



# CONSTRUCTION EQUIPMENT

## TORO TX100W 414467976 - DIESEL ENGINE



**Sample No:** VCP401049  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	VCP401049	---	---	---
Sample Date	12 Sep 2023	---	---	---
Machine Hours	158	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

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### OIL CONDITION

Visc @ 100°C	cSt	▲ 10.9	---	---	---
Base Number (BN)	mg KOH/g	■ 9.0	---	---	---
Oxidation (PA)	%	■ 59	---	---	---

### Diagnosis

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Soot %	%	■ 0.3	---	---	---
Nitration (PA)	%	■ 55	---	---	---
Sulfation (PA)	%	■ 51	---	---	---
Glycol	%	■ NEG	---	---	---
Fuel	%	■ 1.3	---	---	---
Silicon	ppm	■ 28	---	---	---
Sodium	ppm	■ 3	---	---	---
Potassium	ppm	■ 1	---	---	---



### WEAR METALS

Iron	ppm	■ 20	---	---	---
Copper	ppm	■ 10	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ <1	---	---	---
Aluminum	ppm	■ 4	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	■ 62	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	■ 0	---	---	---
Manganese	ppm	■ 2	---	---	---
Vanadium	ppm	<1	---	---	---



### ADDITIVES

Calcium	ppm	■ 1367	---	---	---
Magnesium	ppm	■ 991	---	---	---
Zinc	ppm	■ 1322	---	---	---
Phosphorus	ppm	■ 1045	---	---	---
Barium	ppm	■ 0	---	---	---
Boron	ppm	■ 4	---	---	---

**Depot:** VOLVO0090  
**Unique No:** 10649650  
**Signed:** Sean Felton  
**Report Date:** 20 Sep 2023



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## GRAPHS

