

# WEAR NORMAL CONTAMINATION SEVERE FLUID CONDITION NORMAL

#### (TMR) Machine Id VOLVO L Component Hydraulic S Fluid AW HYDRA

#### Machine Id Machine Id VOLVO L60H 623237 Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- GAL)

### RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

### WEAR

All component wear rates are normal.

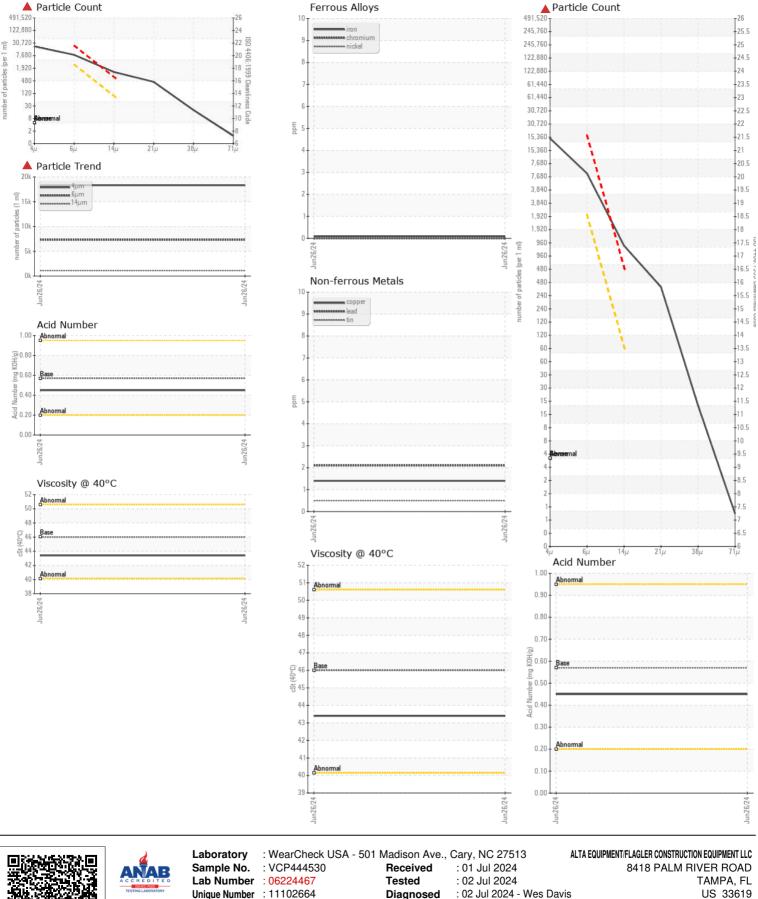
## CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

### FLUID CONDITION

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

|                  |          |              |           | ( )            |          |          |
|------------------|----------|--------------|-----------|----------------|----------|----------|
| Test             | UOM      | Method       | Limit/Abn | Current        | History1 | History2 |
| Sample Number    |          | Client Info  |           | VCP444530      |          |          |
| Sample Date      |          | Client Info  |           | 26 Jun 2024    |          |          |
| Machine Age      | hrs      | Client Info  |           | 736            |          |          |
| Oil Age          | hrs      | Client Info  |           | 0              |          |          |
| Filter Age       | hrs      | Client Info  |           | 0              |          |          |
| Oil Changed      |          | Client Info  |           | Not Changd     |          |          |
| Filter Changed   |          | Client Info  |           | Not Changd     |          |          |
| Sample Status    |          |              |           | SEVERE         |          |          |
|                  |          |              |           |                |          |          |
| Iron             | ppm      | ASTM D5185m  | >50       | <1             |          |          |
| Chromium         | ppm      | ASTM D5185m  | >20       | 0              |          |          |
| Nickel           | ppm      | ASTM D5185m  | >10       | 0              |          |          |
| Titanium         | ppm      | ASTM D5185m  |           | 0              |          |          |
| Silver           | ppm      | ASTM D5185m  |           | 0              |          |          |
| Aluminum         | ppm      | ASTM D5185m  |           | <1             |          |          |
| Lead             | ppm      | ASTM D5185m  | >20       | 2              |          |          |
| Copper           | ppm      | ASTM D5185m  | >150      | 1              |          |          |
| Tin              | ppm      | ASTM D5185m  | >20       | <1             |          |          |
| Vanadium         | ppm      | ASTM D5185m  |           | 0              |          |          |
| White Metal      | scalar   | *Visual      | NONE      | NONE           |          |          |
| Yellow Metal     | scalar   | *Visual      | NONE      | NONE           |          |          |
|                  |          |              |           |                |          |          |
| Silicon          | ppm      | ASTM D5185m  | >20       | 4              |          |          |
| Potassium        | ppm      | ASTM D5185m  | >20       | <1             |          |          |
| Water            |          | WC Method    | >0.1      | NEG            |          |          |
| Particles >4µm   |          | ASTM D7647   |           | 18315          |          |          |
| Particles >6µm   |          | ASTM D7647   | >2500     | <b>A</b> 7308  |          |          |
| Particles >14µm  |          | ASTM D7647   | >80       | <b>1104</b>    |          |          |
| Particles >21µm  |          | ASTM D7647   | >20       | <b>A</b> 374   |          |          |
| Particles >38µm  |          | ASTM D7647   | >4        | 🔺 17           |          |          |
| Particles >71µm  |          | ASTM D7647   | >3        | 1              |          |          |
| Oil Cleanliness  |          | ISO 4406 (c) | >/18/13   | <b>1/20/17</b> |          |          |
| Silt             | scalar   | *Visual      | NONE      | NONE           |          |          |
| Debris           | scalar   | *Visual      | NONE      | LIGHT          |          |          |
| Sand/Dirt        | scalar   | *Visual      | NONE      | NONE           |          |          |
| Appearance       | scalar   | *Visual      | NORML     | NORML          |          |          |
| Odor             | scalar   | *Visual      | NORML     | NORML          |          |          |
| Emulsified Water | scalar   | *Visual      | >0.1      | NEG            |          |          |
|                  |          |              |           |                |          |          |
| Sodium           | ppm      | ASTM D5185m  | _         | 0              |          |          |
| Boron            | ppm      | ASTM D5185m  |           | 0              |          |          |
| Barium           | ppm      | ASTM D5185m  | 5         | 0              |          |          |
| Molybdenum       | ppm      | ASTM D5185m  | 5         | 0              |          |          |
| Manganese        | ppm      | ASTM D5185m  |           | <1             |          |          |
| Magnesium        | ppm      | ASTM D5185m  | 25        | 0              |          |          |
| Calcium          | ppm      | ASTM D5185m  | 200       | 54             |          |          |
| Phosphorus       | ppm      | ASTM D5185m  | 300       | 344            |          |          |
| Zinc             | ppm      | ASTM D5185m  | 370       | 477            |          |          |
| Sulfur           | ppm      | ASTM D5185m  | 2500      | 2380           |          |          |
| Acid Number (AN) | mg KOH/g | ASTM D8045   | 0.57      | 0.45           |          |          |
| Visc @ 40°C      | cSt      | ASTM D445    | 46        | 43.4           |          |          |
|                  |          |              |           |                |          |          |



Certificate L2367 Test Package : MOB 2 To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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