



# CONSTRUCTION EQUIPMENT

## A11830 OLD CASTLE VOLVO L150H 7123 - DIESEL ENGINE



**Sample No:** VCP428663  
**Oil Type:** MOBIL 15W40  
**Job No:** A11830 OLD CASTLE



### SAMPLE INFORMATION

|               |                    |             |             |             |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | <b>VCP428663</b>   | VCP431260   | VCP400763   | VCP342648   |
| Sample Date   | <b>11 Jan 2024</b> | 03 Oct 2023 | 10 May 2023 | 13 Feb 2023 |
| Machine Hours | <b>1970</b>        | 1546        | 1020        | 580         |
| Oil Hours     | <b>500</b>         | 0           | 500         | 0           |
| Oil Changed   | <b>Changed</b>     | N/A         | Changed     | Changed     |
| Sample Status | <b>NORMAL</b>      | ABNORMAL    | ABNORMAL    | ABNORMAL    |

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### OIL CONDITION

|                  |          |             |      |      |      |
|------------------|----------|-------------|------|------|------|
| Visc @ 100°C     | cSt      | <b>13.2</b> | 12.9 | 11.8 | 11.2 |
| Base Number (BN) | mg KOH/g | <b>8.7</b>  | 6.6  | 7.7  | 6.1  |
| Oxidation (PA)   | %        | <b>62</b>   | 38   | 45   | 58   |

### 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    | 0.1 |
| Nitration (PA) | %   | <b>61</b>      | 56   | 56   | 77  |
| Sulfation (PA) | %   | <b>53</b>      | 45   | 47   | 52  |
| Glycol         | %   | <b>NEG</b>     | NEG  | NEG  | NEG |
| Fuel           | %   | <b>&lt;1.0</b> | <1.0 | <1.0 | 0.5 |
| Silicon        | ppm | <b>4</b>       | 5    | 7    | 26  |
| Sodium         | ppm | <b>2</b>       | <1   | <1   | 3   |
| Potassium      | ppm | <b>2</b>       | <1   | 2    | 4   |



### WEAR METALS

|            |     |              |    |    |     |
|------------|-----|--------------|----|----|-----|
| Iron       | ppm | <b>2</b>     | 3  | 3  | 8   |
| Copper     | ppm | <b>8</b>     | 41 | 31 | 263 |
| Lead       | ppm | <b>&lt;1</b> | 1  | <1 | 1   |
| Tin        | ppm | <b>&lt;1</b> | <1 | <1 | 2   |
| Aluminum   | ppm | <b>&lt;1</b> | 11 | 4  | 2   |
| Chromium   | ppm | <b>0</b>     | 0  | 0  | <1  |
| Molybdenum | ppm | <b>43</b>    | 13 | 28 | 78  |
| Nickel     | ppm | <b>0</b>     | 0  | 0  | 0   |
| Titanium   | ppm | <b>0</b>     | 0  | <1 | 0   |
| Silver     | ppm | <b>0</b>     | 0  | 0  | 0   |
| Manganese  | ppm | <b>&lt;1</b> | 0  | <1 | 2   |
| Vanadium   | ppm | <b>0</b>     | 0  | 0  | 0   |



### ADDITIVES

|            |     |             |      |      |      |
|------------|-----|-------------|------|------|------|
| Calcium    | ppm | <b>1503</b> | 2044 | 1901 | 2185 |
| Magnesium  | ppm | <b>496</b>  | 130  | 340  | 43   |
| Zinc       | ppm | <b>1215</b> | 1184 | 1196 | 1194 |
| Phosphorus | ppm | <b>1032</b> | 935  | 946  | 1001 |
| Barium     | ppm | <b>0</b>    | 0    | 0    | 0    |
| Boron      | ppm | <b>39</b>   | 6    | 10   | 62   |

**Depot:** VOLVO8879  
**Unique No:** 10836340  
**Signed:** Wes Davis  
**Report Date:** 19 Jan 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

