



# CONSTRUCTION EQUIPMENT

SWA392504 VOLVO L90F 68122 - DIESEL ENGINE



**Sample No:** VCP431181  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA392504



## SAMPLE INFORMATION

Sample Number	<b>VCP431181</b>	VCP358504	VCP345121	VCP317595
Sample Date	<b>20 Oct 2023</b>	15 Mar 2022	07 Dec 2021	11 Oct 2021
Machine Hours	<b>22060</b>	25099	24475	20556
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>N/A</b>	Changed	Not Changd	N/A
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**EISS BROTHERS**  
 28250 NEW YORK 37  
 WATERTOWN, NY  
 US 13601  
 Contact: SERVICE MANAGER

## OIL CONDITION

Visc @ 100°C	cSt	<b>12.8</b>	13.3	13.5	13.2
Base Number (BN)	mg KOH/g	<b>10.0</b>	11.2	11	---
Oxidation (PA)	%	<b>85</b>	87	84	83

T: (315)629-4370  
 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

Soot %	%	<b>0.4</b>	0.4	0.3	0.3
Nitration (PA)	%	<b>62</b>	57	53	57
Sulfation (PA)	%	<b>64</b>	68	64	64
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	4	5	4
Sodium	ppm	<b>17</b>	2	2	4
Potassium	ppm	<b>23</b>	0	0	<1

## WEAR METALS

Iron	ppm	<b>7</b>	6	5	4
Copper	ppm	<b>&lt;1</b>	<1	0	<1
Lead	ppm	<b>0</b>	<1	<1	0
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>3</b>	<1	<1	0
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>42</b>	38	39	38
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	<1	<1	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

## ADDITIVES

Calcium	ppm	<b>1615</b>	1654	1771	1657
Magnesium	ppm	<b>513</b>	518	518	492
Zinc	ppm	<b>1144</b>	1100	1132	1079
Phosphorus	ppm	<b>950</b>	950	952	916
Barium	ppm	<b>&lt;1</b>	0	0	0
Boron	ppm	<b>45</b>	55	55	48

**Depot:** EISWAT  
**Unique No:** 10723725  
**Signed:** Wes Davis  
**Report Date:** 02 Nov 2023



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## VOLVO GRAPHS

