



# VOLVO

## OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |



Area

### CHERRY FOREST PRODUCT [405120]

Machine Id

### VOLVO L70H 624145

Component

### Diesel Engine

Fluid

### VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

#### RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>VCE380350</b>   | VCP394112   | VCP352915   |
| Sample Date    |     | Client Info |           | <b>17 May 2024</b> | 23 Nov 2023 | 20 Dec 2022 |
| Machine Age    | hrs | Client Info |           | <b>3960</b>        | 3500        | 2512        |
| Oil Age        | hrs | Client Info |           | <b>500</b>         | 500         | 500         |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Not Changed | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

#### WEAR

All component wear rates are normal.

|          |     |               |      |              |    |    |
|----------|-----|---------------|------|--------------|----|----|
| Iron     | ppm | ASTM D5185(m) | >200 | <b>9</b>     | 10 | 14 |
| Chromium | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | <1 |
| Nickel   | ppm | ASTM D5185(m) | >5   | <b>&lt;1</b> | <1 | 0  |
| Titanium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | <1 |
| Silver   | ppm | ASTM D5185(m) | >2   | <b>0</b>     | <1 | 0  |
| Aluminum | ppm | ASTM D5185(m) | >30  | <b>7</b>     | 12 | 7  |
| Lead     | ppm | ASTM D5185(m) | >40  | <b>0</b>     | 0  | 0  |
| Copper   | ppm | ASTM D5185(m) | >20  | <b>&lt;1</b> | <1 | 1  |
| Tin      | ppm | ASTM D5185(m) | >20  | <b>0</b>     | 0  | <1 |
| Vanadium | ppm | ASTM D5185(m) |      | <b>0</b>     | 0  | 0  |

#### CONTAMINATION

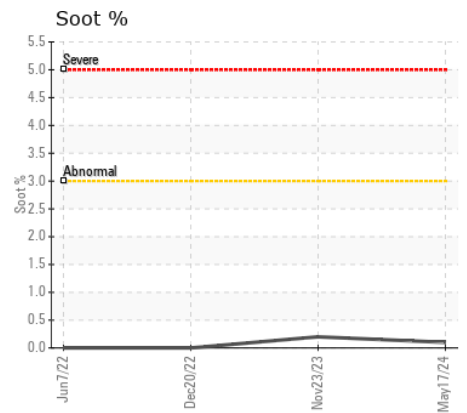
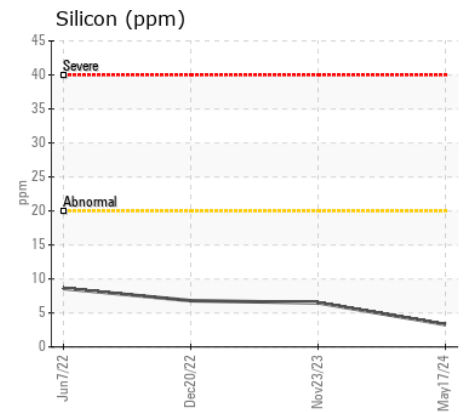
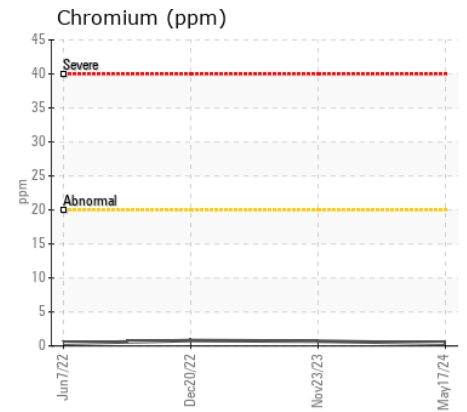
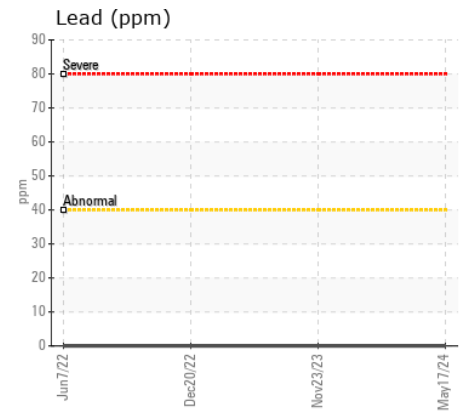
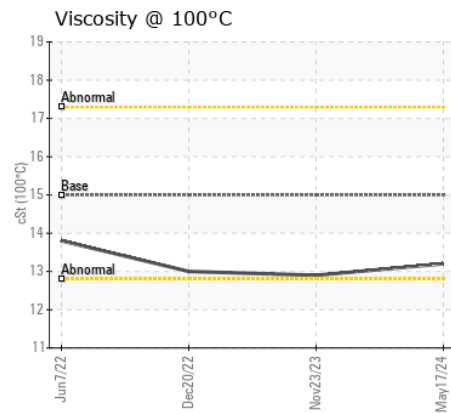
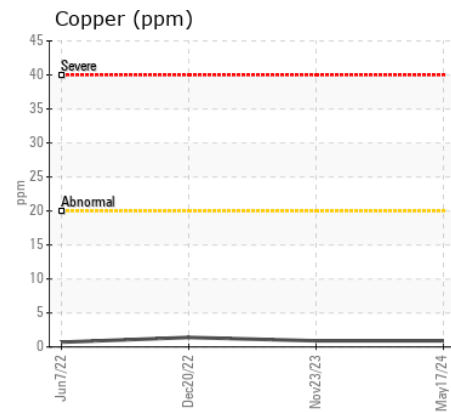
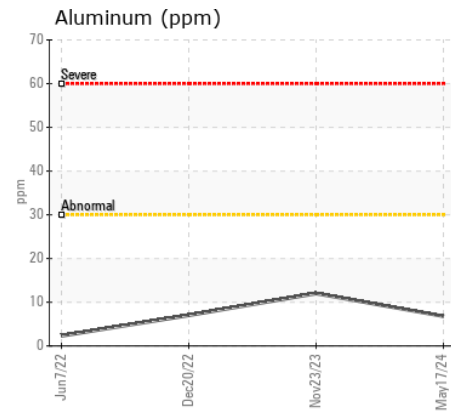
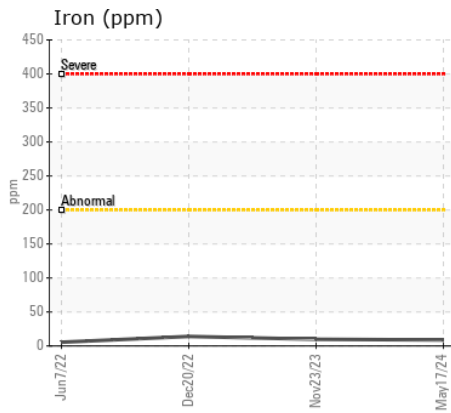
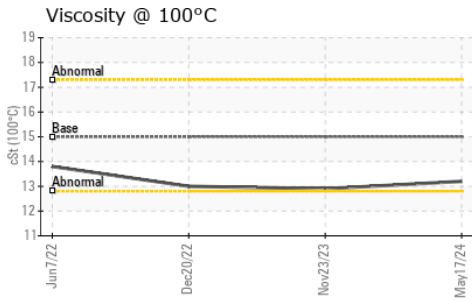
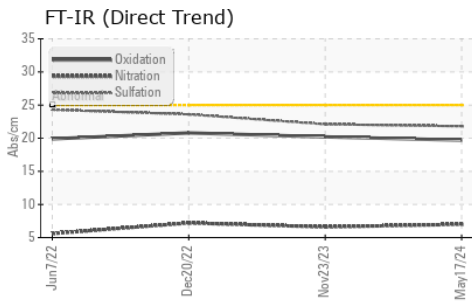
There is no indication of any contamination in the oil.

|                  |          |               |      |                |      |      |
|------------------|----------|---------------|------|----------------|------|------|
| Silicon          | ppm      | ASTM D5185(m) | >20  | <b>3</b>       | 6    | 7    |
| Potassium        | ppm      | ASTM D5185(m) | >20  | <b>&lt;1</b>   | 0    | 0    |
| Fuel             |          | WC Method     | >6.0 | <b>&lt;1.0</b> | <1.0 | <1.0 |
| Water            |          | WC Method     | >0.2 | <b>NEG</b>     | NEG  | NEG  |
| Glycol           |          | WC Method     |      | <b>NEG</b>     | NEG  | NEG  |
| Soot %           | %        | ASTM D7844*   | >3   | <b>0.1</b>     | 0.2  | 0    |
| Nitration        | Abs/cm   | ASTM D7624*   | >20  | <b>7.0</b>     | 6.6  | 7.2  |
| Sulfation        | Abs/.1mm | ASTM D7415*   | >30  | <b>21.8</b>    | 22.1 | 23.6 |
| Emulsified Water | scalar   | Visual*       | >0.2 | <b>NEG</b>     | NEG  | NEG  |

#### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

|              |          |               |      |              |      |      |
|--------------|----------|---------------|------|--------------|------|------|
| Sodium       | ppm      | ASTM D5185(m) |      | <b>2</b>     | 3    | 3    |
| Boron        | ppm      | ASTM D5185(m) | 2.5  | <b>39</b>    | 41   | 45   |
| Barium       | ppm      | ASTM D5185(m) | 0.0  | <b>0</b>     | <1   | 0    |
| Molybdenum   | ppm      | ASTM D5185(m) | 0.7  | <b>37</b>    | 41   | 39   |
| Manganese    | ppm      | ASTM D5185(m) | 0.0  | <b>&lt;1</b> | 0    | <1   |
| Magnesium    | ppm      | ASTM D5185(m) | 256  | <b>483</b>   | 508  | 507  |
| Calcium      | ppm      | ASTM D5185(m) | 2057 | <b>1720</b>  | 1677 | 1707 |
| Phosphorus   | ppm      | ASTM D5185(m) | 935  | <b>906</b>   | 924  | 988  |
| Zinc         | ppm      | ASTM D5185(m) | 1223 | <b>1059</b>  | 1078 | 1087 |
| Sulfur       | ppm      | ASTM D5185(m) | 4079 | <b>2388</b>  | 2402 | 2476 |
| Oxidation    | Abs/.1mm | ASTM D7414*   | >25  | <b>19.7</b>  | 20.2 | 20.8 |
| Visc @ 100°C | cSt      | ASTM D7279(m) | 15.0 | <b>13.2</b>  | 12.9 | 13.0 |



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : VGE380350 **Received** : 28 May 2024  
**Lab Number** : 02637925 **Tested** : 28 May 2024  
**Unique Number** : 5787087 **Diagnosed** : 28 May 2024 - Wes Davis  
**Test Package** : MOB 1

**Strongco Equipment**  
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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.