



# CONSTRUCTION EQUIPMENT

564312 VOLVO ECR145 315091 - DIESEL ENGINE



**Sample No:** VCP450725  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 564312



## SAMPLE INFORMATION

Sample Number	<b>VCP450725</b>	VCP437458	VCP427185	VCP398521
Sample Date	<b>21 May 2024</b>	10 Jan 2024	04 Aug 2023	10 Apr 2023
Machine Hours	<b>3348</b>	2869	2365	1864
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**JON M HALL COMPANY**  
 1920 BOOTHE CIRCLE SUITE 110  
 LONGWOOD, FL  
 US 32750  
 Contact: SERVICE MANAGER



## OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	13.1	12.9	13.0
Base Number (BN)	mg KOH/g	<b>9.3</b>	9.8	10.6	9.5
Oxidation (PA)	%	<b>65</b>	73	84	80

T: (407)215-0410  
 F:

## 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>0.2</b>	0.3	0.2	0.2
Nitration (PA)	%	<b>60</b>	62	63	58
Sulfation (PA)	%	<b>53</b>	56	61	56
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	6	6	4
Sodium	ppm	<b>1</b>	4	3	3
Potassium	ppm	<b>2</b>	0	0	75



## WEAR METALS

Iron	ppm	<b>8</b>	10	10	50
Copper	ppm	<b>3</b>	2	2	1
Lead	ppm	<b>&lt;1</b>	0	0	0
Tin	ppm	<b>1</b>	<1	<1	0
Aluminum	ppm	<b>3</b>	2	3	29
Chromium	ppm	<b>1</b>	<1	<1	1
Molybdenum	ppm	<b>60</b>	53	45	71
Nickel	ppm	<b>&lt;1</b>	0	<1	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>1</b>	0	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	<1	<1	0



## ADDITIVES

Calcium	ppm	<b>1232</b>	1350	1879	1307
Magnesium	ppm	<b>913</b>	760	554	1063
Zinc	ppm	<b>1247</b>	1228	1196	1420
Phosphorus	ppm	<b>1014</b>	1020	995	1134
Barium	ppm	<b>&lt;1</b>	0	0	0
Boron	ppm	<b>7</b>	14	33	16

**Depot:** JONLON  
**Unique No:** 11048572  
**Signed:** Sean Felton  
**Report Date:** 30 May 2024



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## GRAPHS

