



CONSTRUCTION EQUIPMENT

633534 DIPRO VOLVO L220H 3352 - DIESEL ENGINE



Sample No: VCP431398
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 633534 DIPRO



SAMPLE INFORMATION

Sample Number	VCP431398	VCP429350	VCP411735	VCP416245
Sample Date	04 Dec 2023	03 Oct 2023	14 Aug 2023	11 Jul 2023
Machine Hours	7698	6960	6368	5801
Oil Hours	0	500	500	500
Oil Changed	N/A	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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OIL CONDITION

Visc @ 100°C	cSt	13.1	13.5	14.1	14.2
Base Number (BN)	mg KOH/g	9.1	8.5	8.7	9.0
Oxidation (PA)	%	58	55	54	56



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.2
Nitration (PA)	%	59	56	48	53
Sulfation (PA)	%	52	51	50	51
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	3	2	3	3
Sodium	ppm	0	1	2	2
Potassium	ppm	2	<1	4	0



WEAR METALS

Iron	ppm	5	3	4	4
Copper	ppm	<1	<1	1	1
Lead	ppm	0	<1	<1	0
Tin	ppm	0	0	<1	<1
Aluminum	ppm	1	8	<1	<1
Chromium	ppm	<1	0	0	0
Molybdenum	ppm	60	59	59	61
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	<1	<1
Vanadium	ppm	0	0	<1	<1



ADDITIVES

Calcium	ppm	1036	1313	1038	1117
Magnesium	ppm	878	801	989	1032
Zinc	ppm	1173	1341	1216	1283
Phosphorus	ppm	985	1050	990	1053
Barium	ppm	3	0	0	0
Boron	ppm	2	7	0	0

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: VOLVO2990
Unique No: 10778861
Signed: Don Baldrige
Report Date: 11 Dec 2023



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GRAPHS

