



CONSTRUCTION EQUIPMENT

4848HS VOLVO EC350EL 314460 - DIESEL ENGINE



Sample No: VCP405944
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 4848HS



SAMPLE INFORMATION

Sample Number	VCP405944	VCP402094	---	---
Sample Date	05 Oct 2023	25 Jul 2023	---	---
Machine Hours	622	556	---	---
Oil Hours	0	500	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

HIGHWAY EQUIPMENT & SUPPLY CO MAIN
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OIL CONDITION

Visc @ 100°C	cSt	12.5	▲ 10.0	---	---
Base Number (BN)	mg KOH/g	10.4	■ 5.2	---	---
Oxidation (PA)	%	75	63	---	---

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. 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.

CONTAMINATION

Soot %	%	0	■ 0.1	---	---
Nitration (PA)	%	49	83	---	---
Sulfation (PA)	%	59	57	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	■ 0.5	---	---
Silicon	ppm	10	■ 31	---	---
Sodium	ppm	<1	■ 3	---	---
Potassium	ppm	2	■ 4	---	---

WEAR METALS

Iron	ppm	2	■ 11	---	---
Copper	ppm	▲ 91	▲ 252	---	---
Lead	ppm	<1	■ 4	---	---
Tin	ppm	1	■ 3	---	---
Aluminum	ppm	1	■ 2	---	---
Chromium	ppm	0	■ 0	---	---
Molybdenum	ppm	44	■ 87	---	---
Nickel	ppm	0	■ <1	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	<1	■ 0	---	---
Manganese	ppm	<1	■ 3	---	---
Vanadium	ppm	0	<1	---	---

ADDITIVES

Calcium	ppm	1700	■ 2228	---	---
Magnesium	ppm	446	20	---	---
Zinc	ppm	1123	■ 1230	---	---
Phosphorus	ppm	953	■ 975	---	---
Barium	ppm	0	■ 0	---	---
Boron	ppm	62	■ 30	---	---

Depot: VOLVO0025
Unique No: 10685525
Signed: Don Baldrige
Report Date: 11 Oct 2023



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GRAPHS

