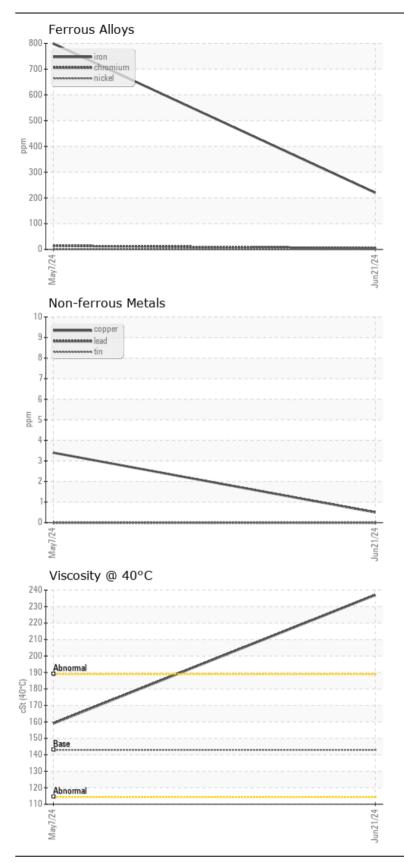
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

[W02008461]

## **VOLVO EC350E 314605**

**Left Travel** 

| RECOMMENDATION                                                                                                                                 | Test             | UOM    | Method      | Limit/Abn      | Current     | History1     | History2 |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|-------------|----------------|-------------|--------------|----------|
|                                                                                                                                                | Sample Number    | OOW    | Client Info | LITTIONOTI     | ML0002389   | ML0001087    |          |
| The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. ( Customer Sample Comment: W02008461) | Sample Date      |        | Client Info |                | 21 Jun 2024 | 07 May 2024  |          |
|                                                                                                                                                | Machine Age      | hrs    | Client Info |                | 1052        | 500          |          |
|                                                                                                                                                | Oil Age          | hrs    | Client Info |                | 552         | 500          |          |
|                                                                                                                                                | Filter Age       | hrs    | Client Info |                | 0           | 0            |          |
|                                                                                                                                                | Oil Changed      |        | Client Info |                | Changed     | Changed      |          |
|                                                                                                                                                | Filter Changed   |        | Client Info |                | N/A         | N/A          |          |
|                                                                                                                                                | Sample Status    |        |             |                | NORMAL      | ABNORMAL     |          |
| VEAD                                                                                                                                           |                  |        |             |                |             |              |          |
| WEAR                                                                                                                                           | Iron             | ppm    | ASTM D5185m |                | 220         | 799          |          |
| All component wear rates are normal.                                                                                                           | Chromium         | ppm    | ASTM D5185m | >20            | 4           | 14           |          |
|                                                                                                                                                | Nickel           | ppm    | ASTM D5185m | >5             | <1          | <1           |          |
|                                                                                                                                                | Titanium         | ppm    | ASTM D5185m |                | 1           | 6            |          |
|                                                                                                                                                | Silver           | ppm    | ASTM D5185m |                | 0           | 0            |          |
|                                                                                                                                                | Aluminum         | ppm    | ASTM D5185m | >100           | 11          | <b>5</b> 0   |          |
|                                                                                                                                                | Lead             | ppm    | ASTM D5185m | >50            | 0           | 0            |          |
|                                                                                                                                                | Copper           | ppm    | ASTM D5185m | >50            | <1          | 3            |          |
|                                                                                                                                                | Tin              | ppm    | ASTM D5185m | >5             | 0           | 0            |          |
|                                                                                                                                                | Vanadium         | ppm    | ASTM D5185m |                | 0           | <1           |          |
|                                                                                                                                                | White Metal      | scalar | *Visual     | NONE           | NONE        | NONE         |          |
|                                                                                                                                                | Yellow Metal     | scalar | *Visual     | NONE           | NONE        | NONE         |          |
| CONTAMINATION                                                                                                                                  | Silicon          | ppm    | ASTM D5185m | <b>&gt;100</b> | 48          | <u>^</u> 210 |          |
|                                                                                                                                                | Potassium        | ppm    | ASTM D5185m |                | 2           | 8            |          |
| There is no indication of any contamination in the oil.                                                                                        | Water            | ppiii  | WC Method   |                | NEG         | NEG          |          |
|                                                                                                                                                | Silt             | scalar | *Visual     | NONE           | NONE        | MODER        |          |
|                                                                                                                                                | Debris           | scalar | *Visual     | NONE           | NONE        | NONE         |          |
|                                                                                                                                                | Sand/Dirt        | scalar | *Visual     | NONE           | NONE        | NONE         |          |
|                                                                                                                                                | Appearance       | scalar | *Visual     | NORML          | NORML       | NORML        |          |
|                                                                                                                                                | Odor             | scalar | *Visual     | NORML          | NORML       | NORML        |          |
|                                                                                                                                                | Emulsified Water | scalar | *Visual     | >0.25          | NEG         | NEG          |          |
|                                                                                                                                                |                  |        |             |                |             |              |          |
| FLUID CONDITION                                                                                                                                | Sodium           | ppm    | ASTM D5185m | >170           | 2           | 7            |          |
| The oil viscosity is higher than normal.                                                                                                       | Boron            | ppm    | ASTM D5185m | 400            | 108         | 12           |          |
|                                                                                                                                                | Barium           | ppm    | ASTM D5185m | 200            | 0           | 1            |          |
|                                                                                                                                                | Molybdenum       | ppm    |             | 12             | 4           | 2            |          |
|                                                                                                                                                | Manganese        | ppm    | ASTM D5185m |                | 3           | 10           |          |
|                                                                                                                                                | Magnesium        | ppm    | ASTM D5185m |                | 32          | 9            |          |
|                                                                                                                                                | Calcium          | ppm    | ASTM D5185m | 150            | 75          | 50           |          |
|                                                                                                                                                | Phosphorus       | ppm    | ASTM D5185m | 1650           | 874         | 400          |          |
|                                                                                                                                                | Zinc             | ppm    | ASTM D5185m | 125            | 63          | 21           |          |
|                                                                                                                                                | Sulfur           | ppm    | ASTM D5185m | 22500          | 30840       | 16804        |          |





Certificate L2367

Laboratory Sample No.

: ML0002389 Lab Number : 06218955 Unique Number : 11097152 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 24 Jun 2024 **Tested** 

: 25 Jun 2024 Diagnosed : 26 Jun 2024 - Don Baldridge

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS 8450 QUARRY ROAD MANASSAS, VA

US 20110

Contact: MIKE MAYHUGH MMAYHUGH@MCCLUNG-LOGAN.COM

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) F: (703)393-7844

Submitted By: DARRELL ANDES

T: (703)393-7344