

## [530] VOLVO SD115 236019 Hydraulic System

## VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

| VOLVO SUPER HYDRAULIC OIL 46 ( GAL)   |                        |        |              |           |             |             |          |
|---|------------------------|--------|--------------|-----------|-------------|-------------|----------|
| RECOMMENDATION  | Test                   | UOM    | Method       | Limit/Abn | Current     | History1    | History2 |
| Resample at the next service interval to monitor.   | Sample Number          |        | Client Info  |           | VCP446771   | VCP408644   |          |
|   | Sample Date            |        | Client Info  |           | 16 Apr 2024 | 11 Aug 2023 |          |
|   | Machine Age            | hrs    | Client Info  |           | 5649        | 5001        |          |
|   | Oil Age                | hrs    | Client Info  |           | 0           | 0           |          |
|   | Filter Age             | hrs    | Client Info  |           | 0           | 0           |          |
|   | Oil Changed            |        | Client Info  |           | Changed     | Not Changd  |          |
|   | Filter Changed         |        | Client Info  |           | Changed     | Changed     |          |
|   | Sample Status          |        |              |           | NORMAL      | ABNORMAL    |          |
| WEAR  | Iron                   | ppm    | ASTM D5185m  | >20       | 6           | 12          |          |
|   | Chromium               | ppm    | ASTM D5185m  | >10       | 0           | 0           |          |
| All component wear rates are normal.  | Nickel                 | ppm    | ASTM D5185m  | >10       | 0           | 0           |          |
|   | Titanium               | ppm    | ASTM D5185m  |           | 0           | 0           |          |
|   | Silver                 | ppm    | ASTM D5185m  |           | 0           | <1          |          |
|   | Aluminum               | ppm    | ASTM D5185m  | >10       | 0           | <1          |          |
|   | Lead                   | ppm    | ASTM D5185m  | >10       | 0           | 2           |          |
|   | Copper                 | ppm    | ASTM D5185m  | >75       | 3           | 6           |          |
|   | Tin                    | ppm    | ASTM D5185m  | >10       | 0           | 0           |          |
|   | Vanadium               | ppm    | ASTM D5185m  |           | 0           | 0           |          |
|   | White Metal            | scalar | *Visual      | NONE      | NONE        | NONE        |          |
|   | Yellow Metal           | scalar | *Visual      | NONE      | NONE        | NONE        |          |
| CONTAMINATION   | Silicon                | ppm    | ASTM D5185m  | >20       | 11          | 4           |          |
|   | Potassium              | ppm    | ASTM D5185m  |           | 4           | 13          |          |
| The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. | Water                  |        | WC Method    |           | NEG         | NEG         |          |
|   | Particles >4µm         |        | ASTM D7647   | >5000     | 889         |             |          |
|   | Particles >6µm         |        | ASTM D7647   | >1300     | 125         |             |          |
|   | Particles >14µm        |        | ASTM D7647   | >160      | 9           |             |          |
|   | Particles >21µm        |        | ASTM D7647   | >40       | 2           |             |          |
|   | Particles >38µm        |        | ASTM D7647   | >10       | 0           |             |          |
|   | Particles >71µm        |        | ASTM D7647   | >3        | 0           |             |          |
|   | <b>Oil Cleanliness</b> |        | ISO 4406 (c) | >19/17/14 | 17/14/10    |             |          |
|   | Silt                   | scalar | *Visual      | NONE      | NONE        | NONE        |          |
|   | Debris                 | scalar | *Visual      | NONE      | NONE        | A MODER     |          |
|   | Sand/Dirt              | scalar | *Visual      | NONE      | NONE        | NONE        |          |
|   | Appearance             | scalar | *Visual      | NORML     | NORML       | NORML       |          |
|   | Odor                   | scalar | *Visual      | NORML     | NORML       | NORML       |          |
|   | Emulsified Water       | scalar | *Visual      | >0.1      | NEG         | NEG         |          |
| FLUID CONDITION   | Sodium                 | ppm    | ASTM D5185m  |           | 2           | 0           |          |
|   | Boron                  | ppm    | ASTM D5185m  | 14        | 11          | 36          |          |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.                              | Barium                 | ppm    | ASTM D5185m  | 0.0       | 0           | 0           |          |
|   | Molybdenum             | ppm    | ASTM D5185m  | 0.0       | 12          | 26          |          |
|   | Manganese              | ppm    | ASTM D5185m  | 0.0       | 0           | 0           |          |
|   | Magnesium              | ppm    | ASTM D5185m  | 2.6       | 58          | 116         |          |
|   | Calcium                | ppm    | ASTM D5185m  |           | 486         | 969         |          |
|   | Phosphorus             | ppm    | ASTM D5185m  | 354       | 322         | 513         |          |
|   | Zinc                   | ppm    | ASTM D5185m  |           | 382         | 562         |          |
|   | Sulfur                 | ppm    | ASTM D5185m  | 3719      | 2455        | 4356        |          |
|   | Acid Number (AN)       |        | ACTN DOOM    |           | 0.00        |             |          |

Acid Number (AN) mg KOH/g ASTM D8045

Visc @ 40°C cSt ASTM D445 46

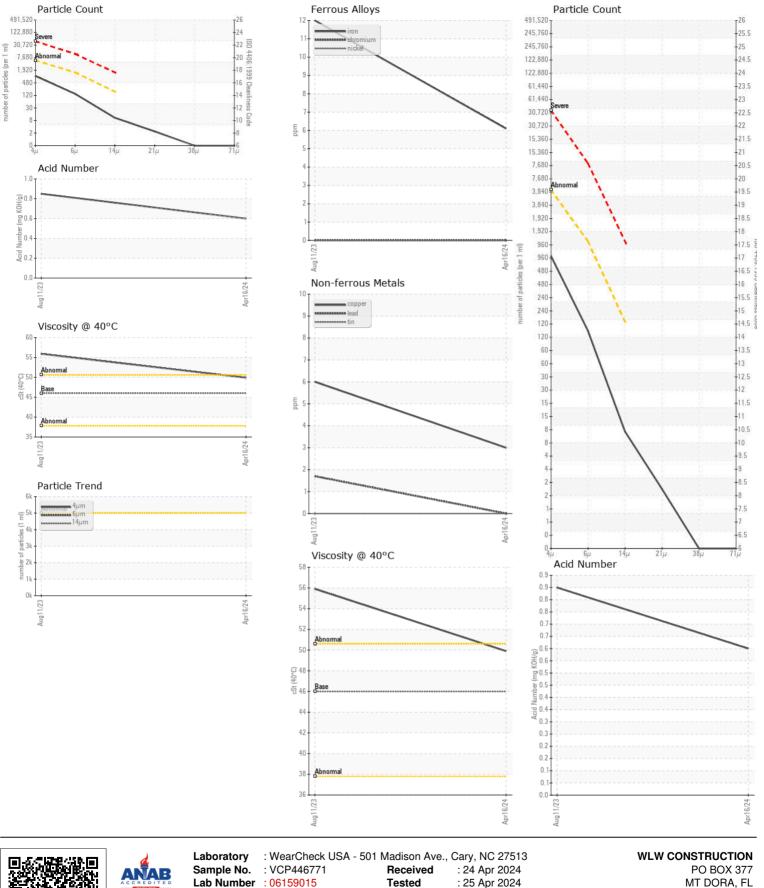
WEAR NORMAL CONTAMINATION NORMAL **FLUID CONDITION** NORMAL

0.60

49.9

0.85

55.9 ---



Lab Number : 06159015 : 25 Apr 2024 Unique Number : 10994438 : 25 Apr 2024 - Don Baldridge US 32756-0377 Diagnosed Test Package : MOB 2 Contact: ELAINE STULTZ Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. elaine@wlwconstruction.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (352)383-7305 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: ELAINE STULTZ - WLWMOU Page 2 of 2

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