



# ASCENDUM

## OIL ANALYSIS REPORT

|                 |           |
|-----------------|-----------|
| WEAR            | NORMAL    |
| CONTAMINATION   | ATTENTION |
| FLUID CONDITION | NORMAL    |



Machine Id  
**VOLVO A30G 752836**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

| Test           | UOM | Method      | Limit/Abn | Current     | History1    | History2    |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number  |     | Client Info |           | ASC0011329  | ASC0010385  | VCP435098   |
| Sample Date    |     | Client Info |           | 22 May 2024 | 26 Mar 2024 | 17 Aug 2023 |
| Machine Age    | hrs | Client Info |           | 2970        | 2656        | 1657        |
| Oil Age        | hrs | Client Info |           | 2970        | 2656        | 0           |
| Filter Age     | hrs | Client Info |           | 0           | 0           | 0           |
| Oil Changed    |     | Client Info |           | N/A         | N/A         | Not Changed |
| Filter Changed |     | Client Info |           | N/A         | N/A         | Not Changed |
| Sample Status  |     |             |           | ATTENTION   | NORMAL      | SEVERE      |

### WEAR

All component wear rates are normal.

|              |        |             |      |      |      |      |
|--------------|--------|-------------|------|------|------|------|
| Iron         | ppm    | ASTM D5185m | >50  | 5    | 6    | 6    |
| Chromium     | ppm    | ASTM D5185m | >20  | <1   | 2    | <1   |
| Nickel       | ppm    | ASTM D5185m | >10  | 0    | <1   | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <1   | <1   | 0    |
| Silver       | ppm    | ASTM D5185m |      | <1   | 0    | 0    |
| Aluminum     | ppm    | ASTM D5185m | >20  | <1   | 2    | <1   |
| Lead         | ppm    | ASTM D5185m | >20  | 2    | 2    | 2    |
| Copper       | ppm    | ASTM D5185m | >150 | 2    | 3    | 2    |
| Tin          | ppm    | ASTM D5185m | >20  | <1   | 1    | 0    |
| Vanadium     | ppm    | ASTM D5185m |      | <1   | <1   | 0    |
| White Metal  | scalar | *Visual     | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual     | NONE | NONE | NONE | NONE |

### CONTAMINATION

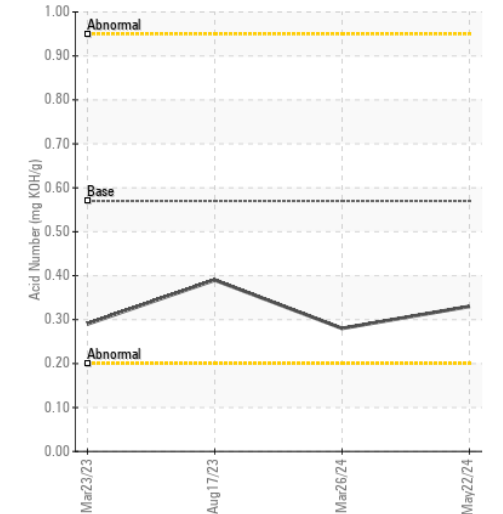
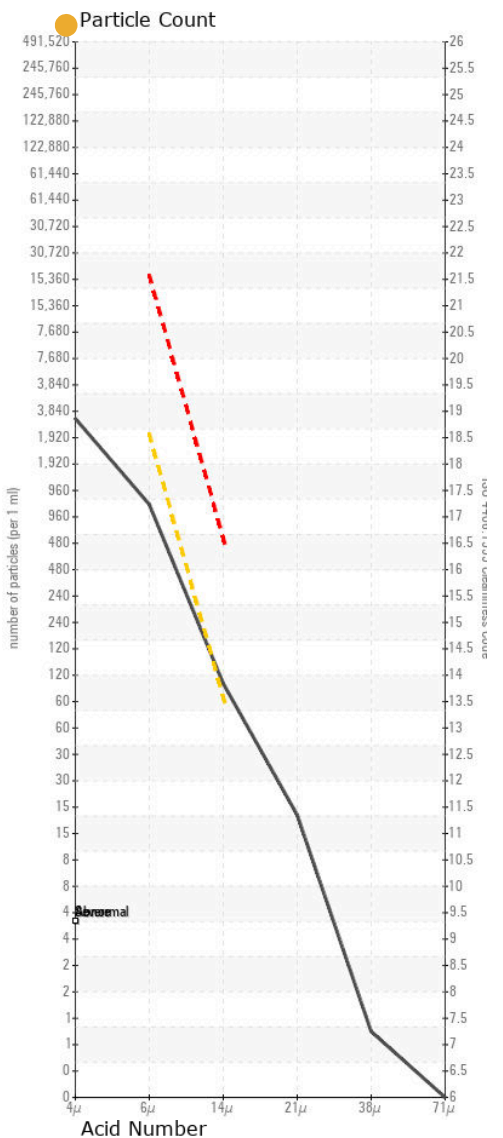
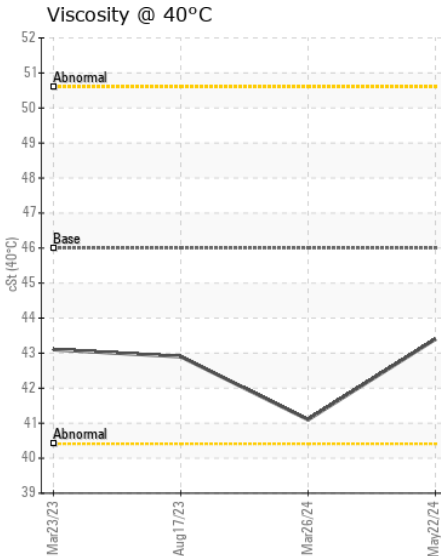
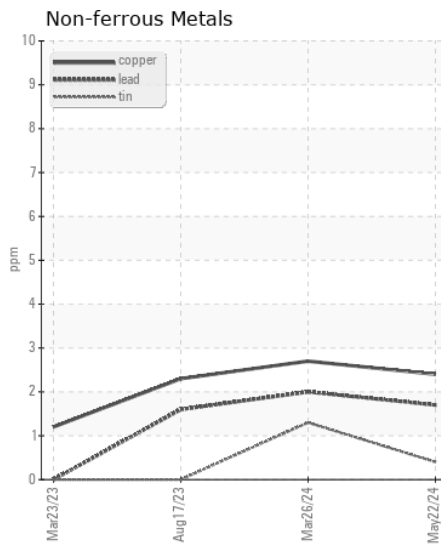
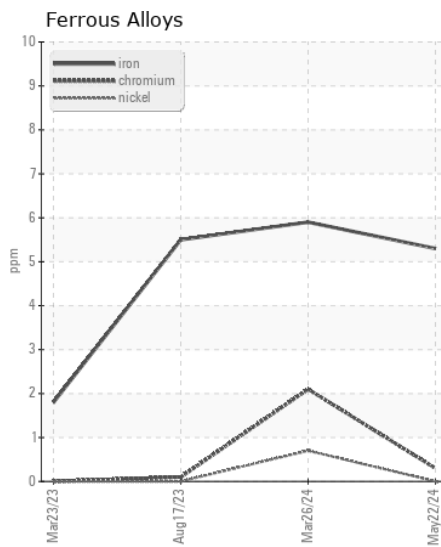
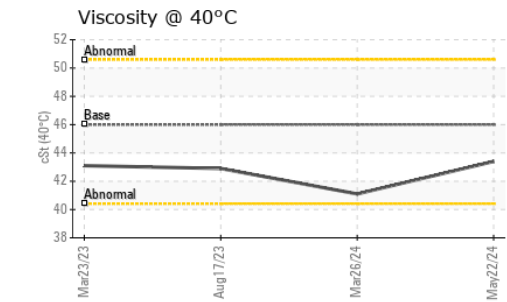
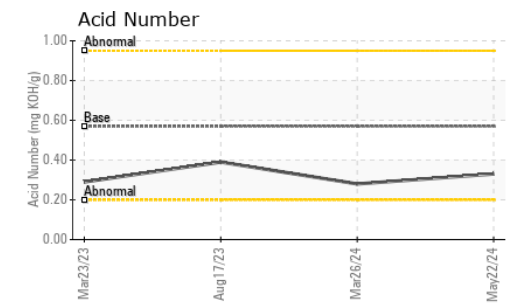
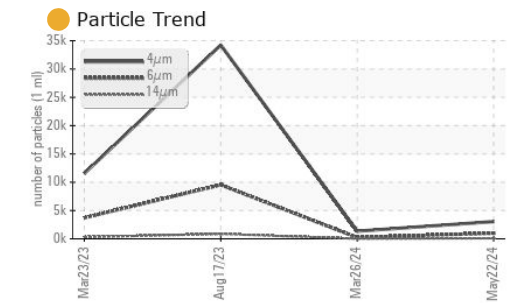
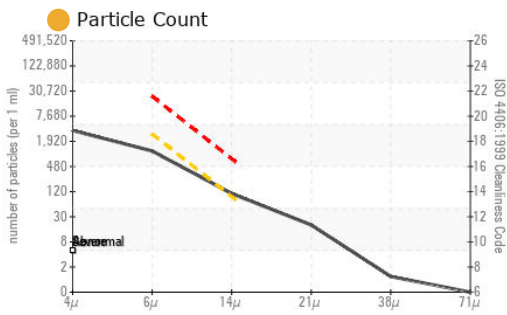
There is a light amount of silt (particulates < 14 microns in size) present in the oil.

|                  |        |              |          |            |          |            |
|------------------|--------|--------------|----------|------------|----------|------------|
| Silicon          | ppm    | ASTM D5185m  | >20      | 3          | 3        | 4          |
| Potassium        | ppm    | ASTM D5185m  | >20      | 1          | 2        | <1         |
| Water            |        | WC Method    | >0.1     | NEG        | NEG      | NEG        |
| Particles >4µm   |        | ASTM D7647   |          | 3045       | 1348     | 34232      |
| Particles >6µm   |        | ASTM D7647   | >2500    | 990        | 236      | ▲ 9541     |
| Particles >14µm  |        | ASTM D7647   | >80      | ● 95       | 17       | ▲ 861      |
| Particles >21µm  |        | ASTM D7647   | >20      | 17         | 5        | ▲ 266      |
| Particles >38µm  |        | ASTM D7647   | >4       | 1          | 0        | ▲ 14       |
| Particles >71µm  |        | ASTM D7647   | >3       | 0          | 0        | 0          |
| Oil Cleanliness  |        | ISO 4406 (c) | >-/18/13 | ● 19/17/14 | 18/15/11 | ▲ 22/20/17 |
| Silt             | scalar | *Visual      | NONE     | NONE       | NONE     | NONE       |
| Debris           | scalar | *Visual      | NONE     | NONE       | NONE     | NONE       |
| Sand/Dirt        | scalar | *Visual      | NONE     | NONE       | NONE     | NONE       |
| Appearance       | scalar | *Visual      | NORML    | NORML      | NORML    | NORML      |
| Odor             | scalar | *Visual      | NORML    | NORML      | NORML    | NORML      |
| Emulsified Water | scalar | *Visual      | >0.1     | NEG        | NEG      | NEG        |

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

|                  |          |             |      |      |      |      |
|------------------|----------|-------------|------|------|------|------|
| Sodium           | ppm      | ASTM D5185m |      | 1    | <1   | 0    |
| Boron            | ppm      | ASTM D5185m | 5    | 0    | 0    | 0    |
| Barium           | ppm      | ASTM D5185m | 5    | <1   | 0    | 0    |
| Molybdenum       | ppm      | ASTM D5185m | 5    | 0    | 2    | 0    |
| Manganese        | ppm      | ASTM D5185m |      | <1   | <1   | 0    |
| Magnesium        | ppm      | ASTM D5185m | 25   | 9    | 4    | 1    |
| Calcium          | ppm      | ASTM D5185m | 200  | 63   | 62   | 62   |
| Phosphorus       | ppm      | ASTM D5185m | 300  | 326  | 345  | 322  |
| Zinc             | ppm      | ASTM D5185m | 370  | 395  | 426  | 429  |
| Sulfur           | ppm      | ASTM D5185m | 2500 | 1882 | 2196 | 2166 |
| Acid Number (AN) | mg KOH/g | ASTM D8045  | 0.57 | 0.33 | 0.28 | 0.39 |
| Visc @ 40°C      | cSt      | ASTM D445   | 46   | 43.4 | 41.1 | 42.9 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011329  
**Lab Number** : 06193897  
**Unique Number** : 11056020  
**Test Package** : CONST

**Received** : 29 May 2024  
**Tested** : 30 May 2024  
**Diagnosed** : 30 May 2024 - Wes Davis

**113 - ASCENDUM MACHINERY INC - GARNER**  
 3561 JONES SAUSAGE ROAD  
 GARNER, NC  
 US 27529

Contact: TRENT BROADWELL  
 trent.broadwell@ascendummachinery.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)

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