



# CONSTRUCTION EQUIPMENT

## SW-26229-2 CASTLE VOLVO L70H 623673 - DIESEL ENGINE



**Sample No:** VCP442144  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-26229-2 CASTLE



### SAMPLE INFORMATION

Sample Number	<b>VCP442144</b>	VCP423016	VCP419392	VCP395539
Sample Date	<b>07 Nov 2023</b>	10 Aug 2023	31 May 2023	05 Jan 2023
Machine Hours	<b>5819</b>	5162	4633	4150
Oil Hours	<b>650</b>	530	500	700
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>13.6</b>	13.5	14.0	13.8
Base Number (BN)	mg KOH/g	<b>10.1</b>	9.9	9.8	9.6
Oxidation (PA)	%	<b>60</b>	60	55	65

### 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>0.9</b>	0.8	0.6	1
Nitration (PA)	%	<b>63</b>	59	68	75
Sulfation (PA)	%	<b>56</b>	56	53	57
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	8
Sodium	ppm	<b>0</b>	2	1	2
Potassium	ppm	<b>0</b>	1	<1	0



### WEAR METALS

Iron	ppm	<b>9</b>	10	11	27
Copper	ppm	<b>0</b>	1	1	3
Lead	ppm	<b>0</b>	<1	0	<1
Tin	ppm	<b>&lt;1</b>	<1	<1	<1
Aluminum	ppm	<b>3</b>	3	3	8
Chromium	ppm	<b>&lt;1</b>	1	1	3
Molybdenum	ppm	<b>66</b>	65	64	62
Nickel	ppm	<b>0</b>	0	0	<1
Titanium	ppm	<b>0</b>	<1	<1	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>1108</b>	1165	1131	1284
Magnesium	ppm	<b>1004</b>	1038	968	966
Zinc	ppm	<b>1339</b>	1305	1224	1323
Phosphorus	ppm	<b>1106</b>	1065	983	1044
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>6</b>	2	11	5

**Depot:** VOLVO8770  
**Unique No:** 10749749  
**Signed:** Sean Felton  
**Report Date:** 20 Nov 2023



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## GRAPHS

