



# CONSTRUCTION EQUIPMENT

## VOLVO L90H 626191 - DIESEL ENGINE



**Sample No:** VCP454780  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP454780</b>	VCP436603	VCP395889	VCP400423
Sample Date	<b>25 May 2024</b>	17 Jan 2024	01 Aug 2023	09 Jan 2023
Machine Hours	<b>4806</b>	3975	3205	2055
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	N/A	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.3</b>	12.8	12.9	13.1
Base Number (BN)	mg KOH/g	<b>9.2</b>	9.8	5.8	8.2
Oxidation (PA)	%	<b>80</b>	81	84	76



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.5</b>	0.6	0.7	0.6
Nitration (PA)	%	<b>73</b>	73	83	76
Sulfation (PA)	%	<b>59</b>	60	61	58
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	6	8
Sodium	ppm	<b>1</b>	2	3	2
Potassium	ppm	<b>2</b>	3	<1	<1



### WEAR METALS

Iron	ppm	<b>13</b>	11	9	31
Copper	ppm	<b>2</b>	1	2	6
Lead	ppm	<b>&lt;1</b>	1	0	1
Tin	ppm	<b>1</b>	1	<1	2
Aluminum	ppm	<b>7</b>	8	4	12
Chromium	ppm	<b>1</b>	<1	<1	3
Molybdenum	ppm	<b>48</b>	60	47	50
Nickel	ppm	<b>&lt;1</b>	<1	<1	<1
Titanium	ppm	<b>&lt;1</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	1
Vanadium	ppm	<b>&lt;1</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	<b>1653</b>	1596	1744	1627
Magnesium	ppm	<b>537</b>	529	538	509
Zinc	ppm	<b>1146</b>	1147	1131	1136
Phosphorus	ppm	<b>952</b>	978	921	873
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>20</b>	24	34	14

### 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:** VOLVO0090  
**Unique No:** 11059531  
**Signed:** Wes Davis  
**Report Date:** 04 Jun 2024



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## VOLVO GRAPHS

