



# CONSTRUCTION EQUIPMENT

SWA350493 VOLVO L70H 622505 - DIESEL ENGINE



**Sample No:** VCP416145  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA350493



## SAMPLE INFORMATION

Sample Number	<b>VCP416145</b>	VCP400813	VCP387877	VCP374796
Sample Date	<b>01 Sep 2023</b>	18 May 2023	12 Sep 2022	06 Jul 2022
Machine Hours	<b>11602</b>	11032	9569	9235
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>N/A</b>	N/A	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	NORMAL	NORMAL

### ALTA EQUIPMENT

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## OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 11.7</b>	■ 12.3	■ 12.3	■ 12.5
Base Number (BN)	mg KOH/g	■ <b>9.4</b>	■ 9.9	■ 11.6	■ 11.2
Oxidation (PA)	%	<b>80</b>	86	86	83

## CONTAMINATION

Soot %	%	■ <b>0.2</b>	■ 0.2	■ 0.3	■ 0.3
Nitration (PA)	%	<b>63</b>	67	63	61
Sulfation (PA)	%	<b>59</b>	62	65	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>▲ 4.1</b>	<1.0	<1.0	<1.0
Silicon	ppm	■ <b>4</b>	■ 5	■ 3	■ 4
Sodium	ppm	■ <b>3</b>	■ 3	■ 2	■ 2
Potassium	ppm	■ <b>0</b>	■ <1	■ 0	■ 0

## WEAR METALS

Iron	ppm	■ <b>6</b>	■ 8	■ 5	■ 5
Copper	ppm	■ <b>&lt;1</b>	■ 0	■ <1	■ <1
Lead	ppm	■ <b>0</b>	■ 0	■ <1	■ <1
Tin	ppm	■ <b>&lt;1</b>	■ <1	■ <1	■ <1
Aluminum	ppm	■ <b>2</b>	■ 3	■ 2	■ 2
Chromium	ppm	■ <b>0</b>	■ <1	■ <1	■ <1
Molybdenum	ppm	■ <b>40</b>	■ 40	■ 41	■ 41
Nickel	ppm	■ <b>0</b>	■ 0	■ 0	■ <1
Titanium	ppm	<b>0</b>	0	0	0
Silver	ppm	■ <b>0</b>	■ 0	<1	0
Manganese	ppm	■ <b>0</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

## ADDITIVES

Calcium	ppm	■ <b>1752</b>	■ 1709	■ 1582	■ 1611
Magnesium	ppm	■ <b>507</b>	■ 524	■ 482	■ 492
Zinc	ppm	■ <b>1079</b>	■ 1134	■ 1073	■ 1064
Phosphorus	ppm	■ <b>919</b>	■ 941	■ 859	■ 881
Barium	ppm	■ <b>0</b>	■ 0	■ 0	■ 0
Boron	ppm	■ <b>33</b>	■ 42	■ 45	■ 49

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

**Depot:** VOLVO0142  
**Unique No:** 10634952  
**Signed:** Jonathan Hester  
**Report Date:** 11 Sep 2023



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## GRAPHS

