



# CONSTRUCTION EQUIPMENT

## SWA122120-20 VOLVO L180H 5307 - HYDRAULIC SYSTEM



**Sample No:** VCP367715  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA122120-20



### SAMPLE INFORMATION

|               |                    |             |             |             |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | <b>VCP367715</b>   | VCP383609   | VCP353815   | VCP356544   |
| Sample Date   | <b>05 Dec 2022</b> | 27 Sep 2022 | 24 Jun 2022 | 06 Apr 2022 |
| Machine Hours | <b>6547</b>        | 6070        | 5245        | 4671        |
| Oil Hours     | <b>0</b>           | 0           | 0           | 0           |
| Oil Changed   | <b>Not Chngd</b>   | Not Chngd   | N/A         | Changed     |
| Sample Status | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    | NORMAL      |

### ALTA EQUIPMENT

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### OIL CONDITION

|                  |          |             |      |      |      |
|------------------|----------|-------------|------|------|------|
| Visc @ 40°C      | cSt      | <b>40.0</b> | 40.6 | 41.0 | 38.8 |
| Acid Number (AN) | mg KOH/g | <b>0.41</b> | 0.34 | 0.31 | 0.35 |



### CONTAMINATION

|                   |     |                 |          |     |          |
|-------------------|-----|-----------------|----------|-----|----------|
| Particles >4µm    |     | <b>25434</b>    | 28907    | --- | 1962     |
| Particles >6µm    |     | <b>▲ 5705</b>   | ▲ 6456   | --- | 310      |
| Particles >14µm   |     | <b>▲ 180</b>    | ▲ 347    | --- | 24       |
| ISO 4406:1999 (c) |     | <b>22/20/15</b> | 22/20/16 | --- | 18/15/12 |
| Silicon           | ppm | <b>3</b>        | 3        | 4   | 4        |
| Sodium            | ppm | <b>1</b>        | 0        | 2   | 3        |
| Potassium         | ppm | <b>0</b>        | 2        | 0   | 0        |



### WEAR METALS

|            |     |              |    |    |    |
|------------|-----|--------------|----|----|----|
| Iron       | ppm | <b>3</b>     | 3  | 3  | 4  |
| Copper     | ppm | <b>4</b>     | 5  | 4  | 8  |
| Lead       | ppm | <b>&lt;1</b> | 1  | <1 | 2  |
| Tin        | ppm | <b>0</b>     | <1 | <1 | 0  |
| Aluminum   | ppm | <b>2</b>     | 1  | 1  | 2  |
| Chromium   | ppm | <b>2</b>     | 2  | 1  | 3  |
| Molybdenum | ppm | <b>0</b>     | 0  | 0  | 0  |
| Nickel     | ppm | <b>0</b>     | 0  | 0  | 0  |
| Titanium   | ppm | <b>0</b>     | 0  | 0  | 0  |
| Silver     | ppm | <b>0</b>     | 0  | 0  | <1 |
| Manganese  | ppm | <b>0</b>     | <1 | 0  | 0  |
| Vanadium   | ppm | <b>0</b>     | 0  | 0  | 0  |



### ADDITIVES

|            |     |            |     |     |     |
|------------|-----|------------|-----|-----|-----|
| Calcium    | ppm | <b>65</b>  | 59  | 63  | 52  |
| Magnesium  | ppm | <b>0</b>   | <1  | <1  | 0   |
| Zinc       | ppm | <b>416</b> | 431 | 428 | 389 |
| Phosphorus | ppm | <b>328</b> | 342 | 337 | 341 |
| Barium     | ppm | <b>4</b>   | 0   | 0   | 0   |
| Boron      | ppm | <b>0</b>   | 0   | 0   | <1  |

### Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. Oil Cleanliness are abnormally high. Particles >14µm are abnormally high. Particles >21µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

**Depot:** VOLV00142  
**Unique No:** 10248137  
**Signed:** Wes Davis  
**Report Date:** 12 Dec 2022

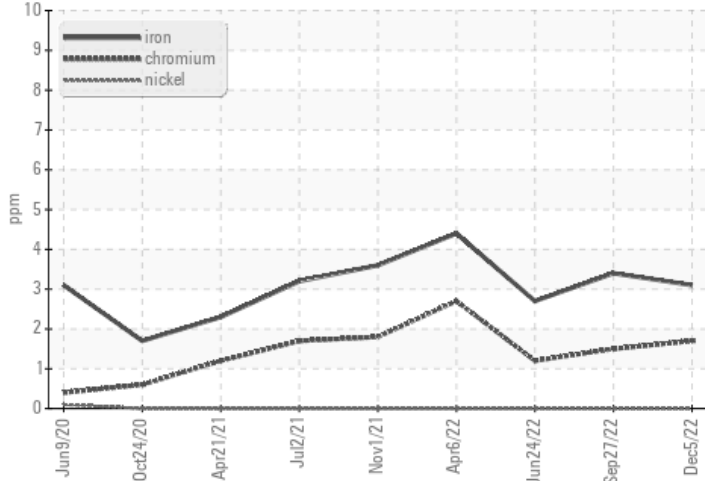


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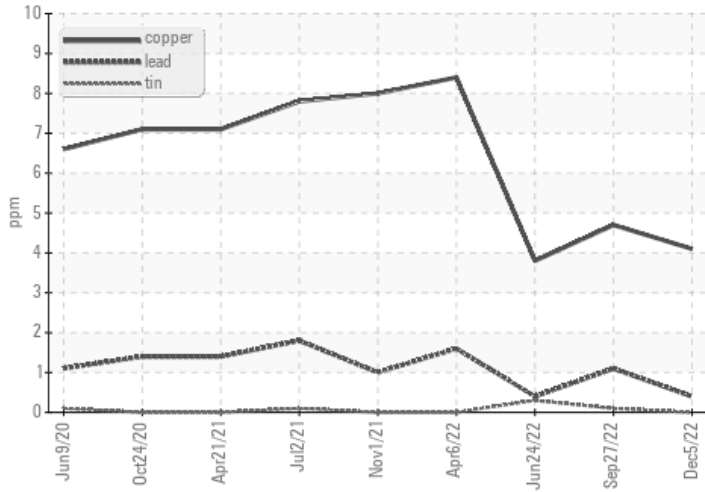


## GRAPHS

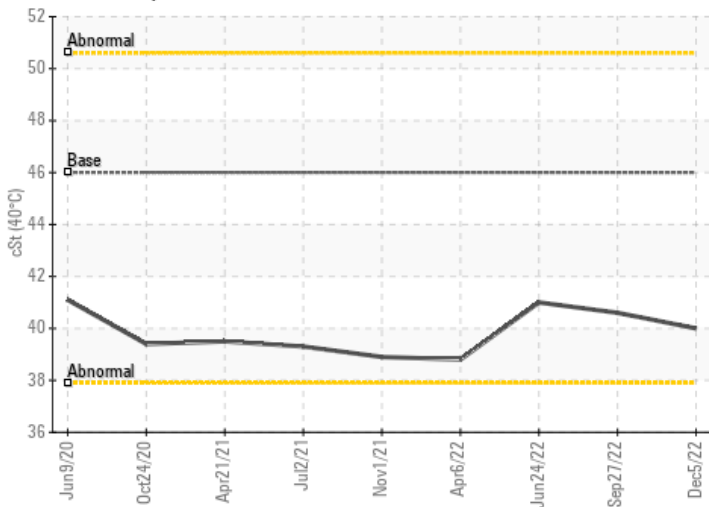
### Ferrous Alloys



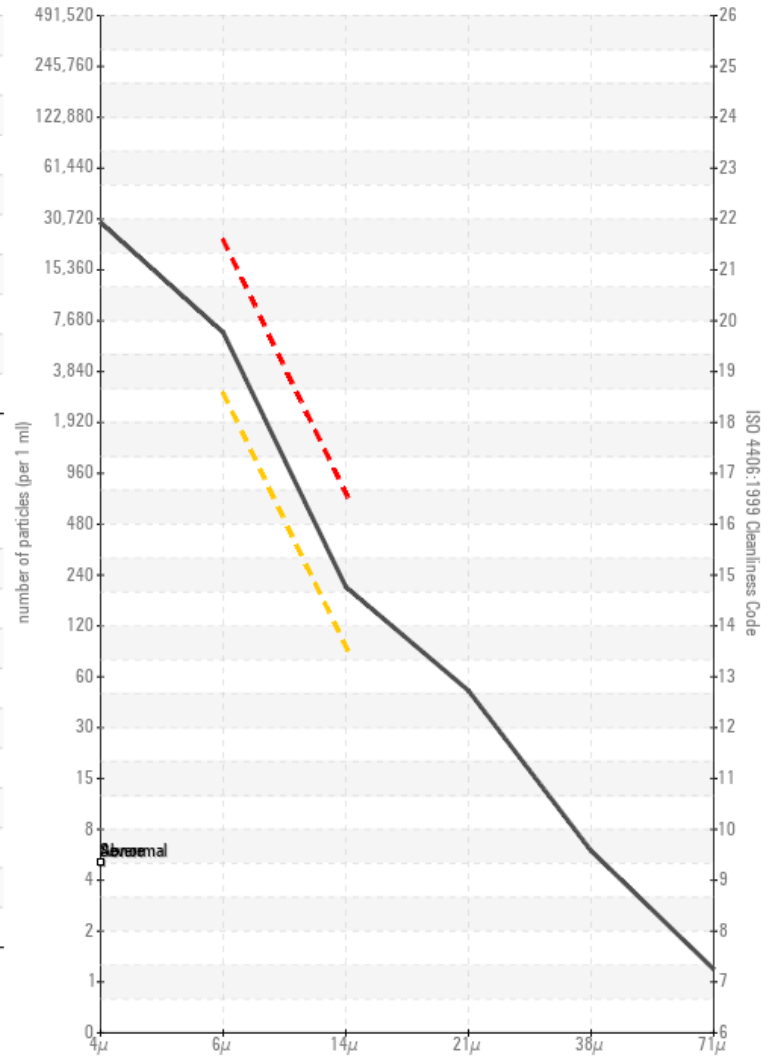
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

