



CONSTRUCTION EQUIPMENT

W14229 VOLVO L220H 2930 - DIESEL ENGINE



Sample No: VCP405865
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14229



SAMPLE INFORMATION

Sample Number	VCP405865	VCP384245	VCP375320	VCP374257
Sample Date	29 Aug 2023	20 Oct 2022	18 Aug 2022	02 Jun 2022
Machine Hours	8656	8149	7751	7157
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

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OIL CONDITION

Visc @ 100°C	cSt	█ 12.6	█ 12.8	█ 12.8	▲ 11.8
Base Number (BN)	mg KOH/g	█ 9.6	█ 11.6	█ 10.4	█ 10.0
Oxidation (PA)	%	82	89	88	111

CONTAMINATION

Soot %	%	█ 0.2	█ 0.2	█ 0.2	█ 0.1
Nitration (PA)	%	60	64	69	48
Sulfation (PA)	%	61	66	66	76
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	█ 1.5
Silicon	ppm	█ 6	█ 5	█ 5	█ 15
Sodium	ppm	█ 4	█ 7	█ 0	█ 3
Potassium	ppm	█ <1	█ 0	█ 2	█ 5

WEAR METALS

Iron	ppm	█ 5	█ 3	█ 4	█ 7
Copper	ppm	█ 2	█ 1	█ 3	▲ 24
Lead	ppm	█ 0	█ 0	█ <1	█ <1
Tin	ppm	█ <1	█ 0	█ <1	█ 1
Aluminum	ppm	█ 1	█ <1	█ 2	█ 2
Chromium	ppm	█ <1	█ <1	█ 0	█ <1
Molybdenum	ppm	█ 40	█ 36	█ 37	█ 33
Nickel	ppm	█ 0	█ 0	█ 0	█ <1
Titanium	ppm	0	0	<1	0
Silver	ppm	█ 0	0	<1	<1
Manganese	ppm	█ <1	█ 1	█ <1	█ 2
Vanadium	ppm	0	<1	0	0

ADDITIVES

Calcium	ppm	█ 1749	█ 1678	█ 1609	█ 1625
Magnesium	ppm	█ 536	█ 515	█ 489	█ 469
Zinc	ppm	█ 952	█ 930	█ 930	█ 1029
Phosphorus	ppm	█ 781	█ 728	█ 764	█ 815
Barium	ppm	█ 0	█ 0	█ <1	█ 0
Boron	ppm	█ 47	█ 35	█ 39	█ 52

Diagnosis

Resample at the next service interval to monitor. All 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: VOLVO0080
Unique No: 10632420
Signed: Wes Davis
Report Date: 05 Sep 2023



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GRAPHS

