



# CONSTRUCTION EQUIPMENT

## 9463 VOLVO ECR145E 315030 - DIESEL ENGINE



**Sample No:** VCP431312  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 9463



### SAMPLE INFORMATION

Sample Number	<b>VCP431312</b>	VCP412992	VCP405600	VCP369988
Sample Date	<b>08 Jan 2024</b>	12 Aug 2023	23 Mar 2023	17 Oct 2022
Machine Hours	<b>2982</b>	2484	2010	1519
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>13.1</b>	13.2	13.2	13.4
Base Number (BN)	mg KOH/g	<b>10.2</b>	9.7	10.6	11.4
Oxidation (PA)	%	<b>74</b>	75	81	85

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>	0.2	0.3	0.3
Nitration (PA)	%	<b>62</b>	60	64	73
Sulfation (PA)	%	<b>57</b>	57	60	64
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	7	9	8
Sodium	ppm	<b>0</b>	<1	3	1
Potassium	ppm	<b>1</b>	2	<1	0



### WEAR METALS

Iron	ppm	<b>11</b>	12	15	12
Copper	ppm	<b>1</b>	1	1	1
Lead	ppm	<b>0</b>	0	0	0
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>2</b>	2	4	1
Chromium	ppm	<b>&lt;1</b>	<1	1	1
Molybdenum	ppm	<b>50</b>	40	46	47
Nickel	ppm	<b>0</b>	<1	<1	<1
Titanium	ppm	<b>0</b>	0	0	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	1
Vanadium	ppm	<b>0</b>	0	<1	<1



### ADDITIVES

Calcium	ppm	<b>1469</b>	1852	1718	1821
Magnesium	ppm	<b>729</b>	457	500	433
Zinc	ppm	<b>1197</b>	1122	1133	1164
Phosphorus	ppm	<b>998</b>	949	949	882
Barium	ppm	<b>3</b>	0	2	0
Boron	ppm	<b>21</b>	29	33	26

**Depot:** JONLON  
**Unique No:** 10835350  
**Signed:** Wes Davis  
**Report Date:** 19 Jan 2024



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## GRAPHS

