



CONSTRUCTION EQUIPMENT

SWO-069572 VOLVO L180H 5715 - DIESEL ENGINE



Sample No: VCP446751
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWO-069572



SAMPLE INFORMATION

Sample Number	VCP446751	VCP0004652	---	---
Sample Date	08 Feb 2024	02 Jul 2023	---	---
Machine Hours	1600	670	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

DUNN CONSTRUCTION INC
 318 N 14TH ST
 BELLEVUE, IA
 US 52031
 Contact: STEVE DUNN
 DUNNCONSTRUCTINC@GMAIL.COM
 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	█ 12.9	▲ 11.1	---	---
Base Number (BN)	mg KOH/g	█ 9.5	█ 5.2	---	---
Oxidation (PA)	%	74	61	---	---



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.2	█ 0.2	---	---
Nitration (PA)	%	61	78	---	---
Sulfation (PA)	%	58	55	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	█ 0.6	---	---
Silicon	ppm	█ 8	█ 27	---	---
Sodium	ppm	█ 22	█ 5	---	---
Potassium	ppm	█ 2	█ 4	---	---



WEAR METALS

Iron	ppm	█ 7	█ 15	---	---
Copper	ppm	▲ 22	▲ 379	---	---
Lead	ppm	█ 0	█ 3	---	---
Tin	ppm	█ <1	█ 2	---	---
Aluminum	ppm	█ 1	█ 1	---	---
Chromium	ppm	█ <1	█ 0	---	---
Molybdenum	ppm	█ 50	█ 89	---	---
Nickel	ppm	█ 1	█ 1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	█ 0	█ 0	---	---
Manganese	ppm	█ <1	█ 3	---	---
Vanadium	ppm	0	<1	---	---



ADDITIVES

Calcium	ppm	█ 1517	█ 2291	---	---
Magnesium	ppm	█ 473	24	---	---
Zinc	ppm	█ 1112	█ 1208	---	---
Phosphorus	ppm	█ 830	█ 1012	---	---
Barium	ppm	█ 11	█ 0	---	---
Boron	ppm	█ 32	█ 47	---	---

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

Depot: DUNBEL
Unique No: 10882782
Signed: Sean Felton
Report Date: 16 Feb 2024



CONSTRUCTION EQUIPMENT



GRAPHS

