



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



Machine Id
VOLVO L70H 624732
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|----------|----------|
| Sample Number | | Client Info | | ML0001552 | --- | --- |
| Sample Date | | Client Info | | 20 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 2597 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Not Chngd | --- | --- |
| Filter Changed | | Client Info | | Not Chngd | --- | --- |
| Sample Status | | | | NORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185m | >50 | 3 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | 0 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Lead | ppm | ASTM D5185m | >20 | <1 | --- | --- |
| Copper | ppm | ASTM D5185m | >150 | 2 | --- | --- |
| Tin | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

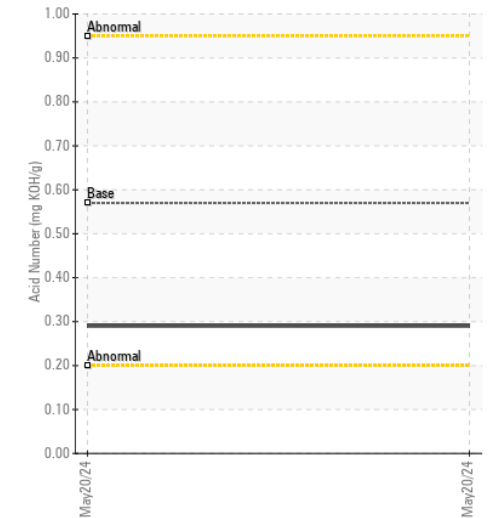
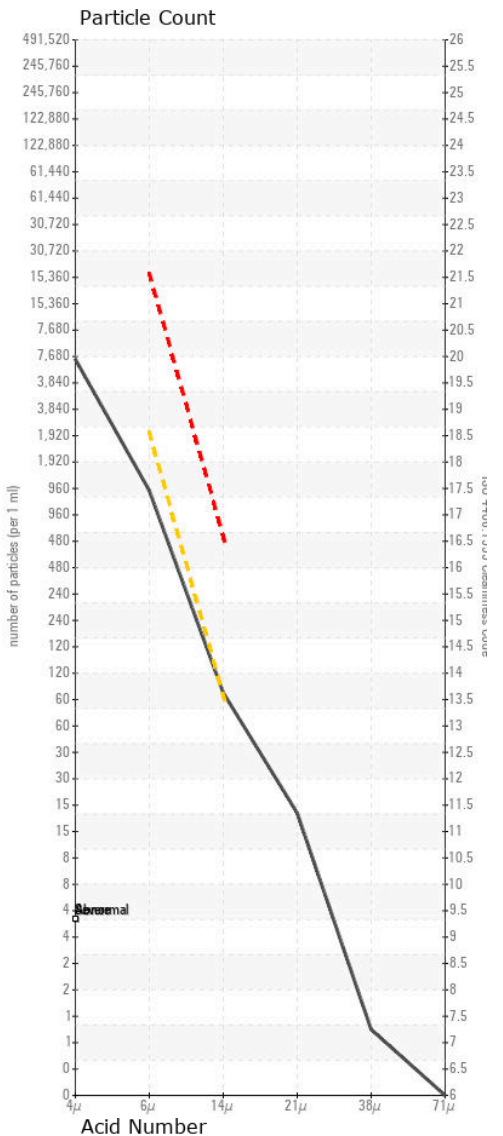
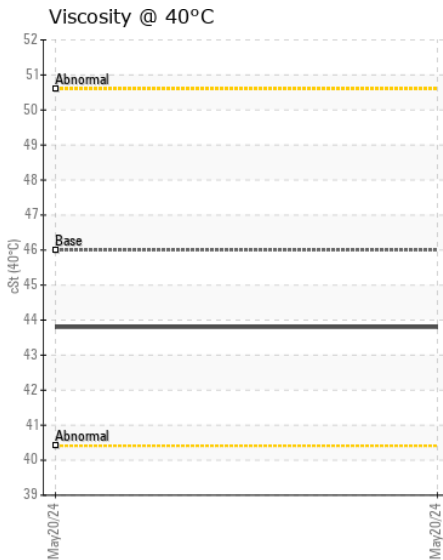
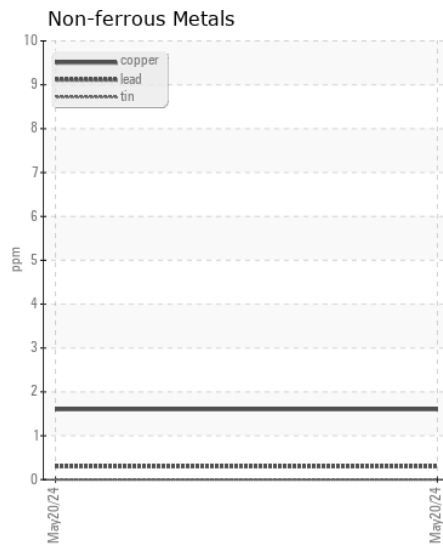
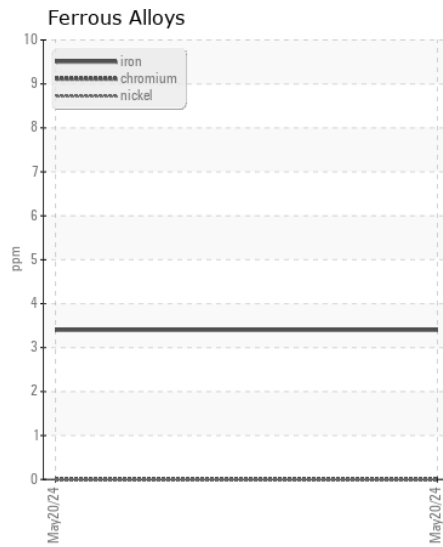
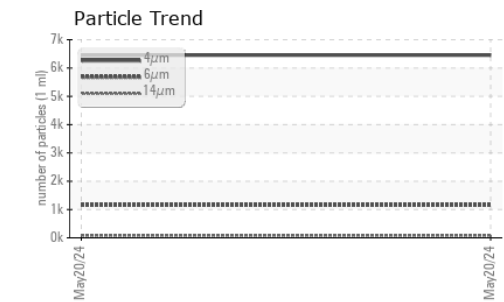
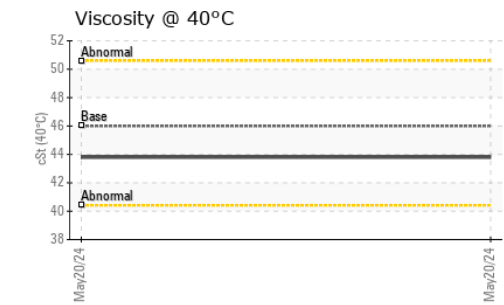
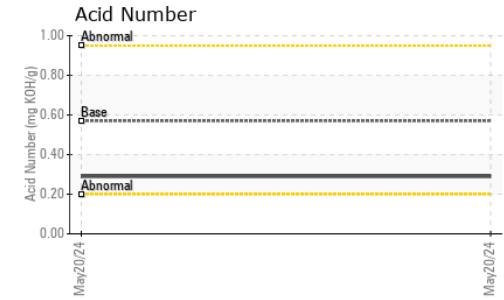
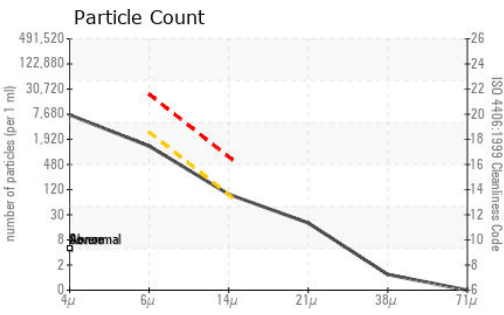
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|--------------|----------|-----------------|-----|-----|
| Silicon | ppm | ASTM D5185m | >20 | 4 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | | 6453 | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | 1156 | --- | --- |
| Particles >14µm | | ASTM D7647 | >80 | 82 | --- | --- |
| Particles >21µm | | ASTM D7647 | >20 | 17 | --- | --- |
| Particles >38µm | | ASTM D7647 | >4 | 1 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >-/18/13 | 20/17/14 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | LIGHT | --- | --- |
| 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 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 | | 1 | --- | --- |
| Boron | ppm | ASTM D5185m | 5 | 0 | --- | --- |
| Barium | ppm | ASTM D5185m | 5 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 5 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 25 | 1 | --- | --- |
| Calcium | ppm | ASTM D5185m | 200 | 75 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 300 | 337 | --- | --- |
| Zinc | ppm | ASTM D5185m | 370 | 458 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 2500 | 2308 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | 0.29 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 43.8 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ML0001552

Lab Number : 06190391

Unique Number : 11047143

Test Package : CONST

Received : 24 May 2024

Tested : 29 May 2024

Diagnosed : 29 May 2024 - Angela Borella

MCCLUNG-LOGAN EQUIPMENT CO - WINCHESTER

160 KENTMERE COURT

WINCHESTER, VA

US 22603

Contact: JENNIFER MATIAS

jmatias@mcclung-logan.com

T: (540)722-3700

F: (540)722-4441

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)