



CONSTRUCTION EQUIPMENT

3458-01 VOLVO SD45B 230447 - DIESEL ENGINE



Sample No: VC019679
Oil Type: MOBIL DELVAC 1300 SUPER15W40
Job No: 3458-01



SAMPLE INFORMATION

Sample Number	VC019679	VCP364487	VCP364480	VC019922
Sample Date	12 Sep 2023	22 Aug 2023	01 Nov 2022	24 Oct 2022
Machine Hours	44	43	5	3
Oil Hours	1	36	1	3
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	NORMAL	SEVERE	NORMAL	SEVERE

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OIL CONDITION

Visc @ 100°C	cSt	13.8	---	14.0	---
Base Number (BN)	mg KOH/g	9.2	38.0	10.4	24.2
Oxidation (PA)	%	72	114	78	95



CONTAMINATION

Water	%	---	9.53	---	5.44
Soot %	%	0.1	0.3	0.1	0.2
Nitration (PA)	%	42	246	42	148
Sulfation (PA)	%	58	0	63	18
Glycol	%	NEG	NEG	NEG	0.0
Fuel	%	<1.0	<1.0	<1.0	0.3
Silicon	ppm	8	14	10	11
Sodium	ppm	2	0	0	4
Potassium	ppm	2	2	0	2

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The water content is negligible. 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 acceptable for the time in service.



WEAR METALS

Iron	ppm	2	8	2	6
Copper	ppm	0	2	<1	8
Lead	ppm	0	<1	<1	<1
Tin	ppm	<1	4	<1	<1
Aluminum	ppm	<1	5	<1	2
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	56	37	37	41
Nickel	ppm	<1	<1	0	2
Titanium	ppm	0	<1	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	1	<1	2
Vanadium	ppm	0	<1	0	<1



ADDITIVES

Calcium	ppm	1495	1707	1586	1803
Magnesium	ppm	564	551	492	450
Zinc	ppm	889	1035	862	1120
Phosphorus	ppm	735	837	709	909
Barium	ppm	0	0	0	0
Boron	ppm	96	83	73	65

Depot: VOLV00118
Unique No: 10658045
Signed: Don Baldrige
Report Date: 22 Sep 2023



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GRAPHS

