



# CONSTRUCTION EQUIPMENT

## 392231 VOLVO L90B 61843 - DIESEL ENGINE



**Sample No:** VCP394296  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 392231



### SAMPLE INFORMATION

|               |             |     |     |     |
|---------------|-------------|-----|-----|-----|
| Sample Number | VCP394296   | --- | --- | --- |
| Sample Date   | 12 Feb 2024 | --- | --- | --- |
| Machine Hours | 24721       | --- | --- | --- |
| Oil Hours     | 500         | --- | --- | --- |
| Oil Changed   | Changed     | --- | --- | --- |
| Sample Status | ABNORMAL    | --- | --- | --- |

**STRONGCO EQUIP (AB)**  
 6 - 38403 BURNT LAKE TRAIL  
 RED DEER COUNTY, AB  
 CA T4S 2L4  
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### OIL CONDITION

|                |     |        |     |     |     |
|----------------|-----|--------|-----|-----|-----|
| Visc @ 100°C   | cSt | ▲ 11.3 | --- | --- | --- |
| Oxidation (PA) | %   | 83     | --- | --- | --- |

### CONTAMINATION

|                |     |         |     |     |     |
|----------------|-----|---------|-----|-----|-----|
| Water          | %   | NEG     | --- | --- | --- |
| Soot %         | %   | ■ 0.2   | --- | --- | --- |
| Nitration (PA) | %   | 96      | --- | --- | --- |
| Sulfation (PA) | %   | 60      | --- | --- | --- |
| Glycol         | %   | ▲ 0.011 | --- | --- | --- |
| Fuel           | %   | ■ 2.7   | --- | --- | --- |
| Silicon        | ppm | ■ 8     | --- | --- | --- |
| Sodium         | ppm | ▲ 27    | --- | --- | --- |
| Potassium      | ppm | ▲ 6     | --- | --- | --- |

### Diagnosis

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time. The fluid was specified as VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. Test for glycol is positive. Light fuel dilution occurring. There is a light concentration of glycol present in the oil. No other contaminants were detected in the oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable due to the presence of contaminants.

### WEAR METALS

|            |     |      |     |     |     |
|------------|-----|------|-----|-----|-----|
| Iron       | ppm | ■ 32 | --- | --- | --- |
| Copper     | ppm | ■ 6  | --- | --- | --- |
| Lead       | ppm | ■ 2  | --- | --- | --- |
| Tin        | ppm | ■ 1  | --- | --- | --- |
| Aluminum   | ppm | ■ 3  | --- | --- | --- |
| Chromium   | ppm | ■ 1  | --- | --- | --- |
| Molybdenum | ppm | ■ 67 | --- | --- | --- |
| Nickel     | ppm | ■ 3  | --- | --- | --- |
| Titanium   | ppm | 0    | --- | --- | --- |
| Silver     | ppm | ■ 0  | --- | --- | --- |
| Manganese  | ppm | ■ 0  | --- | --- | --- |
| Vanadium   | ppm | 0    | --- | --- | --- |

### ADDITIVES

|            |     |        |     |     |     |
|------------|-----|--------|-----|-----|-----|
| Calcium    | ppm | 1199   | --- | --- | --- |
| Magnesium  | ppm | 827    | --- | --- | --- |
| Zinc       | ppm | ■ 1077 | --- | --- | --- |
| Phosphorus | ppm | ■ 872  | --- | --- | --- |
| Barium     | ppm | ■ 0    | --- | --- | --- |
| Boron      | ppm | ■ 30   | --- | --- | --- |

**Depot:** VOLVO9652  
**Unique No:** 5734483  
**Signed:** Wes Davis  
**Report Date:** 23 Feb 2024



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## GRAPHS

### Iron (ppm)



### Lead (ppm)



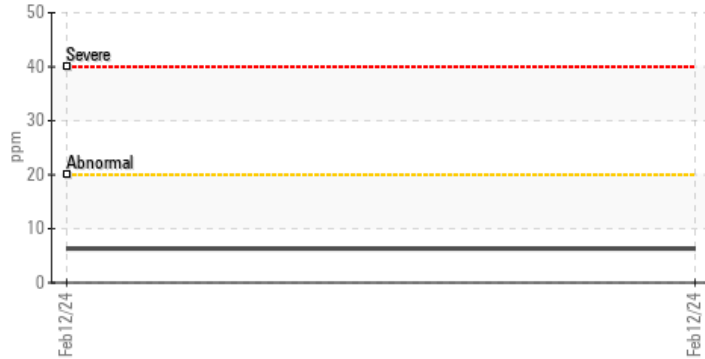
### Aluminum (ppm)



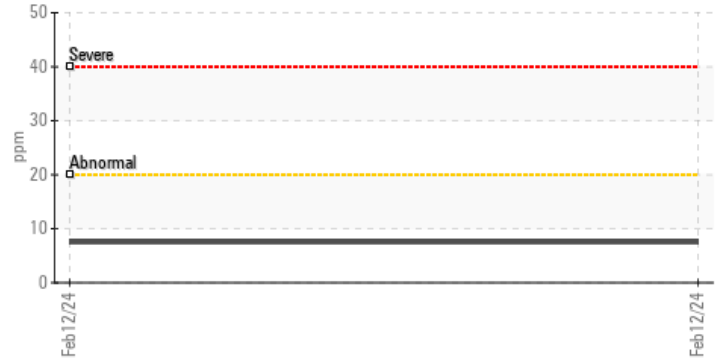
### Chromium (ppm)



### Copper (ppm)



### Silicon (ppm)



### ▲ Viscosity @ 100°C



### ▲ Glycol Contamination

