



# CONSTRUCTION EQUIPMENT

## S1506 711 MATERIALS VOLVO A45G 352955 - DIESEL ENGINE



**Sample No:** VCP428960  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** S1506 711 MATERIALS



### SAMPLE INFORMATION

Sample Number	<b>VCP428960</b>	VCP400963	VCP398271	VCP386528
Sample Date	<b>17 Jan 2024</b>	01 May 2023	10 Feb 2023	03 Nov 2022
Machine Hours	<b>3084</b>	2039	1729	1498
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Not Changd	Changed	Not Changd
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

### VCES- VOLVO CONSTRUCTION EQUIPMENT

8594 FRUITRIDGE ROAD  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.7</b>	12.6	12.7	12.9
Base Number (BN)	mg KOH/g	<b>8.6</b>	8.8	10.2	11.4
Oxidation (PA)	%	<b>78</b>	78	82	89



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.4</b>	0.3	0.2	0.3
Nitration (PA)	%	<b>74</b>	58	59	64
Sulfation (PA)	%	<b>61</b>	57	62	68
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	6	6	6
Sodium	ppm	<b>3</b>	3	2	2
Potassium	ppm	<b>0</b>	1	1	0



### WEAR METALS

Iron	ppm	<b>9</b>	6	7	6
Copper	ppm	<b>3</b>	<1	4	<1
Lead	ppm	<b>&lt;1</b>	1	0	<1
Tin	ppm	<b>&lt;1</b>	1	<1	<1
Aluminum	ppm	<b>2</b>	0	1	1
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>35</b>	41	42	42
Nickel	ppm	<b>2</b>	2	2	<1
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1773</b>	1668	1726	1742
Magnesium	ppm	<b>575</b>	531	488	508
Zinc	ppm	<b>1187</b>	1168	1171	1223
Phosphorus	ppm	<b>993</b>	972	988	1041
Barium	ppm	<b>0</b>	0	<1	0
Boron	ppm	<b>38</b>	44	57	47

### 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.

**Depot:** VOLVO4485  
**Unique No:** 10845564  
**Signed:** Wes Davis  
**Report Date:** 24 Jan 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

