



CONSTRUCTION EQUIPMENT

714792 NORTHSTAR BLU SENNEBOGEN 850 3167 - DIESEL ENGINE



Sample No: VCP447002
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 714792 NORTHSTAR BLU



SAMPLE INFORMATION

Sample Number	VCP447002	VCP436321	VCP452290	VCP435934
Sample Date	08 Apr 2024	19 Mar 2024	24 Jan 2024	06 Nov 2023
Machine Hours	2985	2430	5749	1174
Oil Hours	500	500	0	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL

ALTA EQUIPMENT COMPANY - METRO WEST
 56195 PONTIAC TRAIL
 NEW HUDSON, MI
 US 48165
 Contact: PAUL CONZ
 paul.conz@altg.com
 T: (313)348-8861
 F: (248)356-2029



OIL CONDITION

Visc @ 100°C	cSt	13.3	13.2	▲ 10.3	13.0
Base Number (BN)	mg KOH/g	8.4	8.3	6.0	7.7
Oxidation (PA)	%	71	78	61	84

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.



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	72	78	63	83
Sulfation (PA)	%	56	58	52	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	▲ 2.2	<1.0
Silicon	ppm	6	2	2	4
Sodium	ppm	4	3	0	3
Potassium	ppm	8	6	5	▲ 43



WEAR METALS

Iron	ppm	13	8	20	13
Copper	ppm	4	1	1	1
Lead	ppm	3	0	0	<1
Tin	ppm	3	0	0	<1
Aluminum	ppm	5	2	2	9
Chromium	ppm	3	0	<1	<1
Molybdenum	ppm	64	57	48	57
Nickel	ppm	2	0	0	0
Titanium	ppm	2	0	0	0
Silver	ppm	3	0	0	0
Manganese	ppm	3	<1	0	<1
Vanadium	ppm	2	<1	0	0



ADDITIVES

Calcium	ppm	1118	1130	● 776	1303
Magnesium	ppm	976	1016	● 757	895
Zinc	ppm	1285	1352	1059	1277
Phosphorus	ppm	1047	906	713	1012
Barium	ppm	1	0	5	0
Boron	ppm	2	1	2	17

Depot: VOLVO2990
Unique No: 11033700
Signed: Wes Davis
Report Date: 20 May 2024



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VOLVO GRAPHS

