



VOLVO

OIL ANALYSIS REPORT

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



Area
[SW1028546 LKQ]
 Machine Id
VOLVO L90H 624586
 Component
Hydraulic System
 Fluid
AW HYDRAULIC OIL ISO 46 (--- 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.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | VCP412918 | --- | --- |
| Sample Date | | Client Info | | 09 Jan 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 7972 | --- | --- |
| Oil Age | hrs | Client Info | | 0 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >50 | 0 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | <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 | 2 | --- | --- |
| Copper | ppm | ASTM D5185m | >150 | 4 | --- | --- |
| Tin | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

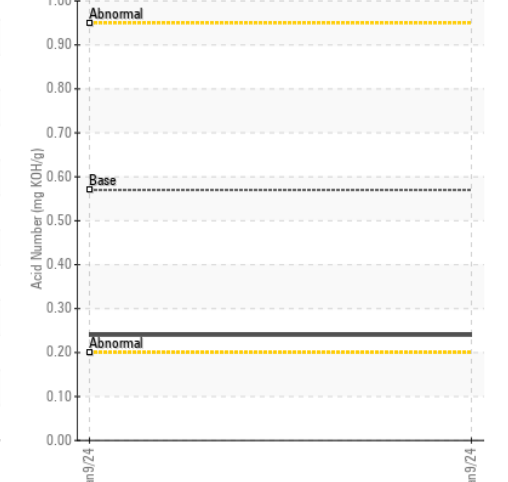
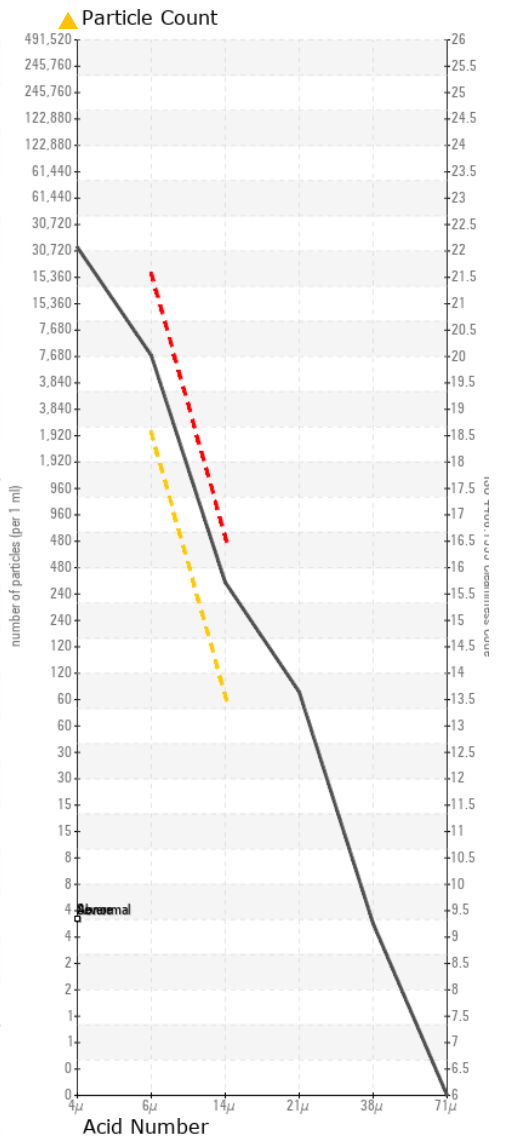
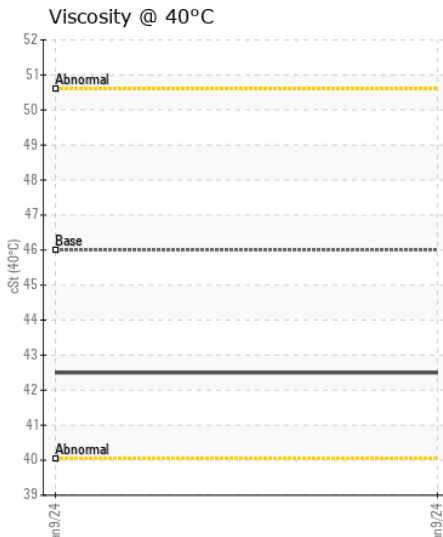
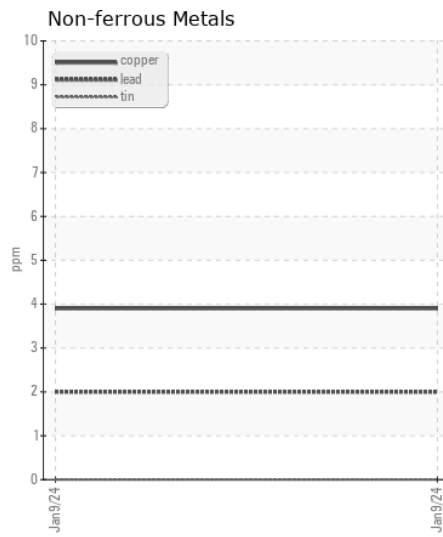
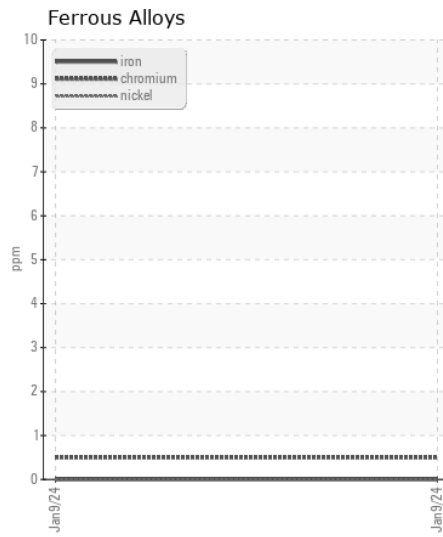
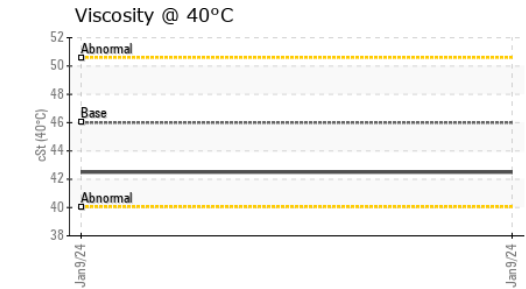
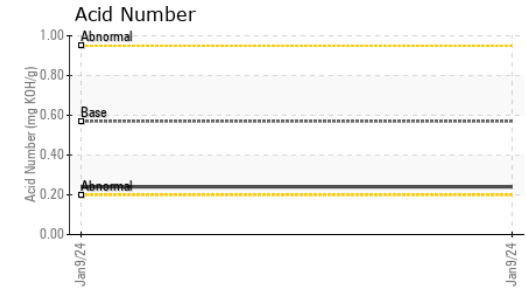
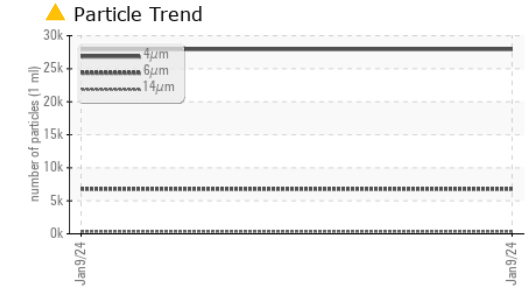
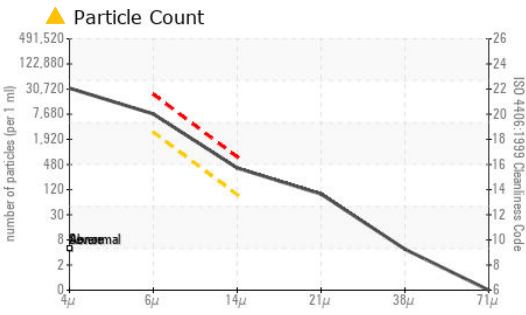
There is a high amount of particulates present in the oil.

| | | | | | | |
|------------------|--------|--------------|----------|------------|-----|-----|
| Silicon | ppm | ASTM D5185m | >20 | 4 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | | 27941 | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ 6785 | --- | --- |
| Particles >14µm | | ASTM D7647 | >80 | ▲ 348 | --- | --- |
| Particles >21µm | | ASTM D7647 | >20 | ▲ 83 | --- | --- |
| Particles >38µm | | ASTM D7647 | >4 | 4 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >-/18/13 | ▲ 22/20/16 | --- | --- |
| 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 | | 1 | --- | --- |
| Boron | ppm | ASTM D5185m | 5 | 0 | --- | --- |
| Barium | ppm | ASTM D5185m | 5 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 5 | 0 | --- | --- |
| Manganese | ppm | ASTM D5185m | | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 25 | <1 | --- | --- |
| Calcium | ppm | ASTM D5185m | 200 | 57 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 300 | 325 | --- | --- |
| Zinc | ppm | ASTM D5185m | 370 | 418 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 2500 | 4561 | --- | --- |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.57 | 0.24 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 46 | 42.5 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP412918 **Received** : 19 Jan 2024
Lab Number : 06065534 **Diagnosed** : 23 Jan 2024
Unique Number : 10836916 **Diagnostician** : Don Baldrige
Test Package : MOB 2

ARNOLD MACHINERY COMPANY
 4323 EAST WINSLOW AVENUE
 PHOENIX, AZ
 US 85040
 Contact: RANDY PRZEKURAT
 randyp@arnoldmachinery.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:
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