	---
Lead	ppm	█ <1	<1	---	---
Tin	ppm	█ 2	█ 2	---	---
Aluminum	ppm	█ 2	█ 0	---	---
Chromium	ppm	█ <1	█ <1	---	---
Molybdenum	ppm	█ 62	█ 94	---	---
Nickel	ppm	█ 1	█ <1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	█ 0	█ 0	---	---
Manganese	ppm	█ 1	█ 3	---	---
Vanadium	ppm	<1	0	---	---



ADDITIVES

Calcium	ppm	█ 1173	█ 2321	---	---
Magnesium	ppm	█ 834	█ 17	---	---
Zinc	ppm	█ 1213	█ 1251	---	---
Phosphorus	ppm	█ 1011	█ 1063	---	---
Barium	ppm	█ 2	█ 2	---	---
Boron	ppm	█ 4	█ 57	---	---

Diagnosis

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot: VOLVO2990
Unique No: 10996682
Signed: Sean Felton
Report Date: 29 Apr 2024



CONSTRUCTION EQUIPMENT



GRAPHS

