



CONSTRUCTION EQUIPMENT

RSO034490 VOLVO A45G 352035 - DIESEL ENGINE



Sample No: VCP426975
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: RSO034490



SAMPLE INFORMATION

Sample Number	VCP426975	VCP333313	VCP356987	VCP331158
Sample Date	29 Jun 2023	11 Nov 2022	04 May 2022	08 Dec 2021
Machine Hours	5822	5199	4371	3584
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

COWIN EQUIPMENT COMPANY

7950 PITTMAN AVE
 PENSACOLA, FL
 US 32534

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OIL CONDITION

Visc @ 100°C	cSt	12.9	13.01	12.8	13.0
Base Number (BN)	mg KOH/g	11.2	10.9	11.5	6.9
Oxidation (PA)	%	79	86	82	65



CONTAMINATION

Water	%	---	---	---	0.125
Soot %	%	0.1	0.3	0.1	0.7
Nitration (PA)	%	50	68	58	92
Sulfation (PA)	%	61	67	64	65
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	4	5	4	9
Sodium	ppm	2	2	1	3
Potassium	ppm	<1	2	0	2



WEAR METALS

Iron	ppm	4	8	5	18
Copper	ppm	2	3	4	13
Lead	ppm	<1	<1	<1	2
Tin	ppm	<1	<1	1	1
Aluminum	ppm	2	4	2	5
Chromium	ppm	<1	<1	<1	2
Molybdenum	ppm	40	46	37	13
Nickel	ppm	<1	<1	2	▲ 11
Titanium	ppm	<1	0	0	<1
Silver	ppm	0	0	2	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1875	1764	1612	1523
Magnesium	ppm	533	511	484	689
Zinc	ppm	1136	975	970	911
Phosphorus	ppm	942	799	874	753
Barium	ppm	0	0	0	0
Boron	ppm	64	36	59	20

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: 10562284
Signed: Wes Davis
Report Date: 18 Jul 2023



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GRAPHS

