

WEAR CONTAMINATION FLUID CONDITION

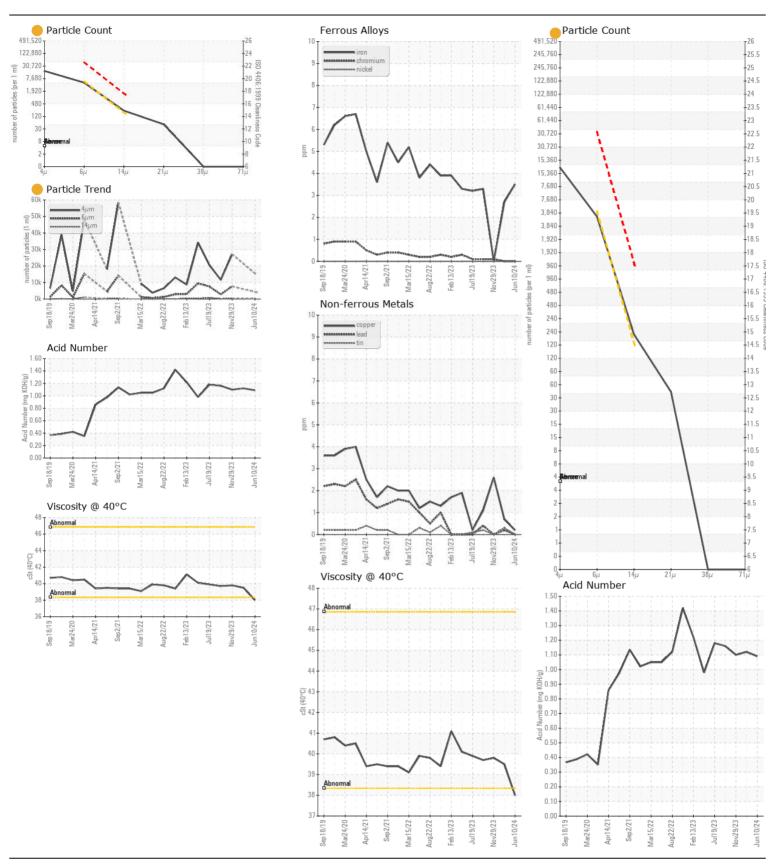
NORMAL
ATTENTION
NORMAL



VOLVO A40G 342373

Hydraulic System
Fluid
MOBIL 10W (--- GAL)

| MOBIL 10W ( GAL)  |                          |          |                 |               |              |              |               |
|---|--------------------------|----------|-----------------|---------------|--------------|--------------|---------------|
| RECOMMENDATION  | Test                     | UOM      | Method          | Limit/Abn     | Current      | History1     | History2      |
|   | Sample Number            |          | Client Info     |               | VCP441995    | VCP399413    | VCP445739     |
| The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. | Sample Date              |          | Client Info     |               | 10 Jun 2024  | 12 Mar 2024  | 29 Nov 2023   |
|   | Machine Age              | hrs      | Client Info     |               | 13342        | 12715        | 12310         |
|   | Oil Age                  | hrs      | Client Info     |               | 1032         | 405          | 1965          |
|   | Filter Age               | hrs      | Client Info     |               | 0            | 0            | 0             |
|   | Oil Changed              |          | Client Info     |               | Not Changd   | Not Changd   | Changed       |
|   | Filter Changed           |          | Client Info     |               | Changed      | Changed      | Changed       |
|   | Sample Status            |          |                 |               | ATTENTION    | ABNORMAL     | ABNORMAL      |
| WEAR  | Iron                     | ppm      | ASTM D5185m     |               | 4            | 3            | 0             |
| All component wear rates are normal.  | Chromium                 | ppm      | ASTM D5185m     | >20           | 0            | 0            | <1            |
|   | Nickel                   | ppm      | ASTM D5185m     | >10           | 0            | 0            | 0             |
|   | Titanium                 | ppm      | ASTM D5185m     |               | <1           | 0            | <1            |
|   | Silver                   | ppm      | ASTM D5185m     |               | 0            | 0            | 0             |
|   | Aluminum                 | ppm      | ASTM D5185m     | >20           | 3            | 3            | 3             |
|   | Lead                     | ppm      | ASTM D5185m     |               | 0            | <1           | 0             |
|   | Copper                   | ppm      | ASTM D5185m     | >150          | <1           | <1           | 3             |
|   | Tin                      | ppm      |                 | >20           | 0            | <1           | 0             |
|   | Vanadium                 | ppm      | ASTM D5185m     |               | 0            | 0            | 0             |
|   | White Metal              | scalar   | *Visual         | NONE          | NONE         | NONE         | NONE          |
|   | Yellow Metal             | scalar   | *Visual         | NONE          | NONE         | NONE         | NONE          |
| CONTAMINATION   | Silicon                  | ppm      | ASTM D5185m     | >20           | 14           | 15           | 16            |
| The same is a second and the same and in the same   | Potassium                | ppm      | ASTM D5185m     | >20           | 0            | 0            | 0             |
| There is a moderate amount of particulates present in the oil.  | Water                    |          | WC Method       | >0.1          | NEG          | NEG          | NEG           |
|   | Particles >4µm           |          | ASTM D7647      |               | 15539        |              | 27064         |
|   | Particles >6µm           |          | ASTM D7647      |               | 4305         |              | <u> </u> 7672 |
|   | Particles >14μm          |          | ASTM D7647      | >160          | <b>198</b>   |              | <u>454</u>    |
|   | Particles >21μm          |          | ASTM D7647      |               | <b>44</b>    |              | <u> </u>      |
|   | Particles >38µm          |          | ASTM D7647      |               | 0            |              | 2             |
|   | Particles >71μm          |          | ASTM D7647      |               | 0            |              | 0             |
|   | Oil Cleanliness          |          | ISO 4406 (c)    |               | 21/19/15     |              | 22/20/16      |
|   | Silt                     | scalar   | *Visual         | NONE          | NONE         | NONE         | NONE          |
|   | Debris                   | scalar   | *Visual         | NONE          | NONE         | ▲ HEAVY      | NONE          |
|   | Sand/Dirt                | scalar   | *Visual         | NONE          | NONE         | NONE         | NONE          |
|   | Appearance               | scalar   | *Visual         | NORML         | NORML        | NORML        | NORML         |
|   | Odor<br>Emulsified Water | scalar   | *Visual *Visual | NORML<br>>0.1 | NORML<br>NEG | NORML<br>NEG | NORML<br>NEG  |
|   |                          | scalar   | VISUAI          | >0.1          | NEG          | NEG          | NEG           |
| FLUID CONDITION   | Sodium                   | ppm      | ASTM D5185m     |               | 3            | 2            | 5             |
|   | Boron                    | ppm      | ASTM D5185m     |               | 0            | 3            | 2             |
| 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             |
|   | Molybdenum               | ppm      | ASTM D5185m     |               | 2            | 3            | 1             |
|   | Manganese                | ppm      | ASTM D5185m     |               | 0            | <1           | <1            |
|   | Magnesium                | ppm      | ASTM D5185m     |               | 30           | 30           | 26            |
|   | Calcium                  | ppm      | ASTM D5185m     |               | 3220         | 3170         | 2877          |
|   | Phosphorus               | ppm      | ASTM D5185m     |               | 928          | 888          | 850           |
|   | Zinc                     | ppm      | ASTM D5185m     |               | 1054         | 1068         | 1014          |
|   | Sulfur                   | ppm      | ASTM D5185m     |               | 8316         | 8027         | 6724          |
|   | Acid Number (AN)         | mg KOH/g | ASTM D8045      |               | 1.09         | 1.12         | 1.10          |
|   | Visc @ 40°C              | cSt      | ASTM D445       |               | 38.0         | 39.5         | 39.8          |





Certificate L2367

Laboratory Sample No. Lab Number

: VCP441995 : 06237691 Unique Number: 11126525

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 16 Jul 2024 **Tested** : 17 Jul 2024

: 18 Jul 2024 - Jonathan Hester Diagnosed

Contact/Location: SCOTT ARMSTRONG - SCHGRE

PO BOX 358 GREENFIELD, IA US 50849 Contact: SCOTT ARMSTRONG

Test Package : MOB 2 To discuss this sample report, contact Customer Service at 1-800-237-1369.

sarmstrong@schildberg.com T: (641)743-8237

\* - 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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SCHILDBERG CONSTRUCTION COMPANY