



# CONSTRUCTION EQUIPMENT

593980 VOLVO SD115 236019 - DIESEL ENGINE



**Sample No:** VCP413238  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 593980



## SAMPLE INFORMATION

Sample Number	VCP413238	VCP385160	---	---
Sample Date	11 Aug 2023	24 Oct 2022	---	---
Machine Hours	5001	4470	---	---
Oil Hours	0	0	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	ABNORMAL	NORMAL	---	---

### WLW CONSTRUCTION

PO BOX 377  
 MT DORA, FL  
 US 32756-0377  
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## OIL CONDITION

Visc @ 100°C	cSt	▲ 12.4	■ 13.0	---	---
Base Number (BN)	mg KOH/g	■ 10.1	■ 10.2	---	---
Oxidation (PA)	%	88	62	---	---

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.



## CONTAMINATION

Soot %	%	■ 0.4	■ 0.3	---	---
Nitration (PA)	%	76	62	---	---
Sulfation (PA)	%	61	55	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	▲ 4.7	<1.0	---	---
Silicon	ppm	■ 8	■ 6	---	---
Sodium	ppm	■ 3	■ 1	---	---
Potassium	ppm	■ 2	■ 3	---	---



## WEAR METALS

Iron	ppm	■ 21	■ 16	---	---
Copper	ppm	■ 4	■ 3	---	---
Lead	ppm	■ <1	■ <1	---	---
Tin	ppm	■ 1	■ <1	---	---
Aluminum	ppm	■ 17	■ 13	---	---
Chromium	ppm	■ 2	■ 1	---	---
Molybdenum	ppm	■ 45	■ 56	---	---
Nickel	ppm	■ <1	■ 0	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	■ <1	■ 0	---	---
Manganese	ppm	■ 1	■ <1	---	---
Vanadium	ppm	<1	<1	---	---



## ADDITIVES

Calcium	ppm	■ 1724	■ 1470	---	---
Magnesium	ppm	■ 575	838	---	---
Zinc	ppm	■ 1149	■ 1343	---	---
Phosphorus	ppm	■ 944	■ 1112	---	---
Barium	ppm	■ 0	■ 2	---	---
Boron	ppm	■ 27	■ 6	---	---

**Depot:** WLWMOU  
**Unique No:** 10608029  
**Signed:** Jonathan Hester  
**Report Date:** 22 Aug 2023



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## GRAPHS

