



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR

**NORMAL**

CONTAMINATION

**ABNORMAL**

FLUID CONDITION

**NORMAL**



Area

**Ascendum Machinery**

Machine Id

**VOLVO A40G ED-05 (S/N A40GV352680)**

Component

**Brake Cooling System**

Fluid

**VOLVO SUPER WET BRAKE TRANSAXLE OIL WB102 (--- GAL)**

### RECOMMENDATION

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>ASC0009720</b>  | ASC0005300  | VCP0005480  |
| Sample Date    |     | Client Info |           | <b>24 Jun 2024</b> | 19 Oct 2023 | 23 Mar 2023 |
| Machine Age    | hrs | Client Info |           | <b>5008</b>        | 4012        | 3047        |
| Oil Age        | hrs | Client Info |           | <b>996</b>         | 4012        | 3047        |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Changed     | Not Changed |
| Filter Changed |     | Client Info |           | <b>Changed</b>     | Changed     | Changed     |
| Sample Status  |     |             |           | <b>ABNORMAL</b>    | ABNORMAL    | ABNORMAL    |

### WEAR

All component wear rates are normal.

|              |        |             |      |              |       |       |
|--------------|--------|-------------|------|--------------|-------|-------|
| Iron         | ppm    | ASTM D5185m | >50  | <b>32</b>    | 39    | 46    |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | <1    | <1    |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>4</b>     | 6     | 5     |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0     | <1    |
| Silver       | ppm    | ASTM D5185m |      | <b>0</b>     | 0     | 0     |
| Aluminum     | ppm    | ASTM D5185m | >30  | <b>3</b>     | 3     | 2     |
| Lead         | ppm    | ASTM D5185m | >50  | <b>0</b>     | 3     | 2     |
| Copper       | ppm    | ASTM D5185m | >200 | <b>190</b>   | ▲ 233 | ▲ 203 |
| Tin          | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0     | <1    |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0     | 0     |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | MODER |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | NONE  |

### CONTAMINATION

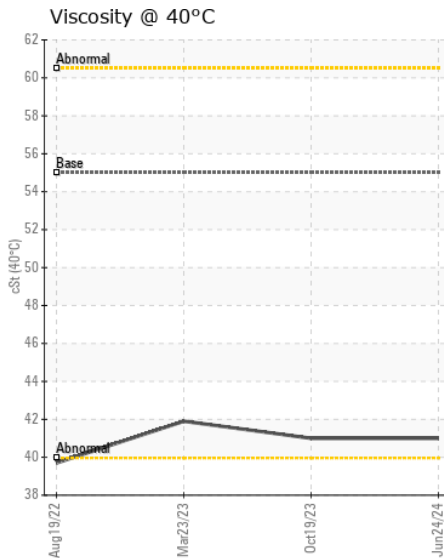
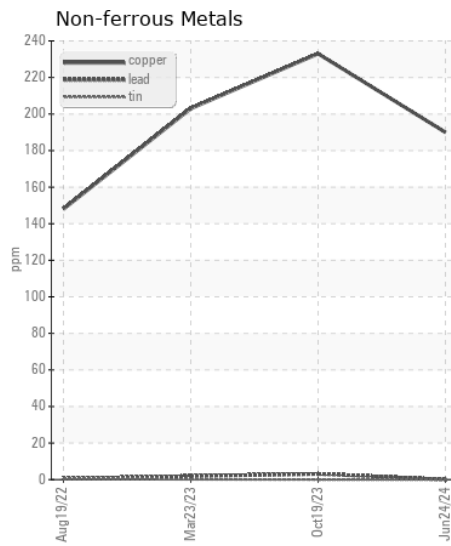
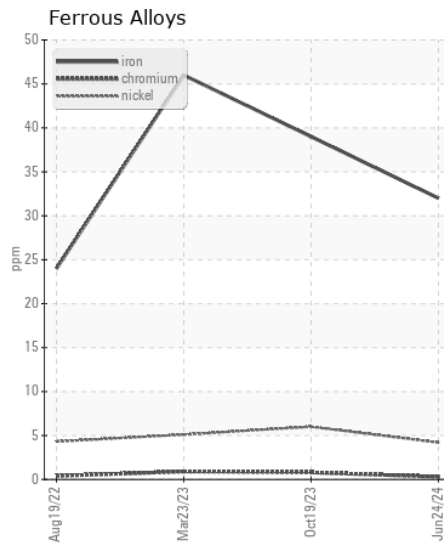
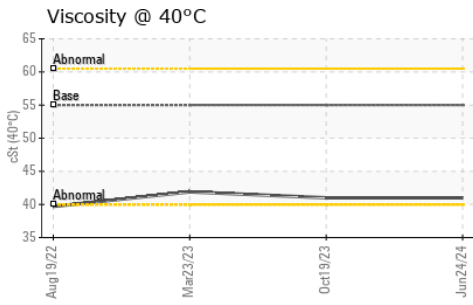
Moderate concentration of visible dirt/debris present in the fluid.

|                  |        |             |       |                |       |         |
|------------------|--------|-------------|-------|----------------|-------|---------|
| Silicon          | ppm    | ASTM D5185m | >50   | <b>18</b>      | 22    | 22      |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>1</b>       | <1    | 0       |
| Water            |        | WC Method   | >0.2  | <b>NEG</b>     | NEG   | NEG     |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE    |
| Debris           | scalar | *Visual     | NONE  | ▲ <b>MODER</b> | LIGHT | ▲ MODER |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>    | NONE  | NONE    |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b>   | NORML | NORML   |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b>   | NORML | NORML   |
| Emulsified Water | scalar | *Visual     | >0.2  | <b>NEG</b>     | NEG   | NEG     |

### FLUID CONDITION

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

|             |     |             |    |             |      |      |
|-------------|-----|-------------|----|-------------|------|------|
| Sodium      | ppm | ASTM D5185m |    | <b>8</b>    | 9    | 10   |
| Boron       | ppm | ASTM D5185m |    | <b>109</b>  | 114  | 119  |
| Barium      | ppm | ASTM D5185m |    | <b>0</b>    | 0    | 0    |
| Molybdenum  | ppm | ASTM D5185m |    | <b>0</b>    | 0    | <1   |
| Manganese   | ppm | ASTM D5185m |    | <b>2</b>    | 1    | 2    |
| Magnesium   | ppm | ASTM D5185m |    | <b>12</b>   | 11   | 13   |
| Calcium     | ppm | ASTM D5185m |    | <b>3538</b> | 3288 | 3450 |
| Phosphorus  | ppm | ASTM D5185m |    | <b>1410</b> | 1282 | 1215 |
| Zinc        | ppm | ASTM D5185m |    | <b>1559</b> | 1478 | 1458 |
| Sulfur      | ppm | ASTM D5185m |    | <b>5139</b> | 4535 | 4352 |
| Visc @ 40°C | cSt | ASTM D445   | 55 | <b>41.0</b> | 41.0 | 41.9 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009720  
**Lab Number** : 06221674  
**Unique Number** : 11099871  
**Test Package** : CONST

**Received** : 26 Jun 2024  
**Tested** : 27 Jun 2024  
**Diagnosed** : 28 Jun 2024 - Don Baldrige

**CAROLINA EXCAVATING**  
 1036 BRANCHVIEW DR, SUITE 106  
 CONCORD, NC  
 US 28025  
 Contact: KEVIN LADGERWOOD  
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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)

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F: