



# CONSTRUCTION EQUIPMENT

## 1212 BERGMAN C815S 5922 - DIESEL ENGINE



**Sample No:** VCP441688  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 1212



### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP441688   | --- | --- | --- |
| Sample Date   | 08 Nov 2023 | --- | --- | --- |
| Machine Hours | 729         | --- | --- | --- |
| Oil Hours     | 0           | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | ABNORMAL    | --- | --- | --- |

**VCES- VOLVO CONSTRUCTION EQUIPMENT**  
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### OIL CONDITION

|                  |          |        |     |     |     |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C     | cSt      | █ 12.7 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 8.1  | --- | --- | --- |
| Oxidation (PA)   | %        | 84     | --- | --- | --- |

### CONTAMINATION

|                |     |       |     |     |     |
|----------------|-----|-------|-----|-----|-----|
| Water          | %   | NEG   | --- | --- | --- |
| Soot %         | %   | █ 0.8 | --- | --- | --- |
| Nitration (PA) | %   | 132   | --- | --- | --- |
| Sulfation (PA) | %   | 63    | --- | --- | --- |
| Glycol         | %   | NEG   | --- | --- | --- |
| Fuel           | %   | <1.0  | --- | --- | --- |
| Silicon        | ppm | █ 21  | --- | --- | --- |
| Sodium         | ppm | █ 11  | --- | --- | --- |
| Potassium      | ppm | █ 2   | --- | --- | --- |

### Diagnosis

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. All other metal levels are typical for a new component breaking in. 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 acceptable for the time in service.

### WEAR METALS

|            |     |       |     |     |     |
|------------|-----|-------|-----|-----|-----|
| Iron       | ppm | ▲ 176 | --- | --- | --- |
| Copper     | ppm | █ 100 | --- | --- | --- |
| Lead       | ppm | █ 2   | --- | --- | --- |
| Tin        | ppm | █ 1   | --- | --- | --- |
| Aluminum   | ppm | █ 4   | --- | --- | --- |
| Chromium   | ppm | █ 3   | --- | --- | --- |
| Molybdenum | ppm | █ 6   | --- | --- | --- |
| Nickel     | ppm | █ <1  | --- | --- | --- |
| Titanium   | ppm | 3     | --- | --- | --- |
| Silver     | ppm | █ 0   | --- | --- | --- |
| Manganese  | ppm | █ 6   | --- | --- | --- |
| Vanadium   | ppm | 0     | --- | --- | --- |

### ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | █ 3150 | --- | --- | --- |
| Magnesium  | ppm | █ 142  | --- | --- | --- |
| Zinc       | ppm | █ 975  | --- | --- | --- |
| Phosphorus | ppm | █ 759  | --- | --- | --- |
| Barium     | ppm | █ 5    | --- | --- | --- |
| Boron      | ppm | █ 118  | --- | --- | --- |

**Depot:** VOLVO4485  
**Unique No:** 10753836  
**Signed:** Don Baldrige  
**Report Date:** 25 Nov 2023



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## GRAPHS

