



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 352842 - DIESEL ENGINE



**Sample No:** VCP444348  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP444348</b>	VCP454114	VCP440785	VCP414671
Sample Date	<b>01 Mar 2024</b>	08 Jan 2024	27 Nov 2023	11 Sep 2023
Machine Hours	<b>4512</b>	4505	4010	3555
Oil Hours	<b>0</b>	0	500	0
Oil Changed	<b>Changed</b>	Changed	Changed	N/A
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:

### OIL CONDITION

Visc @ 100°C	cSt	<b>12.6</b>	12.1	12.4	12.3
Base Number (BN)	mg KOH/g	<b>9.2</b>	10.1	10.2	9.2
Oxidation (PA)	%	<b>75</b>	80	82	79

### 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.

### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.1</b>	0.2	0.2	0.7
Nitration (PA)	%	<b>60</b>	57	63	67
Sulfation (PA)	%	<b>57</b>	60	60	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	3	5	4
Sodium	ppm	<b>2</b>	0	2	3
Potassium	ppm	<b>0</b>	3	0	1

### WEAR METALS

Iron	ppm	<b>7</b>	4	5	14
Copper	ppm	<b>&lt;1</b>	1	1	17
Lead	ppm	<b>0</b>	<1	0	<1
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>1</b>	1	1	4
Chromium	ppm	<b>0</b>	0	0	<1
Molybdenum	ppm	<b>45</b>	37	40	47
Nickel	ppm	<b>0</b>	<1	1	<1
Titanium	ppm	<b>0</b>	1	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	<1	<1

### ADDITIVES

Calcium	ppm	<b>1712</b>	1641	1716	1818
Magnesium	ppm	<b>590</b>	460	493	532
Zinc	ppm	<b>1174</b>	1076	1116	1199
Phosphorus	ppm	<b>1002</b>	917	968	969
Barium	ppm	<b>0</b>	<1	0	0
Boron	ppm	<b>38</b>	35	37	29

**Depot:** RIPTAM  
**Unique No:** 10995432  
**Signed:** Sean Felton  
**Report Date:** 26 Apr 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

