



# CONSTRUCTION EQUIPMENT

TMR-OKEECHOBEE 716012 434166 VOLVO L180H 4821 - HYDRAULIC SYSTEM



**Sample No:** VCP449963  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** 716012



## SAMPLE INFORMATION

|               |                    |             |             |             |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | <b>VCP449963</b>   | VCP445666   | VCP435343   | VCP408044   |
| Sample Date   | <b>18 May 2024</b> | 12 Feb 2024 | 23 Jan 2024 | 01 May 2023 |
| Machine Hours | <b>16357</b>       | 15531       | 15313       | 13007       |
| Oil Hours     | <b>0</b>           | 0           | 0           | 0           |
| Oil Changed   | <b>Not Chngd</b>   | Not Chngd   | Not Chngd   | Not Chngd   |
| Sample Status | <b>ABNORMAL</b>    | ABNORMAL    | ATTENTION   | NORMAL      |

**TRADEMARK METALS RECYCLING - OKEECHOBEE**  
9800 NE 128TH AVE  
OKEECHOBEE, FL  
US 34972  
Contact: RYAN BOWDEN

## OIL CONDITION

|                  |          |             |      |       |      |
|------------------|----------|-------------|------|-------|------|
| Visc @ 40°C      | cSt      | <b>62.3</b> | 61.7 | 59.54 | 49.7 |
| Acid Number (AN) | mg KOH/g | <b>0.81</b> | ---  | 0.597 | 0.35 |

T: (863)467-9810  
F: (863)467-9814

## CONTAMINATION

|                   |     |                 |          |          |          |
|-------------------|-----|-----------------|----------|----------|----------|
| Water             | %   | <b>NEG</b>      | NEG      | NEG      | NEG      |
| Particles >4µm    |     | <b>▲ 50057</b>  | ▲ 34407  | ● 8292   | ■ 4533   |
| Particles >6µm    |     | <b>▲ 12620</b>  | ▲ 5003   | ■ 1067   | ■ 731    |
| Particles >14µm   |     | <b>▲ 691</b>    | ■ 130    | ■ 20     | ■ 22     |
| ISO 4406:1999 (c) |     | <b>23/21/17</b> | 22/20/14 | 20/17/11 | 19/17/12 |
| Silicon           | ppm | ■ <1            | ■ <1     | ■ <1     | ■ 1      |
| Sodium            | ppm | ■ <1            | ■ 1      | ■ 1      | ■ 5      |
| Potassium         | ppm | ■ <1            | ■ 0      | ■ <1     | ■ 2      |

## Diagnosis

We recommend you service the filters on this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The oil viscosity is higher than normal. Confirm oil type. The AN level is acceptable for this fluid.

## WEAR METALS

|            |     |      |      |      |      |
|------------|-----|------|------|------|------|
| Iron       | ppm | ■ <1 | ■ 1  | ■ 1  | ■ 1  |
| Copper     | ppm | ■ <1 | ■ <1 | ■ <1 | ■ 0  |
| Lead       | ppm | ■ 0  | ■ 0  | ■ 0  | ■ <1 |
| Tin        | ppm | ■ 0  | ■ <1 | ■ <1 | ■ <1 |
| Aluminum   | ppm | ■ 0  | ■ 0  | ■ 0  | ■ 0  |
| Chromium   | ppm | ■ 0  | ■ 0  | ■ <1 | ■ 0  |
| Molybdenum | ppm | ■ <1 | ■ 2  | ■ 2  | ■ 4  |
| Nickel     | ppm | ■ 0  | ■ 0  | ■ 0  | ■ <1 |
| Titanium   | ppm | 0    | 0    | <1   | 0    |
| Silver     | ppm | 0    | 0    | 0    | 0    |
| Manganese  | ppm | ■ <1 | ■ <1 | ■ <1 | ■ <1 |
| Vanadium   | ppm | 0    | 0    | <1   | 0    |

## ADDITIVES

|            |     |              |       |       |       |
|------------|-----|--------------|-------|-------|-------|
| Calcium    | ppm | ■ <b>116</b> | ■ 93  | ■ 112 | ■ 91  |
| Magnesium  | ppm | ■ <b>14</b>  | ■ 11  | ■ 16  | ■ 24  |
| Zinc       | ppm | ■ <b>427</b> | ■ 409 | ■ 406 | ■ 470 |
| Phosphorus | ppm | ■ <b>358</b> | ■ 348 | ■ 375 | ■ 380 |
| Barium     | ppm | ■ 0          | ■ 0   | ■ 0   | ■ 0   |
| Boron      | ppm | ■ 0          | ■ 2   | ■ 3   | ■ 3   |

**Depot:** TRAOKE  
**Unique No:** 11048864  
**Signed:** Angela Borella  
**Report Date:** 30 May 2024

**VOLVO** GRAPHS

