



VOLVO

OIL ANALYSIS REPORT

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



Area
[75]
 Machine Id
VOLVO EC300EL 312525
 Component
Diesel Engine
 Fluid
MOBIL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | VC527561 | VC549440 | --- |
| Sample Date | | Client Info | | 29 Mar 2023 | 20 Jul 2022 | --- |
| Machine Age | hrs | Client Info | | 1009 | 935 | --- |
| Oil Age | hrs | Client Info | | 156 | 235 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | Changed | Changed | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron | ppm | ASTM D5185m | >100 | 4 | 4 | --- |
| Chromium | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | 2 | --- |
| Aluminum | ppm | ASTM D5185m | >10 | 1 | 3 | --- |
| Lead | ppm | ASTM D5185m | >20 | 0 | <1 | --- |
| Copper | ppm | ASTM D5185m | >15 | 1 | 1 | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

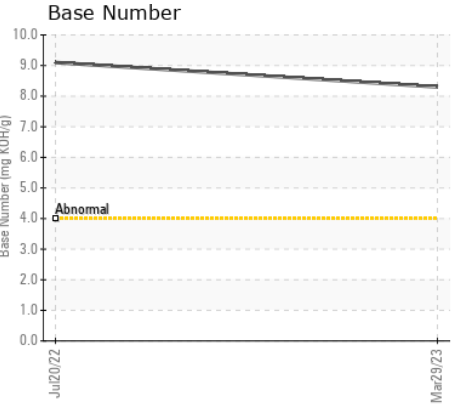
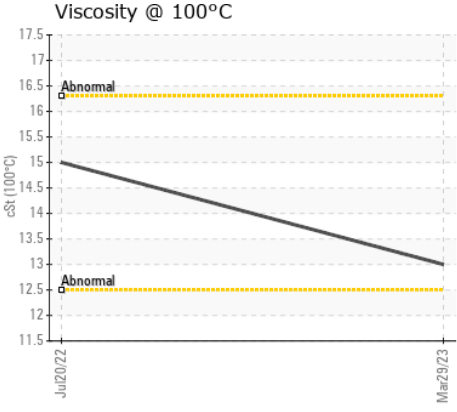
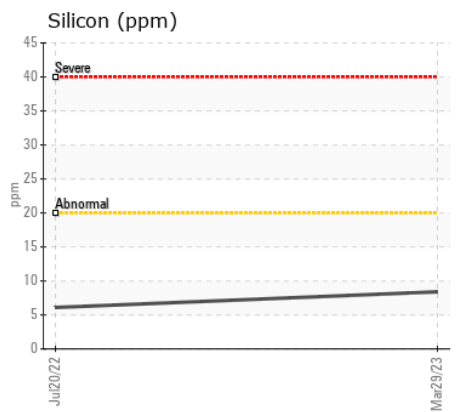
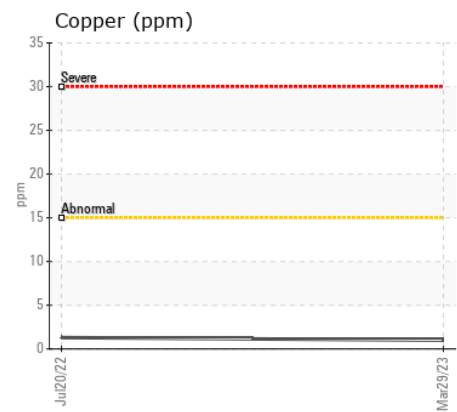
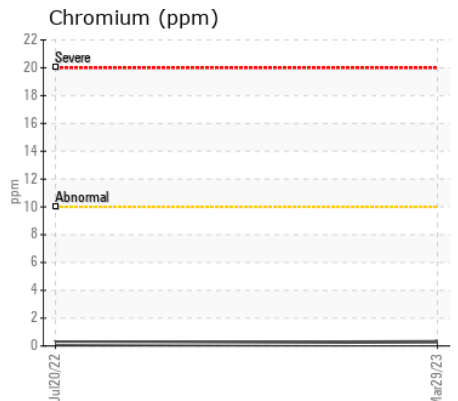
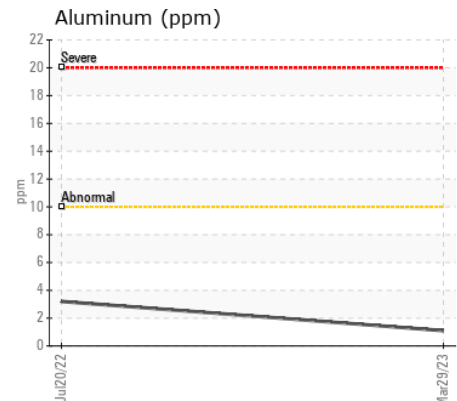
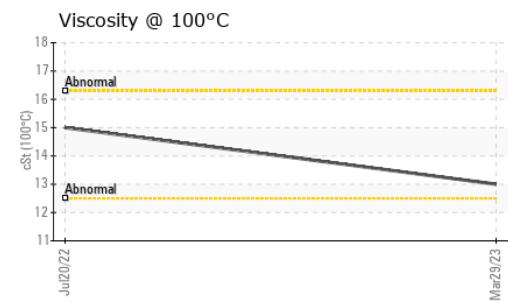
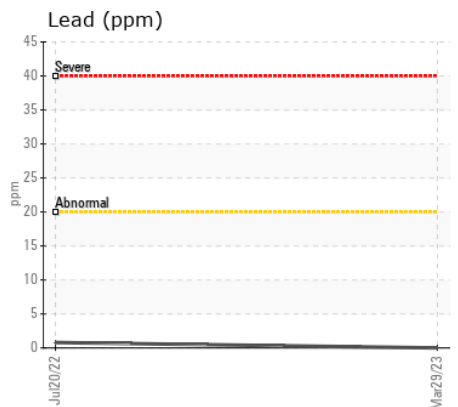
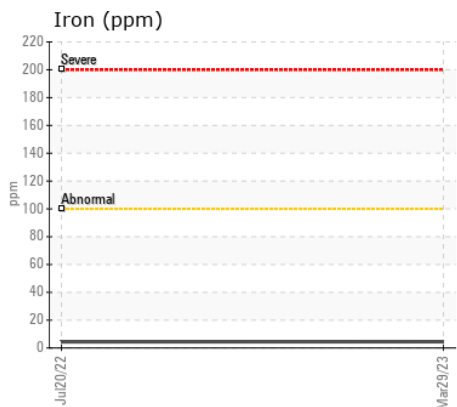
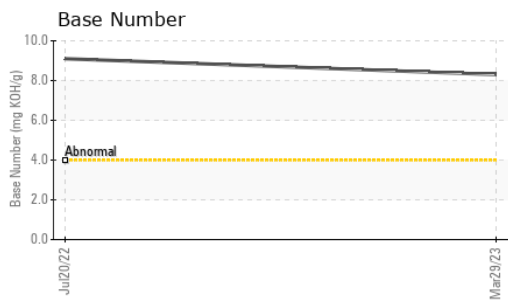
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >20 | 8 | 6 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 3 | --- |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | --- |
| Water | | WC Method | >0.1 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.4 | 7.0 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 17.5 | 18.6 | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | --- |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | >118 | 1 | 1 | --- |
| Boron | ppm | ASTM D5185m | | 42 | 32 | --- |
| Barium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | 30 | 25 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | --- |
| Magnesium | ppm | ASTM D5185m | | 287 | 190 | --- |
| Calcium | ppm | ASTM D5185m | | 1661 | 2159 | --- |
| Phosphorus | ppm | ASTM D5185m | | 730 | 910 | --- |
| Zinc | ppm | ASTM D5185m | | 875 | 1077 | --- |
| Sulfur | ppm | ASTM D5185m | | 2404 | 4289 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.3 | 12.8 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.3 | 9.1 | --- |
| Visc @ 100°C | cSt | ASTM D445 | | 13.0 | 15.0 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VC527561 **Received** : 12 Apr 2023
Lab Number : 05818021 **Diagnosed** : 13 Apr 2023
Unique Number : 10426104 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

DUNN COUNTY HIGHWAY DEPARTMENT
 ROUTE 2 BOX 71A, 3303 US HWY 12 EAST
 MENOMONIE, WI
 US 54751
 Contact: DANNY NELSON
 dnelson@co.dunn.wi.us
 T: (715)232-2361
 F: (715)232-3888

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)