



CONSTRUCTION EQUIPMENT

35082 VOLVO A45G 342292 - DIESEL ENGINE



Sample No: VCP415179
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 35082



SAMPLE INFORMATION

Sample Number	VCP415179	VCP402678	VCP369231	VCP333333
Sample Date	16 Aug 2023	21 Mar 2023	18 Nov 2022	16 May 2022
Machine Hours	6812	6262	5766	4991
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

COWIN EQUIPMENT COMPANY

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OIL CONDITION

Visc @ 100°C	cSt	12.6	12.7	12.9	12.9
Base Number (BN)	mg KOH/g	10.0	10.3	10.3	7.6
Oxidation (PA)	%	82	80	86	59

CONTAMINATION

Soot %	%	0.2	0.3	0.5	0.3
Nitration (PA)	%	57	63	80	78
Sulfation (PA)	%	61	61	65	57
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	6	6	6
Sodium	ppm	2	3	3	2
Potassium	ppm	0	<1	0	3

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.

WEAR METALS

Iron	ppm	5	8	12	12
Copper	ppm	3	1	2	5
Lead	ppm	0	<1	1	<1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	4	4	4
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	42	42	41	16
Nickel	ppm	<1	<1	0	0
Titanium	ppm	<1	0	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	<1

ADDITIVES

Calcium	ppm	1760	1708	1733	1425
Magnesium	ppm	519	497	521	644
Zinc	ppm	1011	973	919	907
Phosphorus	ppm	848	801	796	748
Barium	ppm	0	2	0	0
Boron	ppm	49	53	23	62

Depot: VOLVO8247
Unique No: 10615941
Signed: Wes Davis
Report Date: 22 Aug 2023



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GRAPHS

