



# CONSTRUCTION EQUIPMENT

622085 VOLVO A40G 35285 I - REAR AXLE



**Sample No:** VCP403965  
**Oil Type:** VOLVO PREMIUM GEAR OIL 85W-140 GL-5  
**Job No:** 622085



## SAMPLE INFORMATION

|               |                    |             |             |             |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | <b>VCP403965</b>   | VCP411363   | VCP386364   | VCP362331   |
| Sample Date   | <b>06 Nov 2023</b> | 12 Apr 2023 | 07 Oct 2022 | 17 Mar 2022 |
| Machine Hours | <b>4099</b>        | 3090        | 2036        | 1095        |
| Oil Hours     | <b>3000</b>        | 2744        | 1500        | 1095        |
| Oil Changed   | <b>Changed</b>     | Not Chngd   | Not Chngd   | Changed     |
| Sample Status | <b>ATTENTION</b>   | ATTENTION   | NORMAL      | NORMAL      |

**RIPA AND ASSOCIATES**  
 10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: PM Services  
 PMServices@ripaconstruction.com  
 T:  
 F:



## OIL CONDITION

|             |     |               |        |        |        |
|-------------|-----|---------------|--------|--------|--------|
| Visc @ 40°C | cSt | <b>▲ 54.3</b> | ▲ 54.6 | ■ 56.9 | ■ 49.2 |
|-------------|-----|---------------|--------|--------|--------|



## CONTAMINATION

| Water     | %   | NEG        | NEG  | NEG | NEG |
|-----------|-----|------------|------|-----|-----|
| Silicon   | ppm | ■ <b>2</b> | ■ 1  | ■ 2 | ■ 3 |
| Sodium    | ppm | ■ <b>2</b> | ■ 1  | ■ 0 | ■ 1 |
| Potassium | ppm | ■ <b>1</b> | ■ <1 | ■ 2 | ■ 3 |



## WEAR METALS

|            |     |                |       |       |       |
|------------|-----|----------------|-------|-------|-------|
| Iron       | ppm | ■ <b>145</b>   | ■ 135 | ■ 109 | ■ 246 |
| Copper     | ppm | ■ <b>7</b>     | ■ 2   | ■ <1  | ■ 2   |
| Lead       | ppm | ■ <b>0</b>     | ■ 0   | ■ 0   | ■ 0   |
| Tin        | ppm | ■ <b>&lt;1</b> | ■ 0   | ■ <1  | ■ <1  |
| Aluminum   | ppm | ■ <b>0</b>     | ■ <1  | ■ <1  | ■ <1  |
| Chromium   | ppm | ■ <b>2</b>     | ■ 2   | ■ 2   | ■ 3   |
| Molybdenum | ppm | ■ <b>1</b>     | ■ 2   | ■ 1   | ■ 4   |
| Nickel     | ppm | ■ <b>&lt;1</b> | ■ <1  | ■ 0   | ■ <1  |
| Titanium   | ppm | ■ <b>0</b>     | ■ 0   | ■ 0   | ■ 0   |
| Silver     | ppm | ■ <b>0</b>     | ■ 0   | ■ 0   | ■ 0   |
| Manganese  | ppm | ■ <b>5</b>     | ■ 4   | ■ 4   | ■ 9   |
| Vanadium   | ppm | ■ <b>&lt;1</b> | ■ 0   | ■ <1  | ■ 0   |



## ADDITIVES

|            |     |                |        |        |        |
|------------|-----|----------------|--------|--------|--------|
| Calcium    | ppm | ■ <b>104</b>   | ■ 15   | ■ 15   | ■ 12   |
| Magnesium  | ppm | ■ <b>&lt;1</b> | ■ 1    | ■ 2    | ■ 0    |
| Zinc       | ppm | ■ <b>39</b>    | ■ 11   | ■ 13   | ■ 8    |
| Phosphorus | ppm | ■ <b>2240</b>  | ■ 2369 | ■ 2303 | ■ 2438 |
| Barium     | ppm | ■ <b>0</b>     | ■ 0    | ■ 0    | ■ 0    |
| Boron      | ppm | ■ <b>164</b>   | ■ 271  | ■ 274  | ■ 280  |

## Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type.

**Depot:** RIPTAM  
**Unique No:** 10765269  
**Signed:** Don Baldrige  
**Report Date:** 03 Dec 2023



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## GRAPHS

