



ASCENDUM

OIL ANALYSIS REPORT

WEAR

ABNORMAL

CONTAMINATION

NORMAL

FLUID CONDITION

ATTENTION



Area

Ascendum Machinery

Machine Id

VOLVO EC200EL 310063

Component

Swing Drive

Fluid

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | ASC0007641 | ASC0005351 | VCP0000573 |
| Sample Date | | Client Info | | 27 Feb 2024 | 24 Oct 2023 | 14 Jun 2022 |
| Machine Age | hrs | Client Info | | 5427 | 5030 | 3293 |
| Oil Age | hrs | Client Info | | 397 | 1737 | 1297 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changed | Changed | Changed |
| Filter Changed | | Client Info | | Not Changed | N/A | N/A |
| Sample Status | | | | ABNORMAL | ATTENTION | ATTENTION |

WEAR

A sharp increase in the iron level is noted. Gear wear is indicated.

| | | | | | | |
|--------------|--------|-------------|-------|---------------|------|------|
| Iron | ppm | ASTM D5185m | >1200 | ▲ 1210 | 55 | 27 |
| Chromium | ppm | ASTM D5185m | >10 | ▲ 17 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 15 | 5 | 4 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

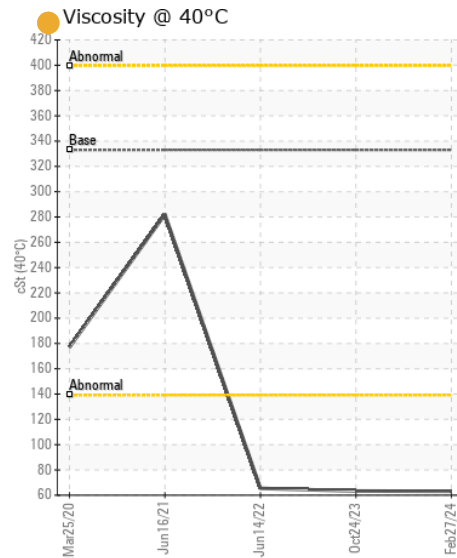
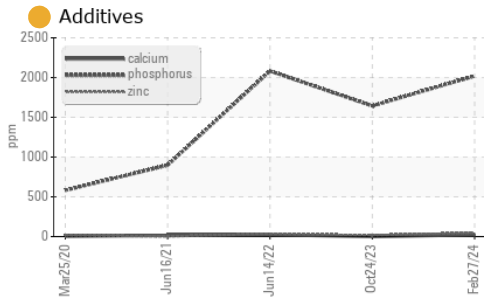
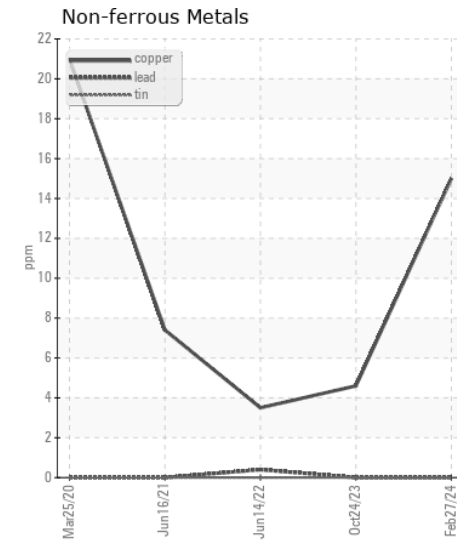
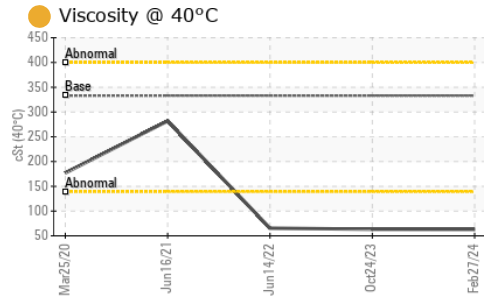
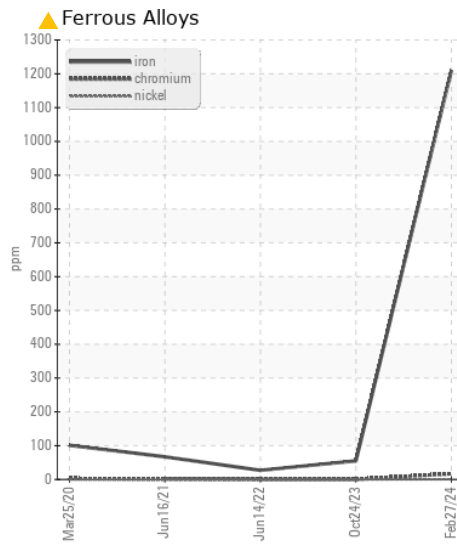
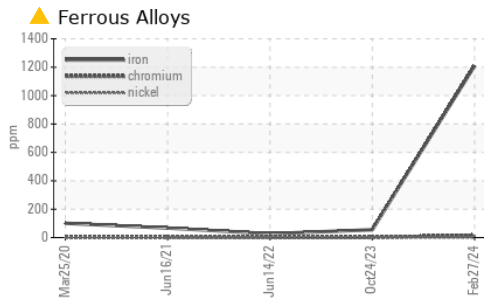
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >100 | 8 | 4 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | <1 | 0 |
| Water | | WC Method | >0.25 | NEG | NEG | NEG |
| 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 | >0.25 | NEG | NEG | 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 | | 1 | 2 | 1 |
| Boron | ppm | ASTM D5185m | 111 | 175 | 196 | 242 |
| Barium | ppm | ASTM D5185m | 0.0 | 1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.9 | 5 | 3 | 4 |
| Manganese | ppm | ASTM D5185m | 0.0 | 14 | 1 | <1 |
| Magnesium | ppm | ASTM D5185m | 39 | 3 | 0 | 5 |
| Calcium | ppm | ASTM D5185m | 93 | ● 23 | ● 0 | ● 24 |
| Phosphorus | ppm | ASTM D5185m | 920 | ● 2020 | ● 1644 | ● 2083 |
| Zinc | ppm | ASTM D5185m | 104 | ● 46 | ● 17 | ● 33 |
| Sulfur | ppm | ASTM D5185m | 20179 | 26867 | 23783 | 26781 |
| Visc @ 40°C | cSt | ASTM D445 | 333 | ● 63.1 | ● 63.3 | ● 65.4 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007641
Lab Number : 06105627
Unique Number : 10903857
Test Package : CONST
Received : 29 Feb 2024
Tested : 02 Mar 2024
Diagnosed : 04 Mar 2024 - Don Baldrige

EGGER TIMBERPAK
 1801 COTTONWOOD ST
 CHARLOTTE, NC
 US 28206
 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)

T:
F: