



# CONSTRUCTION EQUIPMENT

## VOLVO L90H 05625448 - DIESEL ENGINE



**Sample No:** VCP436481  
**Oil Type:** VALVOLINE 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP436481</b>	VCP407114	VCP438662	VCP430821
Sample Date	<b>24 Apr 2024</b>	06 Mar 2024	22 Jan 2024	14 Dec 2023
Machine Hours	<b>0</b>	6296	6059	5859
Oil Hours	<b>0</b>	237	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ATTENTION	NORMAL

**CITY CARTING**  
 221 OLD GATE LN  
 MILFORD, CT  
 US 06460  
 Contact: TAVINS BANKS  
 tavins@citycart.net  
 T: (203)223-3885  
 F:



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.6</b>	12.5	11.8	12.59
Base Number (BN)	mg KOH/g	<b>6.7</b>	6.8	6.5	7.1
Oxidation (PA)	%	<b>36</b>	37	34	43

### 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>0.1</b>	0.1	0.1	0.1
Nitration (PA)	%	<b>52</b>	52	50	56
Sulfation (PA)	%	<b>45</b>	43	43	47
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	0.3	0.4
Silicon	ppm	<b>5</b>	5	6	7
Sodium	ppm	<b>&lt;1</b>	<1	8	<1
Potassium	ppm	<b>2</b>	0	14	2



### WEAR METALS

Iron	ppm	<b>4</b>	4	3	3
Copper	ppm	<b>5</b>	<1	<1	0
Lead	ppm	<b>0</b>	0	1	0
Tin	ppm	<b>&lt;1</b>	0	<1	<1
Aluminum	ppm	<b>2</b>	1	3	3
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>26</b>	30	26	53
Nickel	ppm	<b>0</b>	0	1	0
Titanium	ppm	<b>&lt;1</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	<b>0</b>	<1	<1	<1
Vanadium	ppm	<b>&lt;1</b>	0	<1	0



### ADDITIVES

Calcium	ppm	<b>1891</b>	1855	1724	1932
Magnesium	ppm	<b>148</b>	172	123	201
Zinc	ppm	<b>963</b>	941	948	979
Phosphorus	ppm	<b>832</b>	851	816	763
Barium	ppm	<b>0</b>	0	0	<1
Boron	ppm	<b>29</b>	34	20	26

**Depot:** CITMILCON  
**Unique No:** 11004812  
**Signed:** Wes Davis  
**Report Date:** 01 May 2024



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## GRAPHS

