



# CONSTRUCTION EQUIPMENT

S678 OLDCASTLE VOLVO L110H 632328 - DIESEL ENGINE



**Sample No:** VCP424195  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** S678 OLDCASTLE



## SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP424195   | --- | --- | --- |
| Sample Date   | 12 Jul 2023 | --- | --- | --- |
| Machine Hours | 535         | --- | --- | --- |
| Oil Hours     | 0           | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | SEVERE      | --- | --- | --- |

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

|                  |          |        |     |     |     |
|------------------|----------|--------|-----|-----|-----|
| Visc @ 100°C     | cSt      | █ 12.5 | --- | --- | --- |
| Base Number (BN) | mg KOH/g | █ 10.1 | --- | --- | --- |
| Oxidation (PA)   | %        | 75     | --- | --- | --- |

## CONTAMINATION

|                |     |       |     |     |     |
|----------------|-----|-------|-----|-----|-----|
| Soot %         | %   | █ 0.2 | --- | --- | --- |
| Nitration (PA) | %   | 61    | --- | --- | --- |
| Sulfation (PA) | %   | 59    | --- | --- | --- |
| Glycol         | %   | NEG   | --- | --- | --- |
| Fuel           | %   | <1.0  | --- | --- | --- |
| Silicon        | ppm | █ 16  | --- | --- | --- |
| Sodium         | ppm | █ 3   | --- | --- | --- |
| Potassium      | ppm | █ 2   | --- | --- | --- |

## Diagnosis

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Aluminum level high for break in. 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 | █ 31  | --- | --- | --- |
| Copper     | ppm | █ 10  | --- | --- | --- |
| Lead       | ppm | █ 2   | --- | --- | --- |
| Tin        | ppm | █ 2   | --- | --- | --- |
| Aluminum   | ppm | ● 133 | --- | --- | --- |
| Chromium   | ppm | █ 6   | --- | --- | --- |
| Molybdenum | ppm | █ 38  | --- | --- | --- |
| Nickel     | ppm | █ <1  | --- | --- | --- |
| Titanium   | ppm | <1    | --- | --- | --- |
| Silver     | ppm | █ <1  | --- | --- | --- |
| Manganese  | ppm | █ 3   | --- | --- | --- |
| Vanadium   | ppm | 0     | --- | --- | --- |

## ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | █ 1413 | --- | --- | --- |
| Magnesium  | ppm | █ 594  | --- | --- | --- |
| Zinc       | ppm | █ 1092 | --- | --- | --- |
| Phosphorus | ppm | █ 907  | --- | --- | --- |
| Barium     | ppm | █ 4    | --- | --- | --- |
| Boron      | ppm | █ 53   | --- | --- | --- |

**Depot:** VOLVO4485  
**Unique No:** 10578434  
**Signed:** Don Baldrige  
**Report Date:** 02 Aug 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

