



# VOLVO

## OIL ANALYSIS REPORT

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

Area

**[5127 ASH]**

Machine Id

**VOLVO A60H 350269**

Component

**Front Axle**

Fluid

**CHEVRON DELO GEAR ESI OIL 80W90 (--- GAL)**

### RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number  |     | Client Info |           | VCP413069   | ---      | ---      |
| Sample Date    |     | Client Info |           | 04 Apr 2024 | ---      | ---      |
| Machine Age    | hrs | Client Info |           | 4000        | ---      | ---      |
| Oil Age        | hrs | Client Info |           | 0           | ---      | ---      |
| Filter Age     | hrs | Client Info |           | 0           | ---      | ---      |
| Oil Changed    |     | Client Info |           | Changed     | ---      | ---      |
| Filter Changed |     | Client Info |           | N/A         | ---      | ---      |
| Sample Status  |     |             |           | ABNORMAL    | ---      | ---      |

### WEAR

The copper level is abnormal. All other component wear rates are normal.

|              |        |             |      |       |     |     |
|--------------|--------|-------------|------|-------|-----|-----|
| Iron         | ppm    | ASTM D5185m | >500 | 27    | --- | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | <1    | --- | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | 4     | --- | --- |
| Titanium     | ppm    | ASTM D5185m |      | <1    | --- | --- |
| Silver       | ppm    | ASTM D5185m |      | 0     | --- | --- |
| Aluminum     | ppm    | ASTM D5185m | >25  | 1     | --- | --- |
| Lead         | ppm    | ASTM D5185m | >25  | <1    | --- | --- |
| Copper       | ppm    | ASTM D5185m | >50  | ▲ 193 | --- | --- |
| Tin          | ppm    | ASTM D5185m | >10  | 1     | --- | --- |
| Vanadium     | ppm    | ASTM D5185m |      | 0     | --- | --- |
| White Metal  | scalar | *Visual     | NONE | NONE  | --- | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE  | --- | --- |

### CONTAMINATION

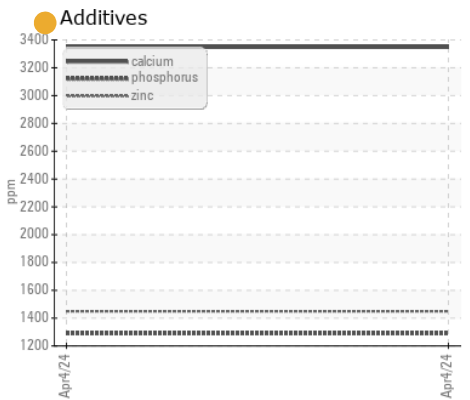
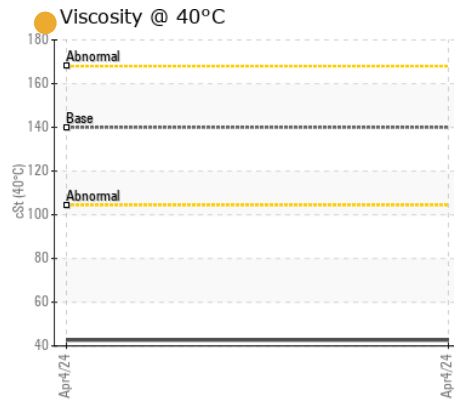
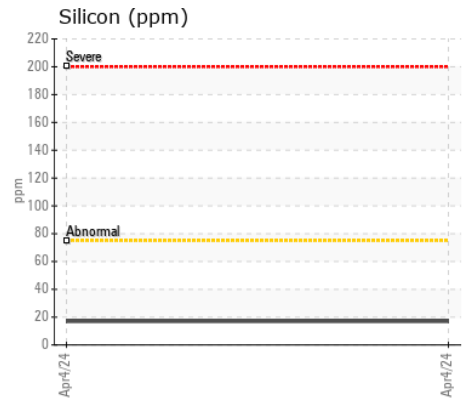
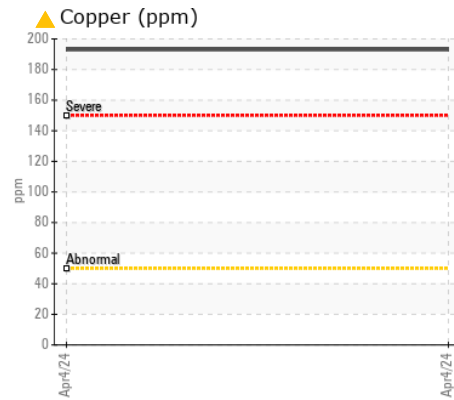
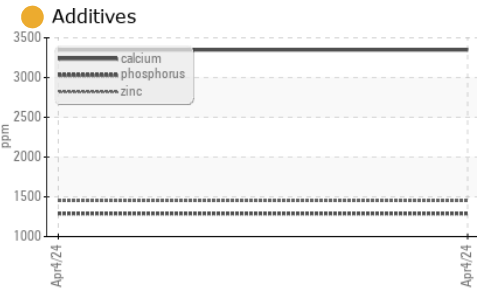
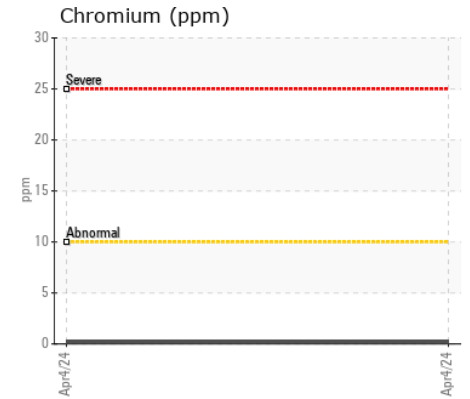
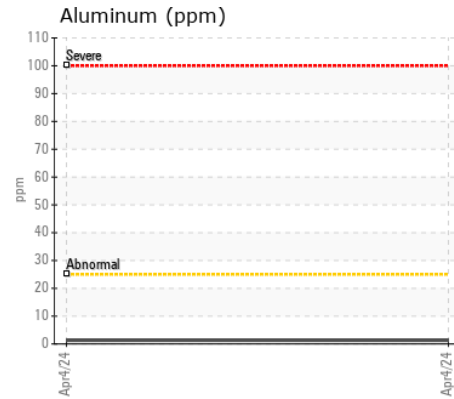
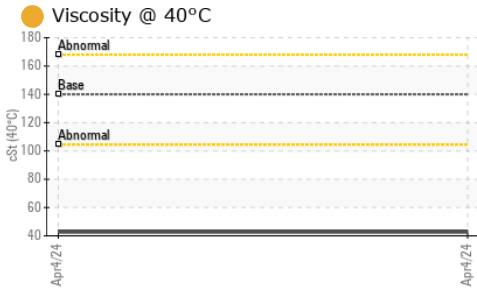
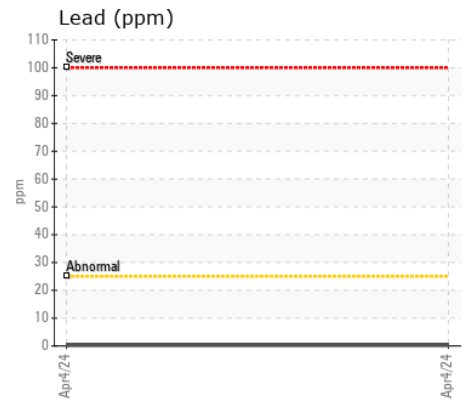
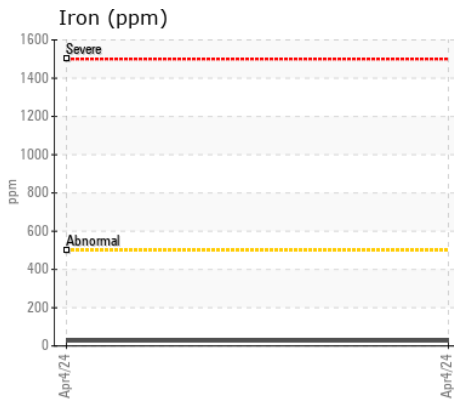
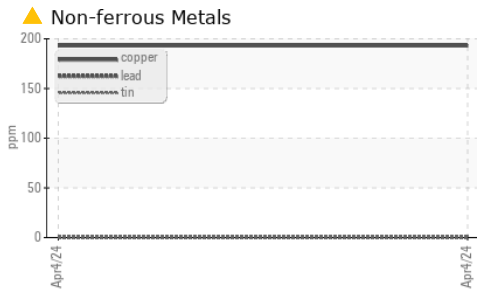
There is no indication of any contamination in the oil.

|                  |        |             |       |       |     |     |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon          | ppm    | ASTM D5185m | >75   | 17    | --- | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | 0     | --- | --- |
| Water            |        | WC Method   | >0.2  | NEG   | --- | --- |
| Silt             | scalar | *Visual     | NONE  | LIGHT | --- | --- |
| 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   | --- | --- |

### FLUID CONDITION

The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

|             |     |             |       |        |     |     |
|-------------|-----|-------------|-------|--------|-----|-----|
| Sodium      | ppm | ASTM D5185m |       | 8      | --- | --- |
| Boron       | ppm | ASTM D5185m | 15    | ● 133  | --- | --- |
| Barium      | ppm | ASTM D5185m | 0     | 0      | --- | --- |
| Molybdenum  | ppm | ASTM D5185m | 0     | 0      | --- | --- |
| Manganese   | ppm | ASTM D5185m |       | 2      | --- | --- |
| Magnesium   | ppm | ASTM D5185m | 0     | 11     | --- | --- |
| Calcium     | ppm | ASTM D5185m | 5     | ● 3348 | --- | --- |
| Phosphorus  | ppm | ASTM D5185m | 600   | ● 1290 | --- | --- |
| Zinc        | ppm | ASTM D5185m | 0     | ● 1449 | --- | --- |
| Sulfur      | ppm | ASTM D5185m | 22000 | ● 5573 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445   | 140   | ● 42.7 | --- | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP413069  
**Lab Number** : 06154820  
**Unique Number** : 10990243  
**Test Package** : MOB 1

**Received** : 19 Apr 2024  
**Tested** : 22 Apr 2024  
**Diagnosed** : 23 Apr 2024 - Don Baldrige

**403 - ASCENDUM MACHINERY INC - FARGO**  
 3739 38TH ST SW, SUITE E  
 FARGO, ND  
 US 58104  
 Contact: JESSE SCHEELE  
 jesse.scheele@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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