



CONSTRUCTION EQUIPMENT

SWO063496 VOLVO A45G 352798 - DIESEL ENGINE



Sample No: VCP421509
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: SWO063496



SAMPLE INFORMATION

Sample Number	VCP421509	VCP419903	VCP333393	VCP354081
Sample Date	27 Jun 2023	24 Mar 2023	01 Nov 2022	10 Jun 2022
Machine Hours	3031	2640	2087	1567
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	12.7	12.7	12.8	12.8
Base Number (BN)	mg KOH/g	10.7	10.1	11.7	9.8
Oxidation (PA)	%	81	80	84	76



CONTAMINATION

Soot %	%	0.2	0.3	0.3	0.3
Nitration (PA)	%	55	59	64	65
Sulfation (PA)	%	62	61	65	60
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	5	7	6	7
Sodium	ppm	2	2	2	1
Potassium	ppm	<1	0	0	2



WEAR METALS

Iron	ppm	5	7	8	14
Copper	ppm	<1	<1	1	2
Lead	ppm	<1	<1	1	1
Tin	ppm	<1	<1	1	1
Aluminum	ppm	3	2	2	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	43	44	43	38
Nickel	ppm	4	4	3	5
Titanium	ppm	<1	0	0	0
Silver	ppm	0	2	0	<1
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1832	1820	1647	1618
Magnesium	ppm	550	564	523	534
Zinc	ppm	1091	1038	963	1026
Phosphorus	ppm	897	867	761	830
Barium	ppm	0	0	0	0
Boron	ppm	52	54	44	61

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: VOLVO8247
Unique No: 10562283
Signed: Wes Davis
Report Date: 18 Jul 2023



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VOLVO GRAPHS

