



CONSTRUCTION EQUIPMENT

W14606 VOLVO L220H 2893 - DIESEL ENGINE



Sample No: VCP404659
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: W14606



SAMPLE INFORMATION

Sample Number	VCP404659	VCP405878	VCP370684	VCP354863
Sample Date	24 Aug 2023	15 Jun 2023	16 Nov 2022	07 Jul 2022
Machine Hours	7499	7098	6485	6008
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	12.2	12.7	12.8	12.9
Base Number (BN)	mg KOH/g	11.9	9.6	11.4	10.2
Oxidation (PA)	%	78	81	42	77



CONTAMINATION

Soot %	%	0.1	0.2	0.1	0.3
Nitration (PA)	%	57	68	172	71
Sulfation (PA)	%	57	61	40	62
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	2.8	<1.0	<1.0	<1.0
Silicon	ppm	5	5	5	4
Sodium	ppm	18	2	0	1
Potassium	ppm	<1	0	1	<1



WEAR METALS

Iron	ppm	4	4	5	4
Copper	ppm	1	0	6	2
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	1	2	2	1
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	41	42	42	38
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	1776	1790	1642	1582
Magnesium	ppm	534	543	459	484
Zinc	ppm	1092	1070	901	1106
Phosphorus	ppm	884	871	736	913
Barium	ppm	0	0	0	0
Boron	ppm	47	47	43	58

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected 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: 10632414
Signed: Wes Davis
Report Date: 06 Sep 2023



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VOLVO GRAPHS

