



# CONSTRUCTION EQUIPMENT

SWA275711-11 VOLVO L70H 623404 - DIESEL ENGINE



**Sample No:** VCP407427  
**Oil Type:** VOLVO VDS-4.5 Premium Motor Oil 15W40  
**Job No:** SWA275711-11



## SAMPLE INFORMATION

Sample Number	<b>VCP407427</b>	VCP367662	VCP376001	VCP322243
Sample Date	<b>09 Jun 2023</b>	15 Dec 2022	15 Aug 2022	16 May 2022
Machine Hours	<b>8270</b>	7328	6731	6285
Oil Hours	<b>0</b>	500	500	500
Oil Changed	<b>Not Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	ABNORMAL	ABNORMAL	ABNORMAL

**DENALI WE CARE**  
 400 TORNE RD  
 HILLBURN, NY  
 US 10931  
 Contact: Service Manager

## OIL CONDITION

Visc @ 100°C	cSt	<b>12.8</b>	13.6	13.1	12.5
Base Number (BN)	mg KOH/g	<b>10.4</b>	11.0	11.4	10.6
Oxidation (PA)	%	<b>83</b>	83	91	85

T:  
F:

## Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Elemental level of silicon (Si) above normal indicating ingress of seal material. 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>0.3</b>	0.5	0.5	0.4
Nitration (PA)	%	<b>61</b>	64	70	66
Sulfation (PA)	%	<b>62</b>	64	70	65
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>▲ 28</b>	▲ 45	▲ 47	▲ 57
Sodium	ppm	<b>1</b>	3	0	2
Potassium	ppm	<b>&lt;1</b>	<1	1	1

## WEAR METALS

Iron	ppm	<b>6</b>	12	9	9
Copper	ppm	<b>0</b>	<1	<1	<1
Lead	ppm	<b>0</b>	<1	<1	0
Tin	ppm	<b>0</b>	<1	<1	<1
Aluminum	ppm	<b>2</b>	6	5	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>41</b>	39	42	41
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	0	0	<1

## ADDITIVES

Calcium	ppm	<b>1801</b>	1785	1595	1615
Magnesium	ppm	<b>543</b>	518	453	464
Zinc	ppm	<b>1203</b>	1210	1096	1155
Phosphorus	ppm	<b>945</b>	951	931	933
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>39</b>	30	31	43

**Depot:** DENHIL  
**Unique No:** 10604694  
**Signed:** Jonathan Hester  
**Report Date:** 16 Aug 2023



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## GRAPHS

