



VOLVO

OIL ANALYSIS REPORT

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



Area
[661396]
Machine Id
VOLVO L110H 631024
Component
Transmission (Auto)
Fluid
VOLVO AUTOMATIC TRANSMISSION FLUID AT102 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | VCP454191 | VCP405085 | VCP379841 |
| Sample Date | | Client Info | | 10 Feb 2024 | 18 Apr 2023 | 02 Nov 2022 |
| Machine Age | hrs | Client Info | | 10869 | 9834 | 9345 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Not Changed | Not Changed | Not Changed |
| Filter Changed | | Client Info | | Not Changed | Not Changed | N/A |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >160 | 28 | 12 | 10 |
| Chromium | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| Silver | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >50 | 2 | 1 | <1 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >225 | 2 | <1 | 1 |
| Tin | ppm | ASTM D5185m | >10 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

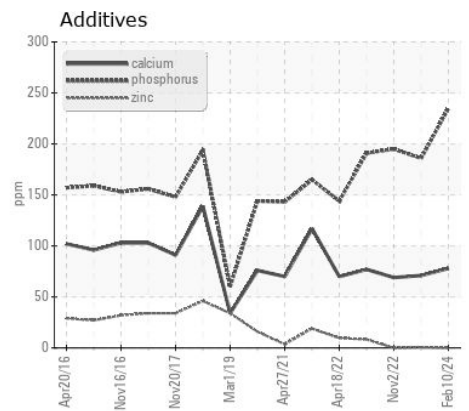
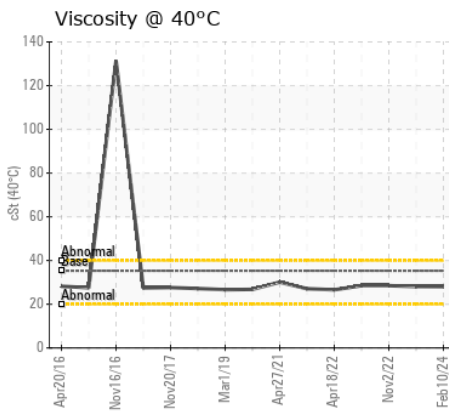
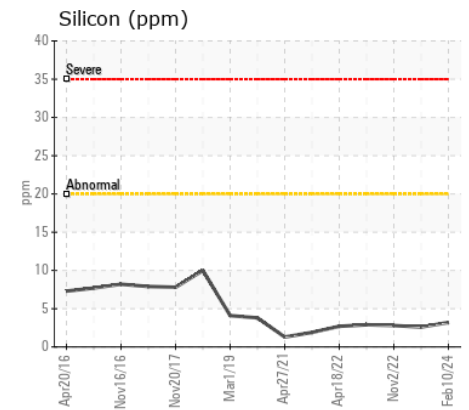
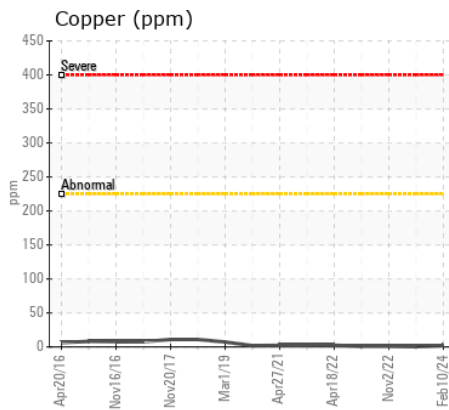
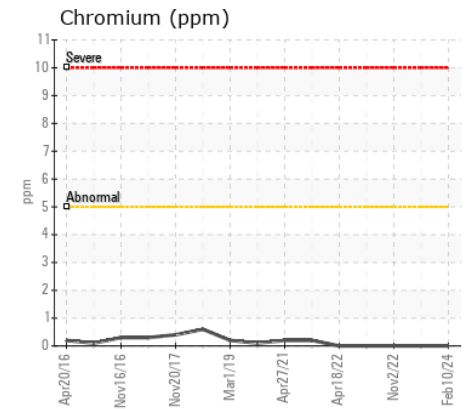
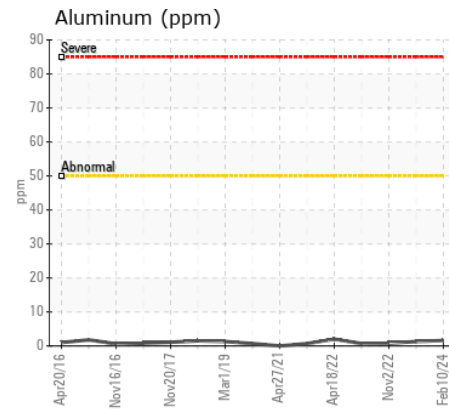
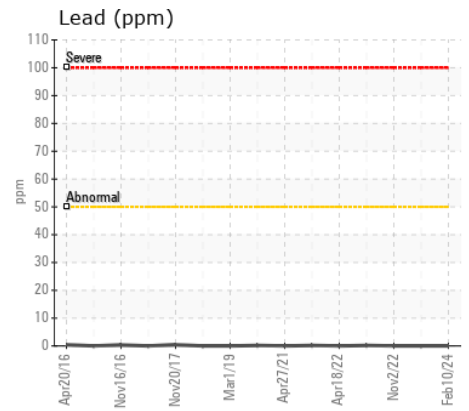
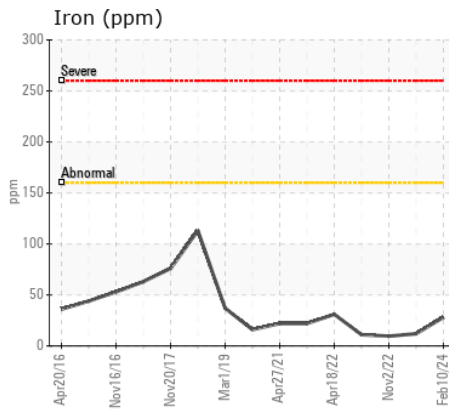
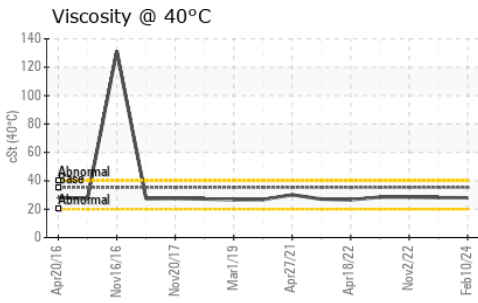
There is no indication of any contamination in the fluid.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >20 | 3 | 3 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | 0 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | NONE |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | NORML | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.1 | NEG | NEG | NEG |

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|------|--------------|------|------|
| Sodium | ppm | ASTM D5185m | | 0 | <1 | 2 |
| Boron | ppm | ASTM D5185m | 187 | 90 | 89 | 91 |
| Barium | ppm | ASTM D5185m | 0.0 | 12 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.0 | <1 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | 0.0 | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | 6.8 | 2 | 2 | <1 |
| Calcium | ppm | ASTM D5185m | 215 | 78 | 71 | 69 |
| Phosphorus | ppm | ASTM D5185m | 445 | 235 | 186 | 195 |
| Zinc | ppm | ASTM D5185m | 56 | 0 | <1 | 0 |
| Sulfur | ppm | ASTM D5185m | 1336 | 2303 | 1827 | 1919 |
| Visc @ 40°C | cSt | ASTM D445 | 35.3 | 28.0 | 28.1 | 28.5 |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP454191 **Received** : 14 Feb 2024
Lab Number : 06089175 **Tested** : 15 Feb 2024
Unique Number : 10876620 **Diagnosed** : 16 Feb 2024 - Jonathan Hester
Test Package : MOB 1

HUBBARD CONSTRUCTION
 303 WEST LANDSTREET ROAD
 ORLANDO, FL
 US 32824
 Contact: RAY BIRKO
 ray.birko@hubbard.com
 T: (407)855-3535
 F: (407)857-1282

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)