



# CONSTRUCTION EQUIPMENT

## SWO-069538 LHOIST VOLVO L350H 1007 - DIESEL ENGINE



**Sample No:** VCP444443  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWO-069538 LHOIST



### SAMPLE INFORMATION

Sample Number	<b>VCP444443</b>	VCP431078	VCP402623	VCP357781
Sample Date	<b>09 Feb 2024</b>	17 Nov 2023	05 Apr 2023	15 Apr 2022
Machine Hours	<b>1802</b>	17555	1551	12518
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	ABNORMAL	NORMAL

### COWIN EQUIPMENT COMPANY

2238 PINSON VALLEY PARKWAY  
 BIRMINGHAM, AL  
 US 35217  
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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.7</b>	13.0	12.7	15.2
Base Number (BN)	mg KOH/g	<b>9.0</b>	9.2	8.8	6.8
Oxidation (PA)	%	<b>78</b>	78	83	124



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	<b>0.3</b>	0.4	0.6	0.8
Nitration (PA)	%	<b>58</b>	59	72	117
Sulfation (PA)	%	<b>60</b>	62	64	92
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>5</b>	4	▲ 29	7
Sodium	ppm	<b>1</b>	2	3	2
Potassium	ppm	<b>1</b>	0	0	1



### WEAR METALS

Iron	ppm	<b>6</b>	6	25	32
Copper	ppm	<b>6</b>	8	8	2
Lead	ppm	<b>0</b>	0	0	4
Tin	ppm	<b>0</b>	0	3	<1
Aluminum	ppm	<b>1</b>	<1	<1	4
Chromium	ppm	<b>&lt;1</b>	<1	0	<1
Molybdenum	ppm	<b>44</b>	44	48	103
Nickel	ppm	<b>&lt;1</b>	<1	5	2
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>0</b>	<1	2	<1
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>1546</b>	1624	1595	1771
Magnesium	ppm	<b>498</b>	524	495	786
Zinc	ppm	<b>1106</b>	1166	1018	1136
Phosphorus	ppm	<b>834</b>	874	832	937
Barium	ppm	<b>11</b>	0	0	0
Boron	ppm	<b>42</b>	46	38	103

### 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.

**Depot:** VOLVO8528  
**Unique No:** 10882783  
**Signed:** Wes Davis  
**Report Date:** 16 Feb 2024



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## VOLVO GRAPHS

