



# CONSTRUCTION EQUIPMENT

## SW-26700-2 EVERGREEN VOLVO L110H 631790 - DIESEL ENGINE



**Sample No:** VCP435878  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-26700-2 EVERGREEN



### SAMPLE INFORMATION

Sample Number	<b>VCP435878</b>	VCP406966	VCP400934	VCP383482
Sample Date	<b>14 Dec 2023</b>	29 Aug 2023	11 May 2023	10 Jan 2023
Machine Hours	<b>6006</b>	5551	4993	4500
Oil Hours	<b>500</b>	550	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	ABNORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.4</b>	13.7	13.7	13.4
Base Number (BN)	mg KOH/g	<b>8.8</b>	9.7	9.6	10.4
Oxidation (PA)	%	<b>59</b>	64	62	73



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.6</b>	0.8	0.4	0.4
Nitration (PA)	%	<b>59</b>	66	58	58
Sulfation (PA)	%	<b>55</b>	58	55	59
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>4</b>	4	4	5
Sodium	ppm	<b>1</b>	1	2	2
Potassium	ppm	<b>&lt;1</b>	<1	1	<1



### WEAR METALS

Iron	ppm	<b>15</b>	19	11	12
Copper	ppm	<b>&lt;1</b>	2	2	2
Lead	ppm	<b>0</b>	<1	<1	<1
Tin	ppm	<b>&lt;1</b>	<1	2	<1
Aluminum	ppm	<b>9</b>	8	7	▲ 11
Chromium	ppm	<b>1</b>	1	1	1
Molybdenum	ppm	<b>65</b>	61	65	48
Nickel	ppm	<b>0</b>	0	<1	<1
Titanium	ppm	<b>0</b>	<1	0	0
Silver	ppm	<b>0</b>	1	0	0
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1049</b>	1211	1195	1467
Magnesium	ppm	<b>938</b>	1011	972	630
Zinc	ppm	<b>1257</b>	1305	1277	1010
Phosphorus	ppm	<b>1049</b>	1036	1055	846
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>7</b>	3	13	28

### 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 acceptable for the time in service.

**Depot:** VOLVO8770  
**Unique No:** 10795625  
**Signed:** Don Baldrige  
**Report Date:** 21 Dec 2023



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## VOLVO GRAPHS

