



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 342175 - DIESEL ENGINE



**Sample No:** VCP407857  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP407857</b>	VCP386184	VCP386799	VCP332844
Sample Date	<b>16 Jun 2023</b>	28 Nov 2022	15 Sep 2022	01 Mar 2022
Machine Hours	<b>9340</b>	8479	8071	7189
Oil Hours	<b>500</b>	500	500	1500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	ABNORMAL

### RIPA AND ASSOCIATES

10149 FISHER AVENUE  
TAMPA, FL  
US 33619  
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T:  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.3</b>	12.7	13.0	12.7
Base Number (BN)	mg KOH/g	<b>9.8</b>	10.2	11.2	11.7
Oxidation (PA)	%	<b>76</b>	77	85	82

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Fuel content 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 suitable for further service.



### CONTAMINATION

Soot %	%	<b>0.5</b>	0.4	0.4	0.5
Nitration (PA)	%	<b>67</b>	71	68	78
Sulfation (PA)	%	<b>61</b>	64	66	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>0.7</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	5	6	6
Sodium	ppm	<b>7</b>	10	18	▲ 188
Potassium	ppm	<b>4</b>	10	17	▲ 186



### WEAR METALS

Iron	ppm	<b>10</b>	8	10	10
Copper	ppm	<b>1</b>	<1	2	2
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>11</b>	8	11	8
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>51</b>	52	47	62
Nickel	ppm	<b>1</b>	<1	3	▲ 7
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1580</b>	1768	1697	1707
Magnesium	ppm	<b>446</b>	392	452	523
Zinc	ppm	<b>1027</b>	1125	1091	1056
Phosphorus	ppm	<b>851</b>	947	930	928
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>37</b>	37	28	25

**Depot:** RIPTAM  
**Unique No:** 10551663  
**Signed:** Wes Davis  
**Report Date:** 13 Jul 2023



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## VOLVO GRAPHS

