



# CONSTRUCTION EQUIPMENT

## 646180 VOLVO EC300EL 20-516 (S/N 312274) - DIESEL ENGINE



**Sample No:** VCP452280  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 646180



### SAMPLE INFORMATION

Sample Number	<b>VCP452280</b>	VCP341345	VCP258470	VCP239026
Sample Date	<b>19 Dec 2023</b>	08 Jun 2022	11 Sep 2019	25 Feb 2019
Machine Hours	<b>4751</b>	3281	1330	1024
Oil Hours	<b>500</b>	500	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	ABNORMAL	NORMAL	NORMAL

**ADAMO DEMOLITION COMPANY**  
 320 EAST 7 MILE RD  
 DETROIT, MI  
 US 48203  
 Contact: SERVICE MANAGER



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.1</b>	11.7	12.8	12.99
Base Number (BN)	mg KOH/g	<b>8.8</b>	8.9	---	---
Oxidation (PA)	%	<b>61</b>	63	78	78

T:  
F:



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.2</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>67</b>	69	53	47
Sulfation (PA)	%	<b>51</b>	55	59	59
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	1.2	<1.0	<1.0
Silicon	ppm	<b>6</b>	8	10	10
Sodium	ppm	<b>1</b>	2	3	4
Potassium	ppm	<b>3</b>	14	8	7

### 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 acceptable for the time in service.



### WEAR METALS

Iron	ppm	<b>13</b>	12	8	6
Copper	ppm	<b>5</b>	17	2	1
Lead	ppm	<b>2</b>	3	0	1
Tin	ppm	<b>&lt;1</b>	<1	0	0
Aluminum	ppm	<b>5</b>	10	4	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>62</b>	<1	39	39
Nickel	ppm	<b>&lt;1</b>	0	1	<1
Titanium	ppm	<b>&lt;1</b>	92	<1	<1
Silver	ppm	<b>0</b>	<1	<1	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1162</b>	1763	1586	1661
Magnesium	ppm	<b>882</b>	400	490	494
Zinc	ppm	<b>1273</b>	1265	840	827
Phosphorus	ppm	<b>1049</b>	1049	737	700
Barium	ppm	<b>0</b>	<1	0	<1
Boron	ppm	<b>10</b>	166	48	48

**Depot:** ADADET  
**Unique No:** 10822406  
**Signed:** Don Baldrige  
**Report Date:** 11 Jan 2024



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## GRAPHS

