



# CONSTRUCTION EQUIPMENT

SWA143338 VOLVO L110H 632075 - DIESEL ENGINE



**Sample No:** VCP370092  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA143338



## SAMPLE INFORMATION

|               |                    |             |     |     |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | <b>VCP370092</b>   | VCP377888   | --- | --- |
| Sample Date   | <b>06 Jan 2023</b> | 23 Jun 2022 | --- | --- |
| Machine Hours | <b>2988</b>        | 1626        | --- | --- |
| Oil Hours     | <b>0</b>           | 0           | --- | --- |
| Oil Changed   | <b>Changed</b>     | Changed     | --- | --- |
| Sample Status | <b>NORMAL</b>      | NORMAL      | --- | --- |



## ALTA EQUIPMENT

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## OIL CONDITION

|                  |          |             |      |     |     |
|------------------|----------|-------------|------|-----|-----|
| Visc @ 100°C     | cSt      | <b>13.9</b> | 13.2 | --- | --- |
| Base Number (BN) | mg KOH/g | <b>7.4</b>  | 5.4  | --- | --- |
| Oxidation (PA)   | %        | <b>91</b>   | 73   | --- | --- |



## CONTAMINATION

|                |     |                |      |     |     |
|----------------|-----|----------------|------|-----|-----|
| Soot %         | %   | <b>1.2</b>     | 0.7  | --- | --- |
| Nitration (PA) | %   | <b>93</b>      | 88   | --- | --- |
| Sulfation (PA) | %   | <b>69</b>      | 66   | --- | --- |
| Glycol         | %   | <b>NEG</b>     | NEG  | --- | --- |
| Fuel           | %   | <b>&lt;1.0</b> | <1.0 | --- | --- |
| Silicon        | ppm | <b>7</b>       | 8    | --- | --- |
| Sodium         | ppm | <b>3</b>       | 2    | --- | --- |
| Potassium      | ppm | <b>0</b>       | 0    | --- | --- |



## WEAR METALS

|            |     |              |    |     |     |
|------------|-----|--------------|----|-----|-----|
| Iron       | ppm | <b>43</b>    | 37 | --- | --- |
| Copper     | ppm | <b>7</b>     | 16 | --- | --- |
| Lead       | ppm | <b>3</b>     | 5  | --- | --- |
| Tin        | ppm | <b>4</b>     | 3  | --- | --- |
| Aluminum   | ppm | <b>12</b>    | 9  | --- | --- |
| Chromium   | ppm | <b>3</b>     | 2  | --- | --- |
| Molybdenum | ppm | <b>43</b>    | 88 | --- | --- |
| Nickel     | ppm | <b>&lt;1</b> | 1  | --- | --- |
| Titanium   | ppm | <b>&lt;1</b> | <1 | --- | --- |
| Silver     | ppm | <b>&lt;1</b> | 1  | --- | --- |
| Manganese  | ppm | <b>&lt;1</b> | <1 | --- | --- |
| Vanadium   | ppm | <b>0</b>     | 0  | --- | --- |



## ADDITIVES

|            |     |             |      |     |     |
|------------|-----|-------------|------|-----|-----|
| Calcium    | ppm | <b>1980</b> | 2185 | --- | --- |
| Magnesium  | ppm | <b>368</b>  | 86   | --- | --- |
| Zinc       | ppm | <b>1269</b> | 1201 | --- | --- |
| Phosphorus | ppm | <b>977</b>  | 941  | --- | --- |
| Barium     | ppm | <b>0</b>    | 1    | --- | --- |
| Boron      | ppm | <b>34</b>   | 27   | --- | --- |

## 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:** VOLV00142  
**Unique No:** 10286407  
**Signed:** Sean Felton  
**Report Date:** 13 Jan 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

