



CONSTRUCTION EQUIPMENT

W14567 VOLVO L220H 2820 - DIESEL ENGINE



Sample No: VCP410538
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14567



SAMPLE INFORMATION

Sample Number	VCP410538	VCP402600	VCP382406	VCP374220
Sample Date	15 Aug 2023	31 May 2023	07 Dec 2022	15 Sep 2022
Machine Hours	9046	8553	8016	7495
Oil Hours	500	500	500	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

HOUSBY HEAVY EQUIPMENT, LLC
 4410 SE 4 MILE DR
 ANKENY, IA
 US 50021
 Contact: RANDY VANDERLEEST
 rvanderleest@housby.com
 T:
 F: (515)964-2865



OIL CONDITION

Visc @ 100°C	cSt	12.3	12.9	13.0	12.9
Base Number (BN)	mg KOH/g	9.3	9.2	11.2	11.1
Oxidation (PA)	%	76	82	88	88



CONTAMINATION

Soot %	%	0.1	0.2	0.2	0.2
Nitration (PA)	%	50	57	60	62
Sulfation (PA)	%	58	62	66	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	0.4	<1.0	<1.0	<1.0
Silicon	ppm	5	6	5	5
Sodium	ppm	2	5	2	2
Potassium	ppm	0	<1	0	<1



WEAR METALS

Iron	ppm	4	4	4	3
Copper	ppm	<1	<1	1	1
Lead	ppm	0	0	2	0
Tin	ppm	0	0	<1	<1
Aluminum	ppm	<1	1	2	2
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	40	40	41	38
Nickel	ppm	0	0	<1	0
Titanium	ppm	<1	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	<1



ADDITIVES

Calcium	ppm	1702	1782	1693	1677
Magnesium	ppm	490	513	514	502
Zinc	ppm	959	946	940	937
Phosphorus	ppm	784	758	734	753
Barium	ppm	0	0	0	0
Boron	ppm	47	48	41	37

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content negligible. 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: 10615383
Signed: Wes Davis
Report Date: 23 Aug 2023



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GRAPHS

