



# VOLVO

## OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

SEVERE

SEVERE

NORMAL



Machine Id  
**VOLVO L220ELR 314360**  
Component  
**Right Final Drive**  
Fluid  
**{not provided} (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### WEAR

Gear wear is indicated. Component wear metal level(s) high for break in.

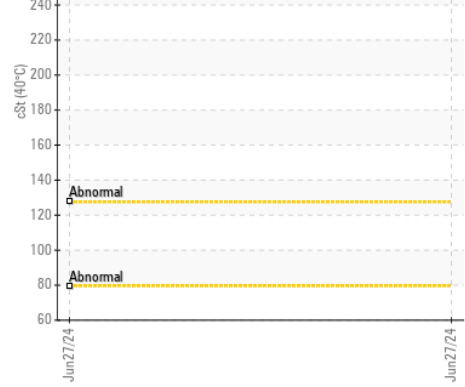
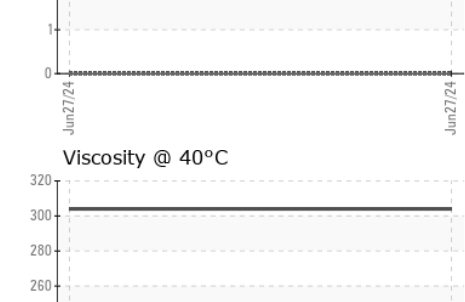
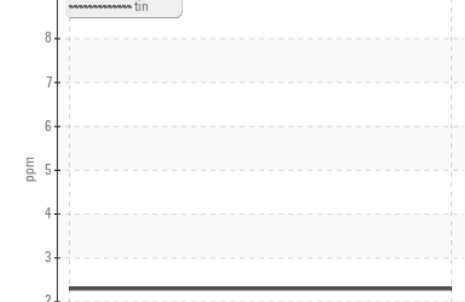
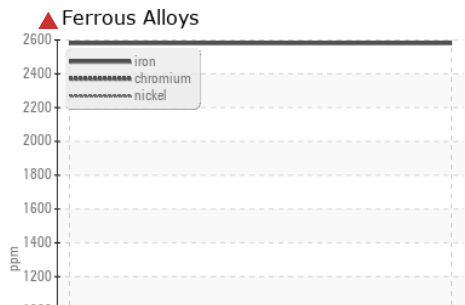
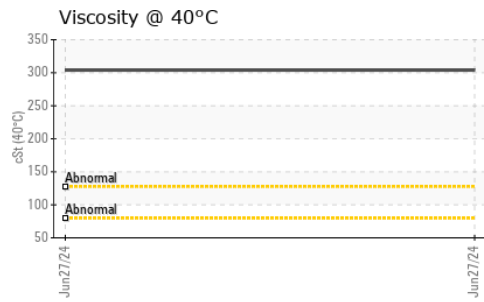
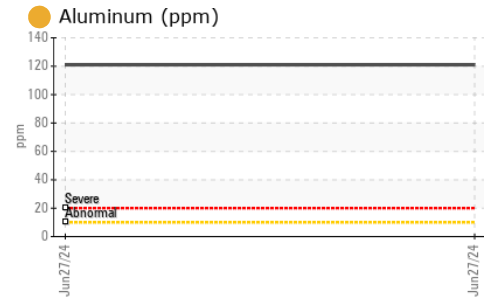
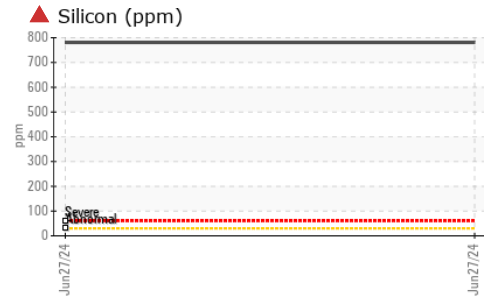
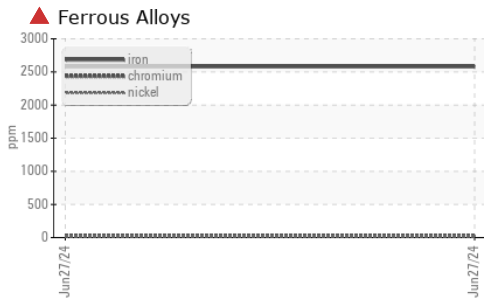
### CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

| Test             | UOM    | Method      | Limit/Abn | Current     | History1 | History2 |
|------------------|--------|-------------|-----------|-------------|----------|----------|
| Sample Number    |        | Client Info |           | VCP0008477  | ---      | ---      |
| Sample Date      |        | Client Info |           | 27 Jun 2024 | ---      | ---      |
| Machine Age      | hrs    | Client Info |           | 1360        | ---      | ---      |
| Oil Age          | hrs    | Client Info |           | 1360        | ---      | ---      |
| Filter Age       | hrs    | Client Info |           | 0           | ---      | ---      |
| Oil Changed      |        | Client Info |           | N/A         | ---      | ---      |
| Filter Changed   |        | Client Info |           | N/A         | ---      | ---      |
| Sample Status    |        |             |           | SEVERE      | ---      | ---      |
| Iron             | ppm    | ASTM D5185m | >1000     | ▲ 2580      | ---      | ---      |
| Chromium         | ppm    | ASTM D5185m | >10       | ▲ 26        | ---      | ---      |
| Nickel           | ppm    | ASTM D5185m | >10       | 13          | ---      | ---      |
| Titanium         | ppm    | ASTM D5185m |           | 10          | ---      | ---      |
| Silver           | ppm    | ASTM D5185m |           | 0           | ---      | ---      |
| Aluminum         | ppm    | ASTM D5185m | >10       | ● 121       | ---      | ---      |
| Lead             | ppm    | ASTM D5185m | >25       | 0           | ---      | ---      |
| Copper           | ppm    | ASTM D5185m | >30       | 2           | ---      | ---      |
| Tin              | ppm    | ASTM D5185m | >10       | 0           | ---      | ---      |
| Vanadium         | ppm    | ASTM D5185m |           | 0           | ---      | ---      |
| White Metal      | scalar | *Visual     | NONE      | NONE        | ---      | ---      |
| Yellow Metal     | scalar | *Visual     | NONE      | NONE        | ---      | ---      |
| Silicon          | ppm    | ASTM D5185m | >30       | ▲ 781       | ---      | ---      |
| Potassium        | ppm    | ASTM D5185m | >20       | 33          | ---      | ---      |
| Water            |        | WC Method   | >0.2      | NEG         | ---      | ---      |
| Silt             | scalar | *Visual     | NONE      | NONE        | ---      | ---      |
| Debris           | scalar | *Visual     | NONE      | NONE        | ---      | ---      |
| Sand/Dirt        | scalar | *Visual     | NONE      | NONE        | ---      | ---      |
| Appearance       | scalar | *Visual     | NORML     | NORML       | ---      | ---      |
| Odor             | scalar | *Visual     | NORML     | NORML       | ---      | ---      |
| Emulsified Water | scalar | *Visual     | >0.2      | NEG         | ---      | ---      |
| Sodium           | ppm    | ASTM D5185m |           | 10          | ---      | ---      |
| Boron            | ppm    | ASTM D5185m |           | 73          | ---      | ---      |
| Barium           | ppm    | ASTM D5185m |           | 4           | ---      | ---      |
| Molybdenum       | ppm    | ASTM D5185m |           | 2           | ---      | ---      |
| Manganese        | ppm    | ASTM D5185m |           | 28          | ---      | ---      |
| Magnesium        | ppm    | ASTM D5185m |           | 13          | ---      | ---      |
| Calcium          | ppm    | ASTM D5185m |           | 239         | ---      | ---      |
| Phosphorus       | ppm    | ASTM D5185m |           | 894         | ---      | ---      |
| Zinc             | ppm    | ASTM D5185m |           | 21          | ---      | ---      |
| Sulfur           | ppm    | ASTM D5185m |           | 30681       | ---      | ---      |
| Visc @ 40°C      | cSt    | ASTM D445   |           | 304         | ---      | ---      |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : VCP0008477

Lab Number : 06227962

Unique Number : 11111455

Test Package : CONST

Received : 03 Jul 2024

Tested : 05 Jul 2024

Diagnosed : 07 Jul 2024 - Don Baldrige

ALTA EQUIPMENT COMPANY

8750 PHILIPS HWY

JACKSONVILLE, FL

US 32256

Contact: TECHNICIAN ACCOUNT

catherine.anastasio@wearcheck.com

T:

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: (904)737-1260