



OIL ANALYSIS REPORT

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

Area
[W02008268]

Machine Id
VOLVO ECR355 314451

Component
Right Hydraulic System

Fluid
VOLVO SUPER HYDRAULIC OIL 46 (40 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W02008268)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | ML0001059 | --- | --- |
| Sample Date | | Client Info | | 02 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 993 | --- | --- |
| Oil Age | hrs | Client Info | | 2007 | --- | --- |
| Filter Age | hrs | Client Info | | 1000 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | ATTENTION | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >20 | 11 | --- | --- |
| Chromium | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >10 | 2 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >75 | 27 | --- | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

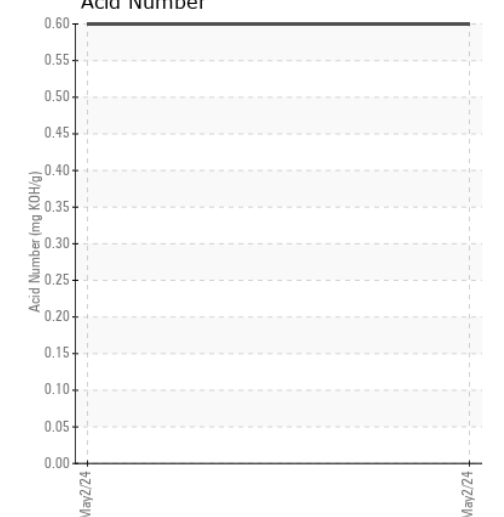
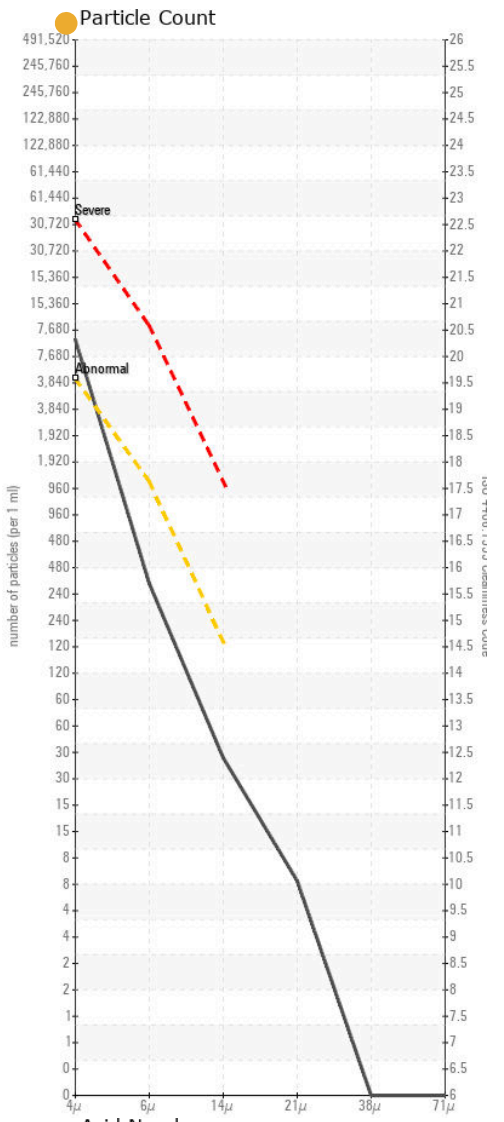
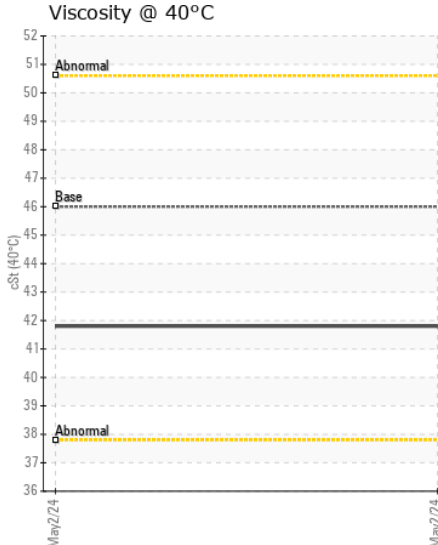
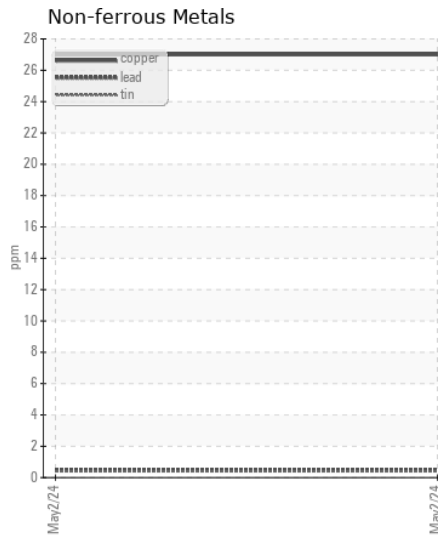
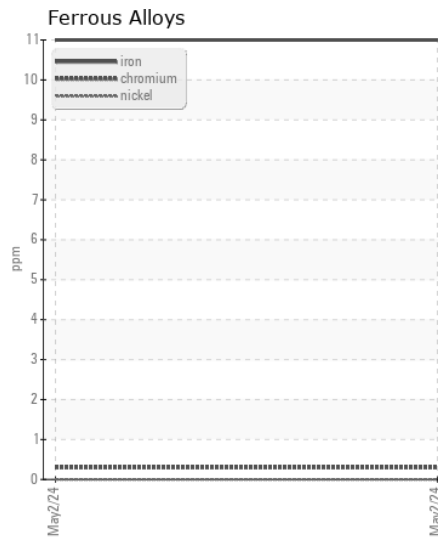
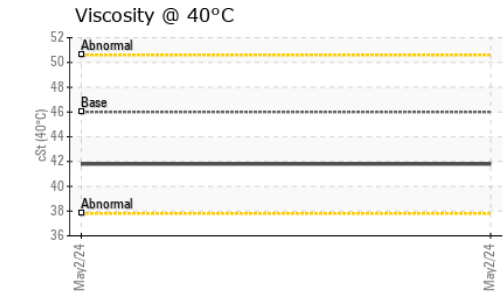
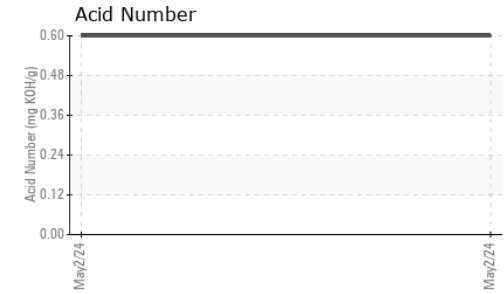
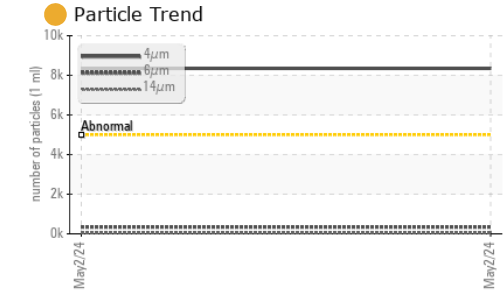
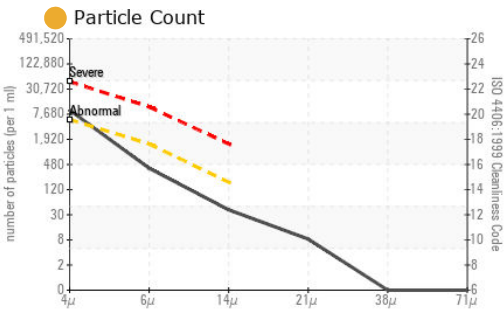
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

| | | | | | | |
|------------------|--------|--------------|-----------|----------|-----|-----|
| Silicon | ppm | ASTM D5185m | >20 | 8 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >5000 | 8352 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | 343 | --- | --- |
| Particles >14µm | | ASTM D7647 | >160 | 35 | --- | --- |
| Particles >21µm | | ASTM D7647 | >40 | 7 | --- | --- |
| Particles >38µm | | ASTM D7647 | >10 | 0 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 20/16/12 | --- | --- |
| 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 | NEG | --- | --- |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

| | | | | | | |
|------------------|----------|-------------|------|------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 0 | --- | --- |
| Boron | ppm | ASTM D5185m | 14 | 5 | --- | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0.0 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 2.6 | 3 | --- | --- |
| Calcium | ppm | ASTM D5185m | 49 | 291 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 354 | 451 | --- | --- |
| Zinc | ppm | ASTM D5185m | 419 | 558 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 3719 | 2919 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.60 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 41.8 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0001059
Lab Number : 06174375
Unique Number : 11020428
Test Package : CONST

Received : 09 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Don Baldrige

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS
 8450 QUARRY ROAD
 MANASSAS, VA
 US 20110

Contact: DARRELL ANDES
 dandes@mcclung-logan.com

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: (703)393-7844