



VOLVO

OIL ANALYSIS REPORT

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



Machine Id
VOLVO L70H 624550

Component
Diesel Engine

Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | VCP428620 | VCP431712 | VCP323819 |
| Sample Date | | Client Info | | 17 Jul 2024 | 14 Dec 2023 | 08 Sep 2023 |
| Machine Age | hrs | Client Info | | 6669 | 5254 | 4508 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >200 | 42 | 53 | 57 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 1 | 2 |
| Nickel | ppm | ASTM D5185m | >5 | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | 3 | 4 | 5 |
| Lead | ppm | ASTM D5185m | >40 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >20 | 2 | <1 | 3 |
| Tin | ppm | ASTM D5185m | >20 | 0 | 1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

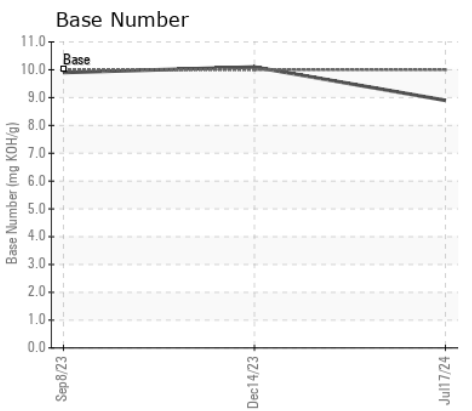
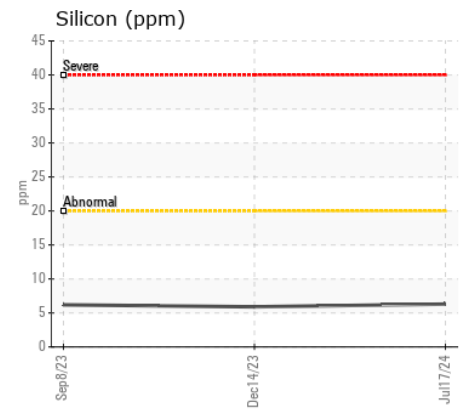
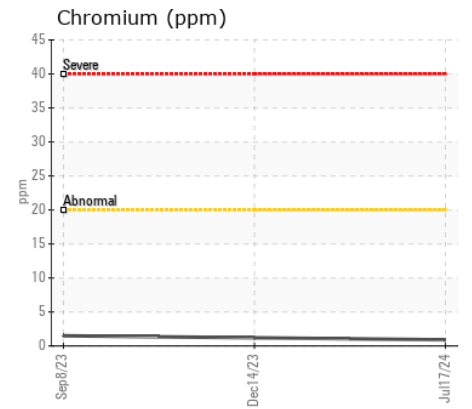
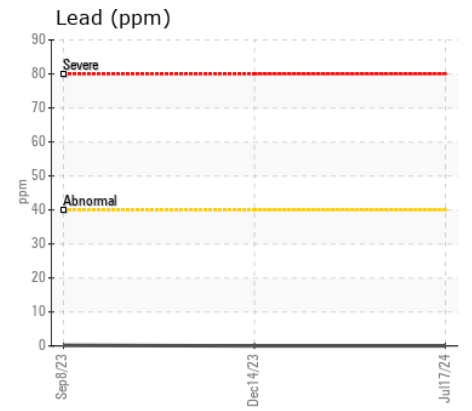
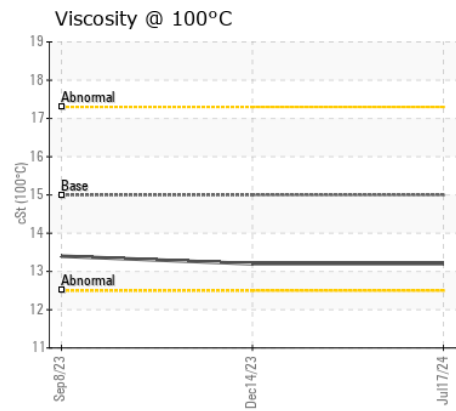
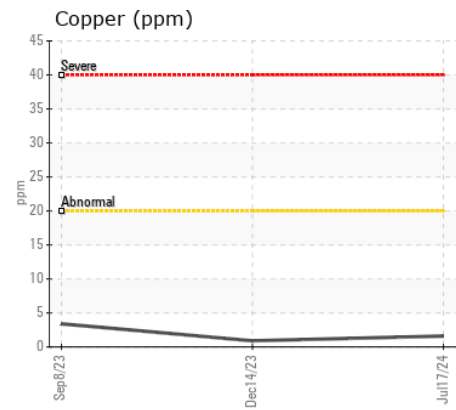
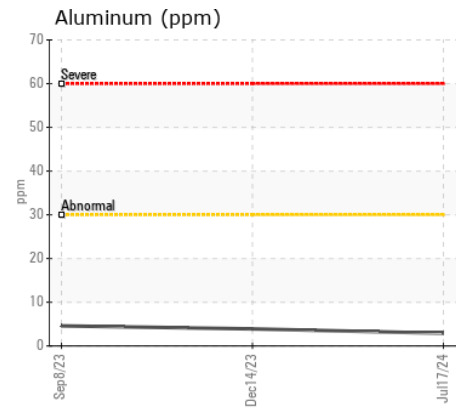
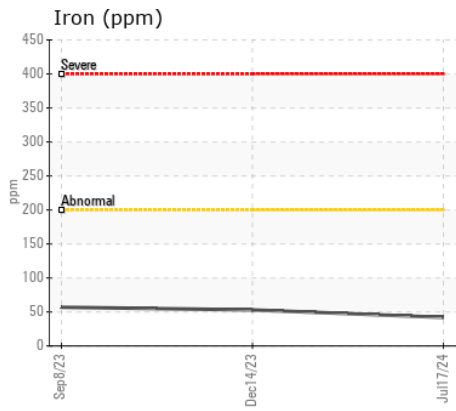
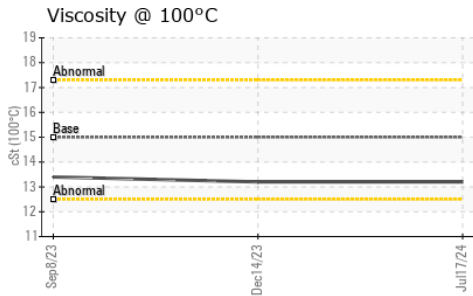
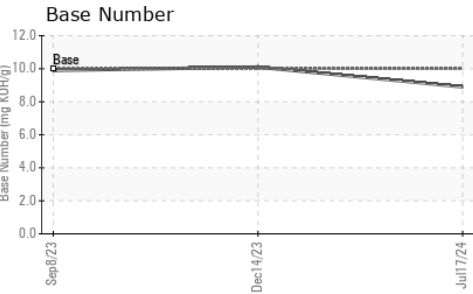
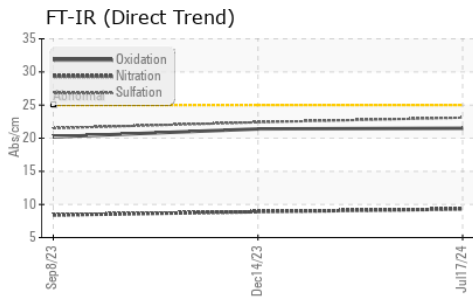
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >20 | 6 | 6 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | 1 |
| Fuel | | WC Method | >6.0 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.4 | 0.5 | 0.4 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 9.3 | 8.9 | 8.4 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 23.1 | 22.4 | 21.5 |
| 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 | >0.2 | NEG | NEG | 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 | | 3 | 2 | 4 |
| Boron | ppm | ASTM D5185m | 2.5 | 15 | 26 | 26 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.7 | 44 | 53 | 47 |
| Manganese | ppm | ASTM D5185m | 0.0 | <1 | 1 | 1 |
| Magnesium | ppm | ASTM D5185m | 256 | 517 | 542 | 616 |
| Calcium | ppm | ASTM D5185m | 2057 | 1778 | 1684 | 1969 |
| Phosphorus | ppm | ASTM D5185m | 935 | 928 | 931 | 995 |
| Zinc | ppm | ASTM D5185m | 1223 | 1113 | 1152 | 1249 |
| Sulfur | ppm | ASTM D5185m | 4079 | 3186 | 2806 | 3675 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 21.5 | 21.4 | 20.2 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10 | 8.9 | 10.1 | 9.9 |
| Visc @ 100°C | cSt | ASTM D445 | 15.0 | 13.2 | 13.2 | 13.4 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP428620 **Received** : 19 Jul 2024
Lab Number : 06241290 **Tested** : 20 Jul 2024
Unique Number : 11130124 **Diagnosed** : 20 Jul 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

ALTA EQUIPMENT COMPANY
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 FORT MYERS, FL
 US 33905
 Contact: TODD LARK
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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) F: (239)481-3302