



VOLVO

OIL ANALYSIS REPORT

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



Area
[SPM660661-10]
 Machine Id
VOLVO EC200 314412
 Component
Hydraulic System
 Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | VCP431849 | VCP354118 | --- |
| Sample Date | | Client Info | | 03 Feb 2024 | 04 Aug 2022 | --- |
| Machine Age | hrs | Client Info | | 2089 | 974 | --- |
| Oil Age | hrs | Client Info | | 0 | 1500 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | N/A | Not Changd | --- |
| Filter Changed | | Client Info | | Changed | Not Changd | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron | ppm | ASTM D5185m | >25 | 14 | 6 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | 0 | --- |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | --- |
| Silver | ppm | ASTM D5185m | | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 2 | <1 | --- |
| Lead | ppm | ASTM D5185m | >20 | 2 | 1 | --- |
| Copper | ppm | ASTM D5185m | >150 | 35 | 35 | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | LIGHT | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

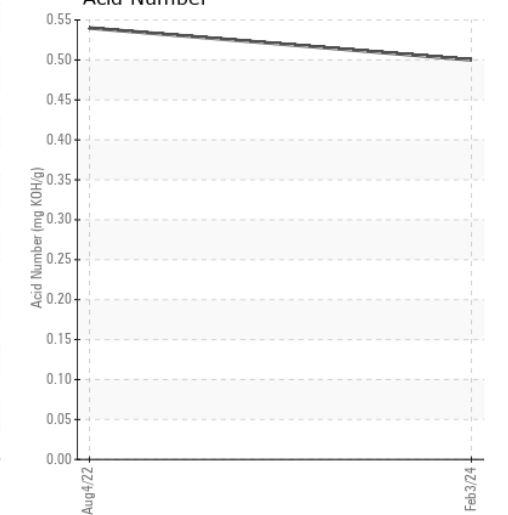
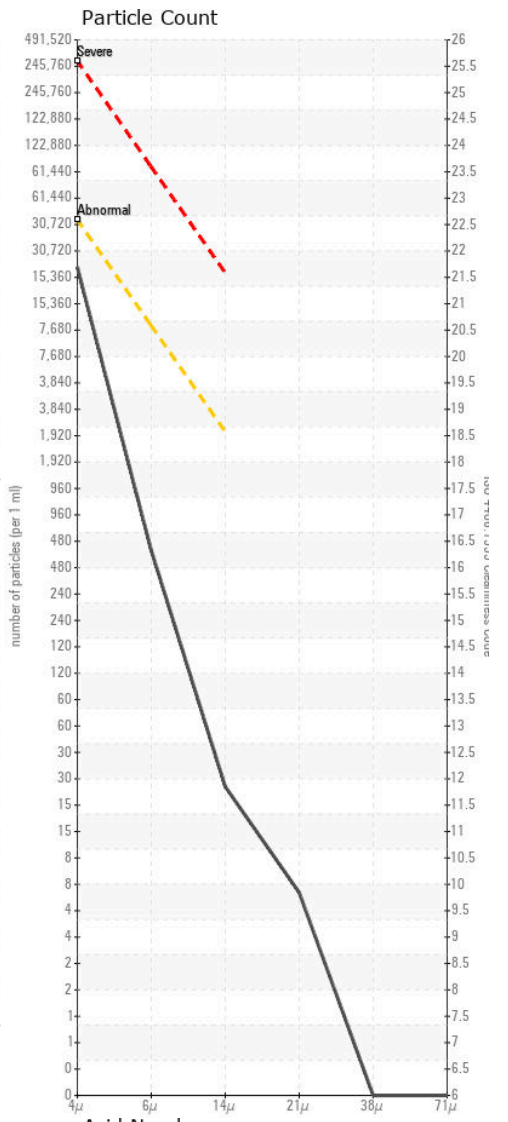
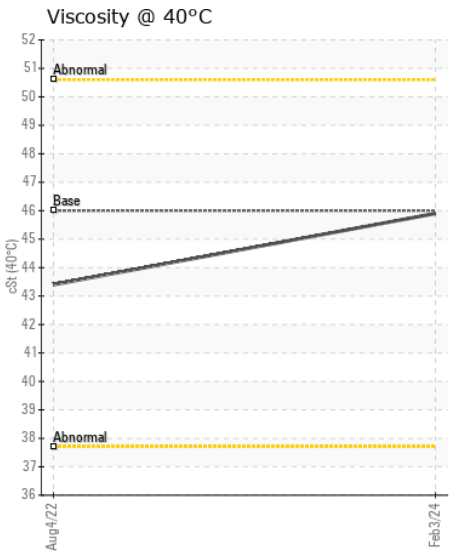
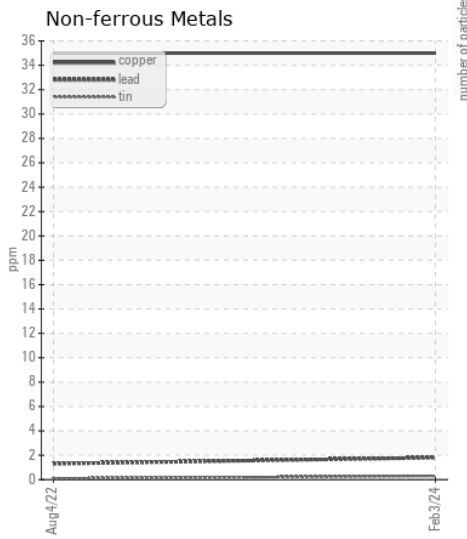
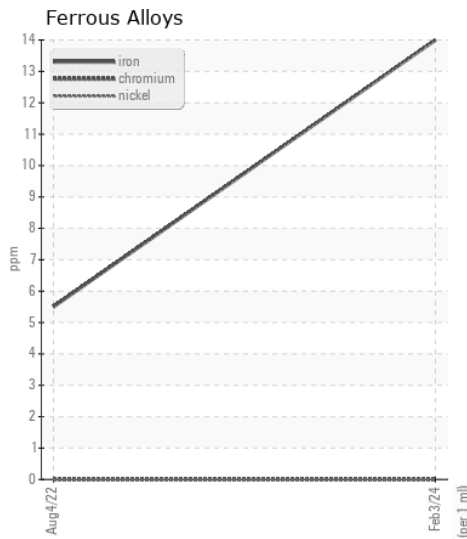
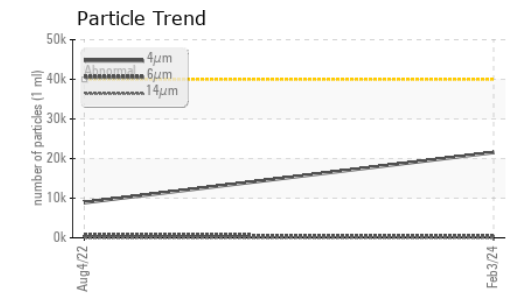
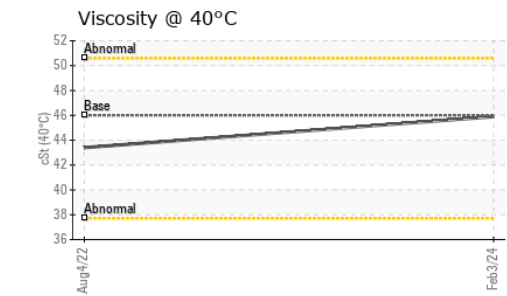
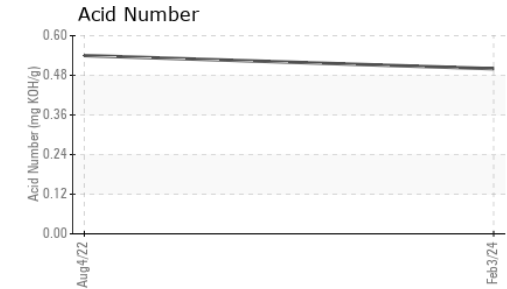
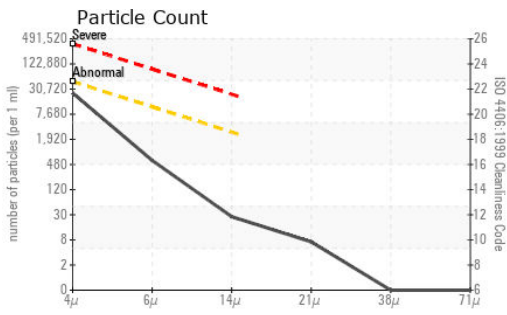
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|-----------------|----------|-----|
| Silicon | ppm | ASTM D5185m | >50 | 9 | 6 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 1 | --- |
| Water | | WC Method | >0.1 | NEG | NEG | --- |
| Particles >4µm | | ASTM D7647 | >40000 | 21540 | 8882 | --- |
| Particles >6µm | | ASTM D7647 | >10000 | 528 | 630 | --- |
| Particles >14µm | | ASTM D7647 | >2500 | 24 | 17 | --- |
| Particles >21µm | | ASTM D7647 | >640 | 6 | 2 | --- |
| Particles >38µm | | ASTM D7647 | >160 | 0 | 0 | --- |
| Particles >71µm | | ASTM D7647 | >40 | 0 | 0 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >22/20/18 | 22/16/12 | 20/16/11 | --- |
| 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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------------|------|-----|
| Sodium | ppm | ASTM D5185m | | 2 | 0 | --- |
| Boron | ppm | ASTM D5185m | 14 | 0 | 0 | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 0.0 | <1 | <1 | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | <1 | 0 | --- |
| Magnesium | ppm | ASTM D5185m | 2.6 | 2 | 2 | --- |
| Calcium | ppm | ASTM D5185m | 49 | 315 | 105 | --- |
| Phosphorus | ppm | ASTM D5185m | 354 | 406 | 388 | --- |
| Zinc | ppm | ASTM D5185m | 419 | 478 | 507 | --- |
| Sulfur | ppm | ASTM D5185m | 3719 | 1498 | 1259 | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.50 | 0.54 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 45.9 | 43.4 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP431849
Lab Number : 06088120
Unique Number : 10875565
Test Package : MOB 2

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 15 Feb 2024 - Don Baldrige

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
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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)