



CONSTRUCTION EQUIPMENT

9303 VOLVO A40F 11500 - DIESEL ENGINE



Sample No: VCP367886
Oil Type: CHEVRON 15W40
Job No: 9303



SAMPLE INFORMATION

Sample Number	VCP367886	VCP405288	VCP364855	VCP325372
Sample Date	18 Jul 2023	26 Jan 2023	10 Aug 2022	15 Sep 2021
Machine Hours	10471	10051	9595	8557
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

CLEAN EARTH - WALDORF
 16301 GARDNER RD
 WALDORF, MD
 US 20601
 Contact: RICK FORD
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 T:
 F:



OIL CONDITION

Visc @ 100°C	cSt	13.1	13.1	12.8	12.9
Base Number (BN)	mg KOH/g	8.2	8.2	9.8	---
Oxidation (PA)	%	62	64	73	71



CONTAMINATION

Soot %	%	0.8	0.6	0.6	0.8
Nitration (PA)	%	63	62	68	78
Sulfation (PA)	%	62	63	70	66
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	8	9	5
Sodium	ppm	3	2	2	2
Potassium	ppm	1	2	15	0



WEAR METALS

Iron	ppm	11	10	9	12
Copper	ppm	1	<1	1	1
Lead	ppm	<1	<1	<1	2
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	3	4	5	4
Chromium	ppm	<1	<1	0	<1
Molybdenum	ppm	98	117	166	102
Nickel	ppm	<1	0	0	<1
Titanium	ppm	2	<1	<1	2
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1486	1443	1529	1540
Magnesium	ppm	494	522	596	607
Zinc	ppm	1151	958	871	900
Phosphorus	ppm	953	804	715	736
Barium	ppm	0	0	0	0
Boron	ppm	385	360	271	237

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: CLEWAL
Unique No: 10573002
Signed: Wes Davis
Report Date: 26 Jul 2023



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GRAPHS

