



# CONSTRUCTION EQUIPMENT

## VOLVO A40G 353384 - DIESEL ENGINE



**Sample No:** VCP432155  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	VCP432155	---	---	---
Sample Date	02 Nov 2023	---	---	---
Machine Hours	1237	---	---	---
Oil Hours	1237	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC  
 8418 PALM RIVER ROAD  
 TAMPA, FL  
 US 33619  
 Contact: KENNY HANEY  
 khaney@flaglerce.com  
 T: (813)630-0077  
 F: (813)630-2233

### OIL CONDITION

Visc @ 100°C	cSt	▲ 10.2	---	---	---
Base Number (BN)	mg KOH/g	■ 4.0	---	---	---
Oxidation (PA)	%	70	---	---	---

### CONTAMINATION

Soot %	%	■ 0.5	---	---	---
Nitration (PA)	%	96	---	---	---
Sulfation (PA)	%	71	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	■ 2.6	---	---	---
Silicon	ppm	▲ 35	---	---	---
Sodium	ppm	■ 4	---	---	---
Potassium	ppm	■ 3	---	---	---

**Diagnosis**  
 The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. In the absence of other significant wear metals, suspect copper due to sources other than wear (i.e. cooling core). Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

### WEAR METALS

Iron	ppm	■ 38	---	---	---
Copper	ppm	▲ 260	---	---	---
Lead	ppm	■ <1	---	---	---
Tin	ppm	■ 5	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 89	---	---	---
Nickel	ppm	■ 6	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 4	---	---	---
Vanadium	ppm	<1	---	---	---

### ADDITIVES

Calcium	ppm	■ 2207	---	---	---
Magnesium	ppm	22	---	---	---
Zinc	ppm	■ 1211	---	---	---
Phosphorus	ppm	■ 935	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 9	---	---	---

**Depot:** VOLVO0093  
**Unique No:** 10727210  
**Signed:** Jonathan Hester  
**Report Date:** 08 Nov 2023



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## GRAPHS

