



# ASCENDUM

## OIL ANALYSIS REPORT



Area  
**Ascendum Machinery**  
 Machine Id  
**VOLVO EC380E 315145**  
 Component  
**Swing Drive**  
 Fluid  
**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)**

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

### RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>ASC0007616</b>  | VCP420559   | VCP0004597  |
| Sample Date    |     | Client Info |           | <b>27 Feb 2024</b> | 02 Oct 2023 | 20 Sep 2022 |
| Machine Age    | hrs | Client Info |           | <b>1421</b>        | 1140        | 485         |
| Oil Age        | hrs | Client Info |           | <b>281</b>         | 0           | 485         |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Changed     | Changed     |
| Filter Changed |     | Client Info |           | <b>None</b>        | Not Changed | N/A         |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |             |       |             |      |       |
|--------------|--------|-------------|-------|-------------|------|-------|
| Iron         | ppm    | ASTM D5185m | >1200 | <b>130</b>  | 65   | 514   |
| Chromium     | ppm    | ASTM D5185m | >10   | <b>2</b>    | 1    | 6     |
| Nickel       | ppm    | ASTM D5185m | >10   | <b>0</b>    | 0    | 0     |
| Titanium     | ppm    | ASTM D5185m |       | <b>0</b>    | 0    | 0     |
| Silver       | ppm    | ASTM D5185m |       | <b>0</b>    | 0    | 0     |
| Aluminum     | ppm    | ASTM D5185m | >25   | <b>2</b>    | 2    | 2     |
| Lead         | ppm    | ASTM D5185m | >50   | <b>0</b>    | 0    | 0     |
| Copper       | ppm    | ASTM D5185m | >50   | <b>6</b>    | 8    | 20    |
| Tin          | ppm    | ASTM D5185m | >10   | <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

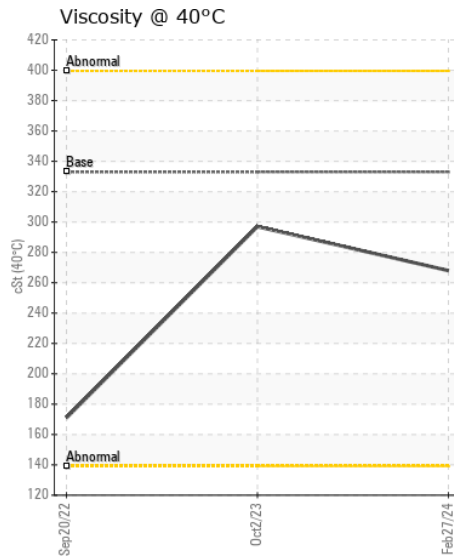
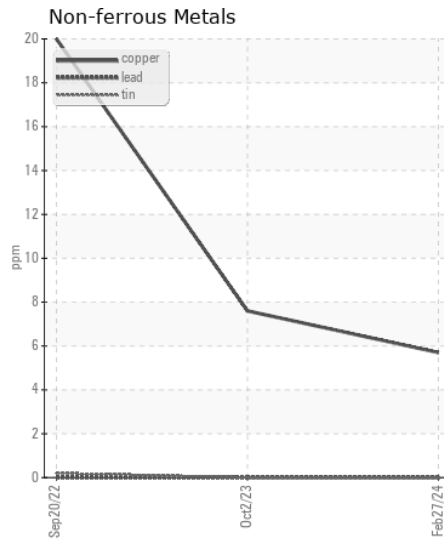
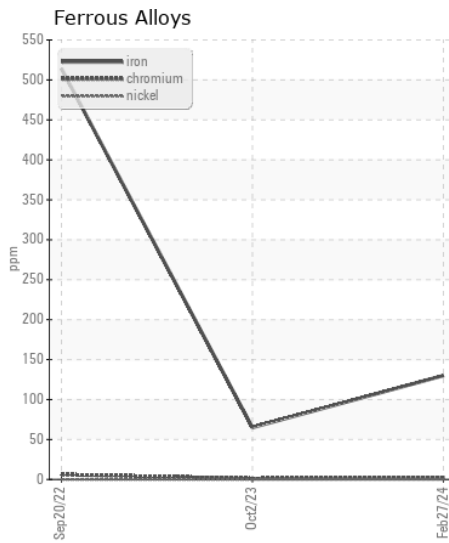
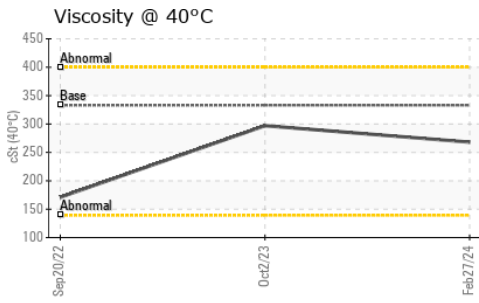
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |       |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon          | ppm    | ASTM D5185m | >100  | <b>17</b>    | 2     | 11    |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>0</b>     | 0     | 0     |
| Water            |        | WC Method   | >0.25 | <b>NEG</b>   | NEG   | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | NONE  |
| 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     | >0.25 | <b>NEG</b>   | NEG   | NEG   |

### FLUID CONDITION

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

|             |     |             |       |              |       |       |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium      | ppm | ASTM D5185m |       | <b>0</b>     | 0     | 3     |
| Boron       | ppm | ASTM D5185m | 111   | <b>170</b>   | 169   | 0     |
| Barium      | ppm | ASTM D5185m | 0.0   | <b>0</b>     | 0     | 0     |
| Molybdenum  | ppm | ASTM D5185m | 0.9   | <b>0</b>     | 0     | <1    |
| Manganese   | ppm | ASTM D5185m | 0.0   | <b>2</b>     | 1     | 7     |
| Magnesium   | ppm | ASTM D5185m | 39    | <b>0</b>     | 0     | 0     |
| Calcium     | ppm | ASTM D5185m | 93    | <b>6</b>     | 17    | 12    |
| Phosphorus  | ppm | ASTM D5185m | 920   | <b>1342</b>  | 980   | 328   |
| Zinc        | ppm | ASTM D5185m | 104   | <b>0</b>     | 18    | 24    |
| Sulfur      | ppm | ASTM D5185m | 20179 | <b>28096</b> | 28391 | 17114 |
| Visc @ 40°C | cSt | ASTM D445   | 333   | <b>268</b>   | 297   | 171   |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0007616  
**Lab Number** : 06105603  
**Unique Number** : 10903833  
**Test Package** : CONST

**Received** : 29 Feb 2024  
**Tested** : 02 Mar 2024  
**Diagnosed** : 04 Mar 2024 - Sean Felton

**CD PHILEMON GRADING AND TRUCKING INC**  
 3512 TARLTON MILL RD  
 MARSHVILLE, NC  
 US 28174  
 Contact: Service Manager

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: