



# CONSTRUCTION EQUIPMENT

## VOLVO L220H 3546 - DIESEL ENGINE



**Sample No:** VCP368354  
**Oil Type:** MOBIL 15W40  
**Job No:**



### SAMPLE INFORMATION

Sample Number	<b>VCP368354</b>	VCP429824	VCP401003	VCP429832
Sample Date	<b>12 Mar 2024</b>	31 Jan 2024	26 Dec 2023	30 Nov 2023
Machine Hours	<b>2512</b>	1987	1483	1082
Oil Hours	<b>0</b>	0	0	0
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	ATTENTION

**ARNOLD MACHINERY COMPANY**  
 464 WASHINGTON STREET S  
 TWIN FALLS, ID  
 US 83301  
 Contact: JANA E HYMAS  
 jhymas@arnoldmachinery.com  
 T: (208)733-1715  
 F: (775)356-7152



### OIL CONDITION

Visc @ 100°C	cSt	<b>12.1</b>	12.3	12.6	12.4
Base Number (BN)	mg KOH/g	<b>9.5</b>	8.3	9.1	7.5
Oxidation (PA)	%	<b>53</b>	57	57	64

### 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>0.1</b>	0.1	0.1	0.2
Nitration (PA)	%	<b>53</b>	58	53	62
Sulfation (PA)	%	<b>52</b>	51	52	55
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>6</b>	6	4	11
Sodium	ppm	<b>0</b>	0	<1	5
Potassium	ppm	<b>1</b>	1	0	4



### WEAR METALS

Iron	ppm	<b>5</b>	6	3	84
Copper	ppm	<b>2</b>	6	19	11
Lead	ppm	<b>&lt;1</b>	<1	0	0
Tin	ppm	<b>&lt;1</b>	2	1	<1
Aluminum	ppm	<b>2</b>	3	<1	12
Chromium	ppm	<b>&lt;1</b>	<1	0	2
Molybdenum	ppm	<b>56</b>	77	64	64
Nickel	ppm	<b>0</b>	1	0	0
Titanium	ppm	<b>&lt;1</b>	<1	0	<1
Silver	ppm	<b>0</b>	<1	0	0
Manganese	ppm	<b>0</b>	1	<1	2
Vanadium	ppm	<b>0</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	<b>1576</b>	1147	1105	1167
Magnesium	ppm	<b>772</b>	954	948	783
Zinc	ppm	<b>1297</b>	1238	1228	1114
Phosphorus	ppm	<b>1098</b>	986	1017	937
Barium	ppm	<b>0</b>	0	0	0
Boron	ppm	<b>18</b>	18	7	17

**Depot:** VOLVO1835  
**Unique No:** 10940262  
**Signed:** Wes Davis  
**Report Date:** 22 Mar 2024



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## GRAPHS

