



# CONSTRUCTION EQUIPMENT

## SW-21557-2 CMC ROCK VOLVO L220H 3376 - DIESEL ENGINE



**Sample No:** VCP404710  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SW-21557-2 CMC ROCK



### SAMPLE INFORMATION

Sample Number	<b>VCP404710</b>	VCP406787	---	---
Sample Date	<b>17 Jul 2023</b>	26 Apr 2023	---	---
Machine Hours	<b>2160</b>	1547	---	---
Oil Hours	<b>500</b>	1100	---	---
Oil Changed	<b>Changed</b>	Changed	---	---
Sample Status	<b>ATTENTION</b>	NORMAL	---	---

**ARNOLD MACHINERY COMPANY**  
 2975 WEST 2100 SOUTH  
 SALT LAKE CITY, UT  
 US 84119  
 Contact: TONY PAYAN  
 tpayan@arnoldmachinery.com  
 T: (801)972-4000  
 F: (801)975-9434



### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 12.4</b>	■ 11.7	---	---
Base Number (BN)	mg KOH/g	<b>■ 7.9</b>	■ 4.3	---	---
Oxidation (PA)	%	<b>62</b>	67	---	---

### Diagnosis

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Soot %	%	<b>■ 0.3</b>	■ 0.2	---	---
Nitration (PA)	%	<b>58</b>	71	---	---
Sulfation (PA)	%	<b>55</b>	54	---	---
Glycol	%	<b>NEG</b>	■ 0.0	---	---
Fuel	%	<b>&lt;1.0</b>	■ 0.4	---	---
Silicon	ppm	<b>■ 0</b>	■ 9	---	---
Sodium	ppm	<b>■ &lt;1</b>	■ 3	---	---
Potassium	ppm	<b>■ 1</b>	■ 0	---	---



### WEAR METALS

Iron	ppm	<b>■ 12</b>	■ 15	---	---
Copper	ppm	<b>■ 31</b>	■ 67	---	---
Lead	ppm	<b>■ &lt;1</b>	■ 0	---	---
Tin	ppm	<b>■ &lt;1</b>	■ 1	---	---
Aluminum	ppm	<b>■ &lt;1</b>	■ <1	---	---
Chromium	ppm	<b>■ 0</b>	■ 0	---	---
Molybdenum	ppm	<b>■ 59</b>	■ 52	---	---
Nickel	ppm	<b>■ 0</b>	■ 0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>■ 0</b>	■ 0	---	---
Manganese	ppm	<b>■ &lt;1</b>	■ 2	---	---
Vanadium	ppm	<b>0</b>	<1	---	---



### ADDITIVES

Calcium	ppm	<b>■ 1145</b>	■ 1371	---	---
Magnesium	ppm	<b>■ 843</b>	679	---	---
Zinc	ppm	<b>■ 1166</b>	■ 1096	---	---
Phosphorus	ppm	<b>■ 953</b>	■ 789	---	---
Barium	ppm	<b>■ 2</b>	■ 0	---	---
Boron	ppm	<b>■ 3</b>	■ 10	---	---

**Depot:** VOLVO8770  
**Unique No:** 10573110  
**Signed:** Don Baldrige  
**Report Date:** 27 Jul 2023



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## GRAPHS

