



# CONSTRUCTION EQUIPMENT

## 1315 IAA RANCHO CORD VOLVO L90H 623813 - DIESEL ENGINE



**Sample No:** VCP441712  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 1315 IAA RANCHO CORD



### SAMPLE INFORMATION

Sample Number	<b>VCP441712</b>	VCP424070	VCP375083	VCP357160
Sample Date	<b>17 Nov 2023</b>	27 Jun 2023	20 Oct 2022	03 May 2022
Machine Hours	<b>10894</b>	10281	9430	8786
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Not Changd	Not Changd
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**VCES- VOLVO CONSTRUCTION EQUIPMENT**  
 8594 FRUITRIDGE ROAD  
 SACRAMENTO, CA  
 US 95826  
 Contact: RAY KRANZUSCH  
 ray.kranzusch@vcesvolvo.com  
 T:  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.9</b>	14.6	14.1	14.0
Base Number (BN)	mg KOH/g	<b>9.6</b>	7.6	5.7	7.6
Oxidation (PA)	%	<b>90</b>	110	85	40



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>1.6</b>	2.3	0.5	0
Nitration (PA)	%	<b>89</b>	121	104	51
Sulfation (PA)	%	<b>68</b>	77	69	45
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	15	8	6
Sodium	ppm	<b>3</b>	4	<1	2
Potassium	ppm	<b>&lt;1</b>	<1	2	0



### WEAR METALS

Iron	ppm	<b>14</b>	52	21	14
Copper	ppm	<b>&lt;1</b>	3	1	<1
Lead	ppm	<b>0</b>	0	<1	<1
Tin	ppm	<b>&lt;1</b>	2	<1	1
Aluminum	ppm	<b>5</b>	13	6	6
Chromium	ppm	<b>&lt;1</b>	3	1	<1
Molybdenum	ppm	<b>38</b>	44	44	42
Nickel	ppm	<b>0</b>	<1	0	<1
Titanium	ppm	<b>0</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	1
Manganese	ppm	<b>&lt;1</b>	1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	<b>1637</b>	1907	1818	1862
Magnesium	ppm	<b>503</b>	562	504	559
Zinc	ppm	<b>1124</b>	1323	1206	1146
Phosphorus	ppm	<b>931</b>	1043	999	1011
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>19</b>	20	19	29

### 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.

**Depot:** VOLVO4485  
**Unique No:** 10764768  
**Signed:** Wes Davis  
**Report Date:** 30 Nov 2023



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

