



# CONSTRUCTION EQUIPMENT

## 6002 VOLVO A35D 72359 - DIESEL ENGINE



**Sample No:** VCP434256  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 6002



### SAMPLE INFORMATION

Sample Number	<b>VCP434256</b>	VCP401514	VCP406173	VCP391333
Sample Date	<b>24 Apr 2024</b>	04 Oct 2023	25 Apr 2023	04 Nov 2022
Machine Hours	<b>13535</b>	13040	12500	12130
Oil Hours	<b>0</b>	0	500	115
Oil Changed	<b>Changed</b>	Not Changd	Changed	Not Changd
Sample Status	<b>ATTENTION</b>	NORMAL	MARGINAL	NORMAL

**LEONARDS CONTRACTING**  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>11.8</b>	12.1	12.1	12.9
Base Number (BN)	mg KOH/g	<b>9.9</b>	10.2	9.2	12.4
Oxidation (PA)	%	<b>78</b>	79	73	82

### Diagnosis

No corrective action is recommended at this time. 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. 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

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.7</b>	0.6	0.4	0.1
Nitration (PA)	%	<b>58</b>	56	50	48
Sulfation (PA)	%	<b>63</b>	62	57	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>2.0</b>	<1.0	<b>3.3</b>	<1.0
Silicon	ppm	<b>7</b>	5	5	4
Sodium	ppm	<b>1</b>	3	2	2
Potassium	ppm	<b>0</b>	<1	<1	0



### WEAR METALS

Iron	ppm	<b>11</b>	6	8	3
Copper	ppm	<b>0</b>	<1	<1	<1
Lead	ppm	<b>0</b>	1	0	<1
Tin	ppm	<b>&lt;1</b>	1	0	<1
Aluminum	ppm	<b>2</b>	2	2	<1
Chromium	ppm	<b>0</b>	<1	0	<1
Molybdenum	ppm	<b>38</b>	42	38	38
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>0</b>	0	<1	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1653</b>	1719	1575	1567
Magnesium	ppm	<b>488</b>	549	481	486
Zinc	ppm	<b>1070</b>	1243	1084	1085
Phosphorus	ppm	<b>922</b>	1021	876	882
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>52</b>	48	57	61

**Depot:** LEOMAD  
**Unique No:** 11007266  
**Signed:** Jonathan Hester  
**Report Date:** 07 May 2024



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## GRAPHS

