



ASCENDUM

OIL ANALYSIS REPORT



Area

Ascendum Machinery

Machine Id

VOLVO EC380E 380E314127

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

WEAR

NORMAL

CONTAMINATION

ABNORMAL

FLUID CONDITION

NORMAL

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | ASC0001553 | --- | --- |
| Sample Date | | Client Info | | 15 Jan 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 3445 | --- | --- |
| Oil Age | hrs | Client Info | | 3445 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Not Chngd | --- | --- |
| Filter Changed | | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >25 | 7 | --- | --- |
| Chromium | ppm | ASTM D5185m | >10 | 1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | 0 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 1 | --- | --- |
| Lead | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m | >150 | 10 | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

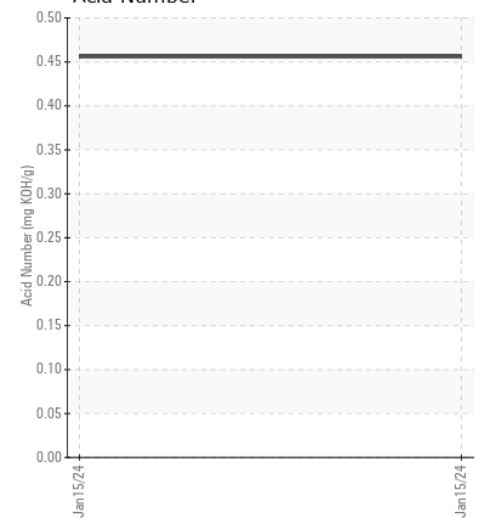
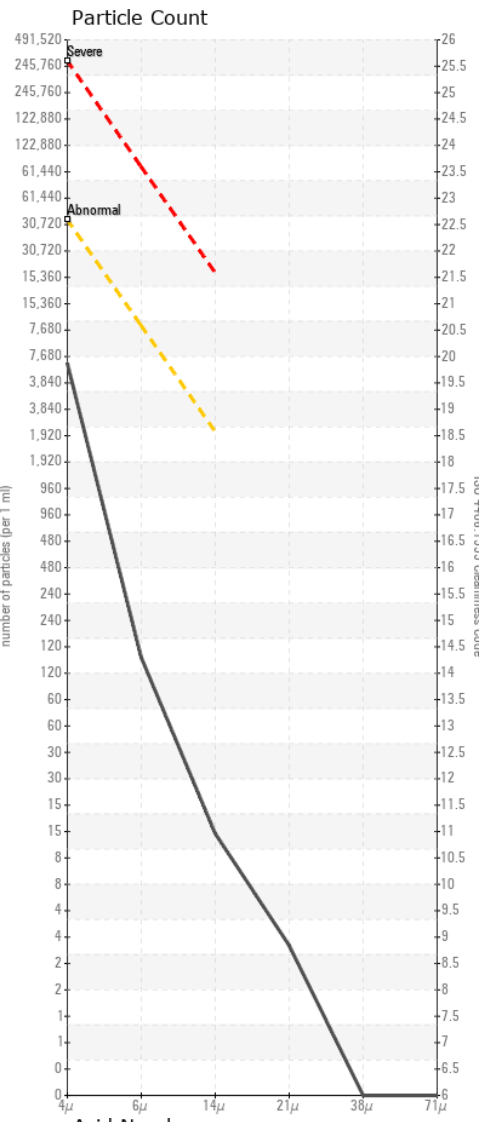
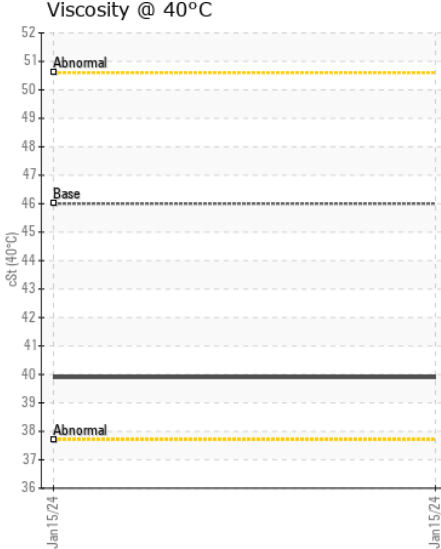
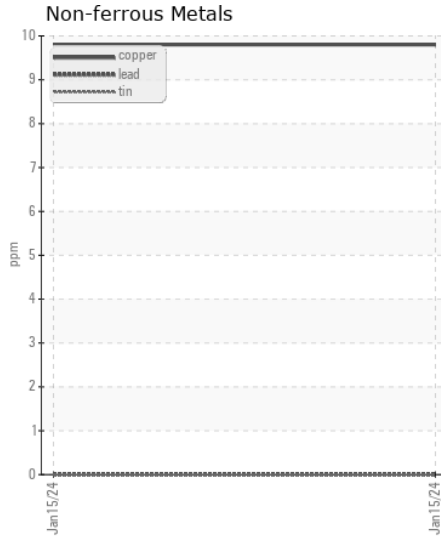
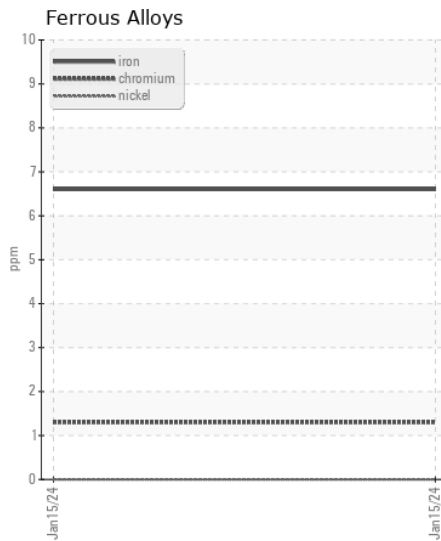
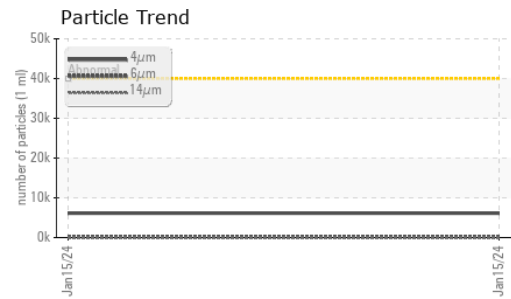
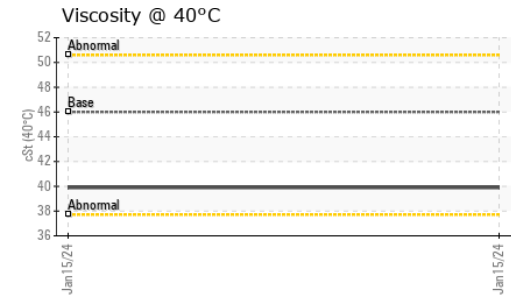
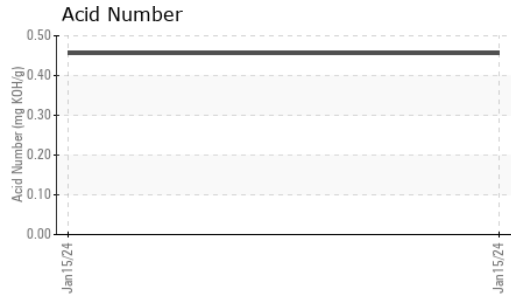
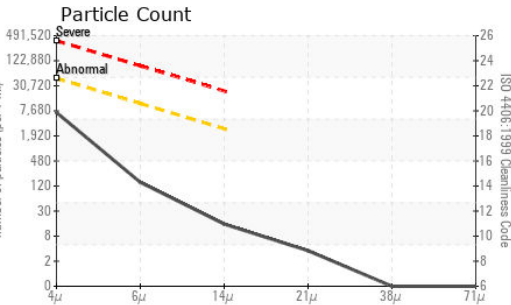
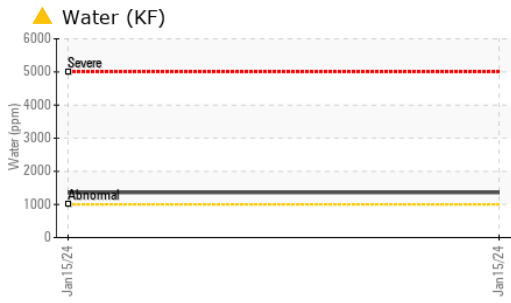
There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

| | | | | | | |
|------------------|--------|--------------|-----------|----------|-----|-----|
| Silicon | ppm | ASTM D5185m | >50 | 5 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 1 | --- | --- |
| Water | % | ASTM D6304 | >0.1 | ▲ 0.136 | --- | --- |
| ppm Water | ppm | ASTM D6304 | >1000 | ▲ 1360 | --- | --- |
| Particles >4µm | | ASTM D7647 | >40000 | 6120 | --- | --- |
| Particles >6µm | | ASTM D7647 | >10000 | 130 | --- | --- |
| Particles >14µm | | ASTM D7647 | >2500 | 13 | --- | --- |
| Particles >21µm | | ASTM D7647 | >640 | 3 | --- | --- |
| Particles >38µm | | ASTM D7647 | >160 | 0 | --- | --- |
| Particles >71µm | | ASTM D7647 | >40 | 0 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >22/20/18 | 20/14/11 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| 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 | >0.1 | ▲ 0.2% | --- | --- |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|-------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 3 | --- | --- |
| Boron | ppm | ASTM D5185m | 14 | 13 | --- | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0.0 | 4 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 2.6 | 72 | --- | --- |
| Calcium | ppm | ASTM D5185m | 49 | 203 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 354 | 341 | --- | --- |
| Zinc | ppm | ASTM D5185m | 419 | 387 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 3719 | 1686 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.456 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 39.9 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001553 **Received** : 17 Jan 2024
Lab Number : 06062571 **Diagnosed** : 24 Jan 2024
Unique Number : 10833953 **Diagnostician** : Doug Bogart
Test Package : MOBCE (Additional Tests: KF)

ENVIRONMENTAL HOLDINGS GROUP LLC
 4000 TRIANGLE LANE SUITE 160
 EXPORT, PA
 US 15632
 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: