



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 352441 - DIESEL ENGINE



**Sample No:** VCP422408  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP422408</b>	VCP402828	VCP412291	VCP411084
Sample Date	<b>05 Dec 2023</b>	27 Sep 2023	16 Aug 2023	05 Jun 2023
Machine Hours	<b>7520</b>	0	6804	6447
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ATTENTION	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>14.0</b>	12.4	11.9	12.2
Base Number (BN)	mg KOH/g	<b>8.1</b>	10.5	10.1	10.4
Oxidation (PA)	%	<b>42</b>	78	76	76

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>45</b>	48	53	51
Sulfation (PA)	%	<b>44</b>	59	58	59
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	1.7	1.0
Silicon	ppm	<b>2</b>	3	4	5
Sodium	ppm	<b>0</b>	1	2	<1
Potassium	ppm	<b>0</b>	1	0	1

### WEAR METALS

Iron	ppm	<b>&lt;1</b>	3	4	4
Copper	ppm	<b>2</b>	<1	<1	<1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>&lt;1</b>	2	<1	0
Chromium	ppm	<b>0</b>	0	0	0
Molybdenum	ppm	<b>12</b>	56	69	48
Nickel	ppm	<b>&lt;1</b>	<1	<1	<1
Titanium	ppm	<b>0</b>	0	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	0

### ADDITIVES

Calcium	ppm	<b>1939</b>	1620	1711	1613
Magnesium	ppm	<b>129</b>	476	532	493
Zinc	ppm	<b>1042</b>	1082	1085	1077
Phosphorus	ppm	<b>865</b>	914	908	902
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>9</b>	58	59	54

### 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:** VOLVO0090  
**Unique No:** 10780110  
**Signed:** Wes Davis  
**Report Date:** 12 Dec 2023



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## GRAPHS

