



# CONSTRUCTION EQUIPMENT

## 3034 VOLVO ECR145EL 315064 - DIESEL ENGINE



**Sample No:** VCP434340  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 3034



### SAMPLE INFORMATION

Sample Number	<b>VCP434340</b>	VCP401788	VCP384077	VCP350290
Sample Date	<b>08 May 2024</b>	09 Nov 2023	03 Nov 2022	25 May 2022
Machine Hours	<b>2915</b>	2410	1465	9601
Oil Hours	<b>0</b>	0	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**LEONARDS CONTRACTING**  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.8</b>	13.1	13.4	13.3
Base Number (BN)	mg KOH/g	<b>10.0</b>	10.8	12.3	11.2
Oxidation (PA)	%	<b>89</b>	86	92	85

### 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.



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	0.3	0.3	0.2
Nitration (PA)	%	<b>78</b>	63	73	67
Sulfation (PA)	%	<b>63</b>	63	67	63
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	10
Sodium	ppm	<b>1</b>	<1	2	4
Potassium	ppm	<b>2</b>	0	0	1



### WEAR METALS

Iron	ppm	<b>14</b>	8	14	3
Copper	ppm	<b>3</b>	1	2	4
Lead	ppm	<b>&lt;1</b>	0	<1	<1
Tin	ppm	<b>1</b>	<1	1	<1
Aluminum	ppm	<b>3</b>	3	5	0
Chromium	ppm	<b>1</b>	<1	2	0
Molybdenum	ppm	<b>42</b>	40	43	77
Nickel	ppm	<b>&lt;1</b>	<1	1	0
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>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1641</b>	1713	1716	1910
Magnesium	ppm	<b>495</b>	537	521	90
Zinc	ppm	<b>1122</b>	1180	1172	1012
Phosphorus	ppm	<b>1044</b>	993	935	893
Barium	ppm	<b>1</b>	0	0	<1
Boron	ppm	<b>49</b>	41	36	145

**Depot:** LEOMAD  
**Unique No:** 11057084  
**Signed:** Wes Davis  
**Report Date:** 31 May 2024



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## VOLVO GRAPHS

