



# CONSTRUCTION EQUIPMENT

## 9112 VOLVO L180H 5100 - DIESEL ENGINE



**Sample No:** VCP367857  
**Oil Type:** CHEVRON 15W40  
**Job No:** 9112



### SAMPLE INFORMATION

Sample Number	<b>VCP367857</b>	VCP404426	VCP363673	VCP361160
Sample Date	<b>14 Jul 2023</b>	21 Mar 2023	07 Sep 2022	31 May 2022
Machine Hours	<b>11909</b>	10996	9707	8913
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**RELIABLE CONTRACTING**  
 2410 EVERGREEN RD SUITE 200  
 GAMBRILLS, MD  
 US 21054  
 Contact: RUSSELL HATFIELD  
 RHATFIELD@RELIABLECONTRACTING.COM  
 T: (410)987-1851  
 F:

### OIL CONDITION

Visc @ 100°C	cSt	█ <b>13.1</b>	█ 12.6	█ 12.9	█ 12.9
Base Number (BN)	mg KOH/g	█ <b>7.1</b>	█ 9.5	█ 8.7	█ 8.0
Oxidation (PA)	%	<b>64</b>	57	71	65

### CONTAMINATION

Soot %	%	█ <b>0.2</b>	█ 0.3	█ 0.2	█ 0.2
Nitration (PA)	%	<b>65</b>	58	68	63
Sulfation (PA)	%	<b>61</b>	53	66	62
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	█ <b>4</b>	█ 7	█ 5	█ 5
Sodium	ppm	█ <b>2</b>	█ 3	█ 2	█ 0
Potassium	ppm	█ <b>&lt;1</b>	█ 2	█ 6	█ 1

### WEAR METALS

Iron	ppm	█ <b>5</b>	█ 7	█ 5	█ 5
Copper	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Lead	ppm	█ <b>0</b>	█ <1	█ 0	█ <1
Tin	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Aluminum	ppm	█ <b>&lt;1</b>	█ 3	█ 4	█ 4
Chromium	ppm	█ <b>&lt;1</b>	█ <1	█ <1	█ <1
Molybdenum	ppm	█ <b>94</b>	█ 119	█ 123	█ 120
Nickel	ppm	█ <b>0</b>	█ 0	█ 0	█ 0
Titanium	ppm	<b>1</b>	<1	<1	<1
Silver	ppm	█ <b>0</b>	█ 0	<1	0
Manganese	ppm	█ <b>&lt;1</b>	█ 1	█ <1	█ <1
Vanadium	ppm	<b>&lt;1</b>	0	0	0

### ADDITIVES

Calcium	ppm	█ <b>1445</b>	█ 1585	█ 1395	█ 1438
Magnesium	ppm	█ <b>467</b>	█ 621	█ 494	█ 620
Zinc	ppm	█ <b>1190</b>	█ 976	█ 1017	█ 833
Phosphorus	ppm	█ <b>964</b>	█ 762	█ 833	█ 681
Barium	ppm	█ <b>0</b>	█ 0	█ 2	█ 0
Boron	ppm	█ <b>324</b>	█ 231	█ 328	█ 267

### 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:** RELMIL  
**Unique No:** 10573001  
**Signed:** Wes Davis  
**Report Date:** 26 Jul 2023



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## VOLVO GRAPHS

