



VOLVO

OIL ANALYSIS REPORT

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

Area

[675482 MARK CONST]

Machine Id

TAKEUCHI TL8 408006478

Component

Diesel Engine

Fluid

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

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | VCP446617 | --- | --- |
| Sample Date | | Client Info | | 26 Feb 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 111 | --- | --- |
| 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

Metal levels are typical for a new component breaking in.

| | | | | | | |
|--------------|--------|-------------|------|------|-----|-----|
| Iron | ppm | ASTM D5185m | >100 | 12 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | 1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >4 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | >3 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | --- | --- |
| Lead | ppm | ASTM D5185m | >40 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m | >330 | 27 | --- | --- |
| Tin | ppm | ASTM D5185m | >15 | <1 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

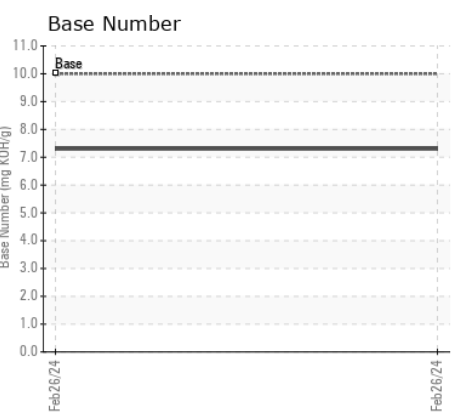
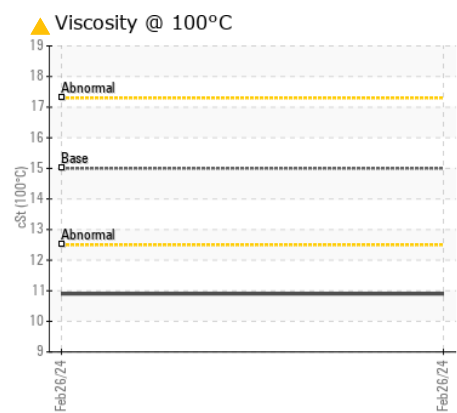
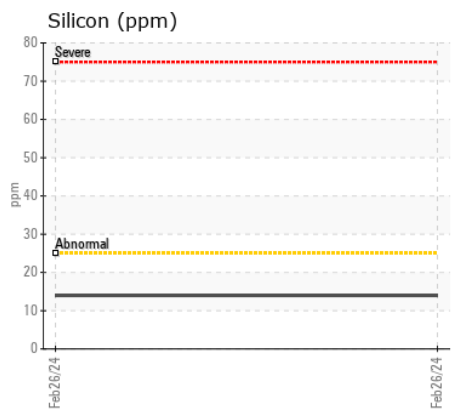
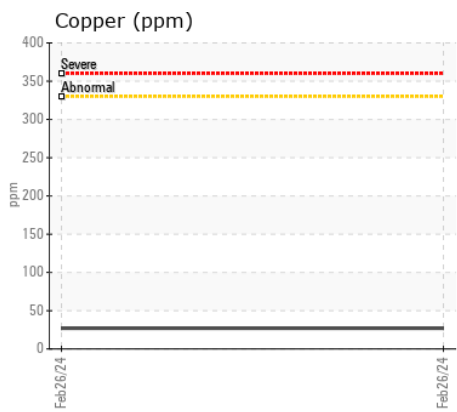
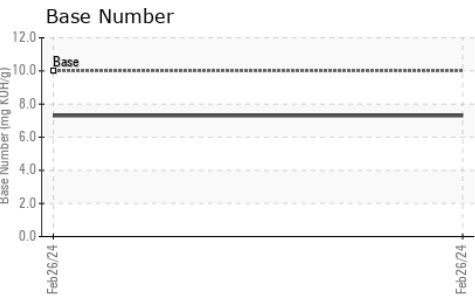
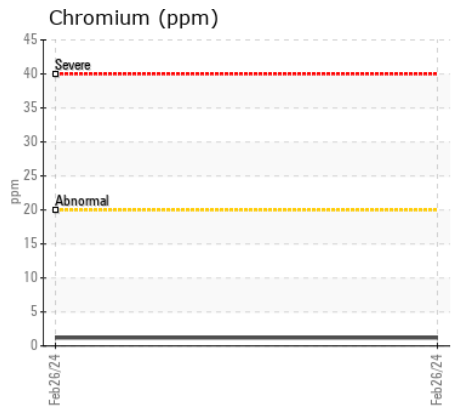
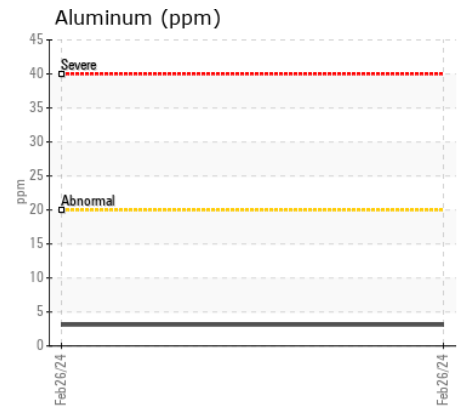
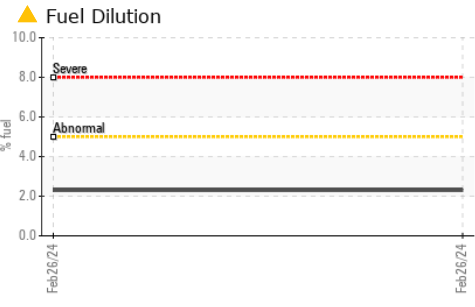
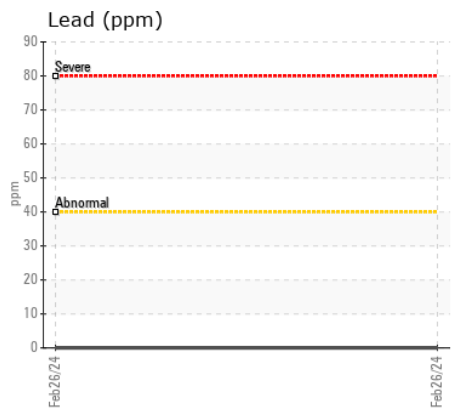
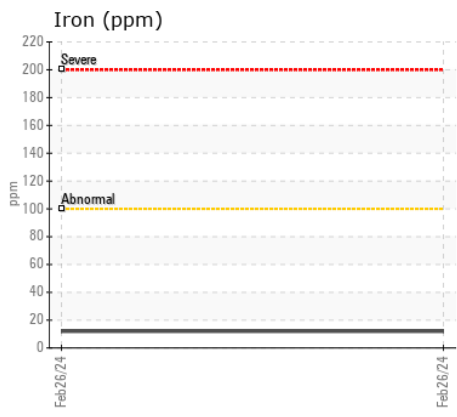
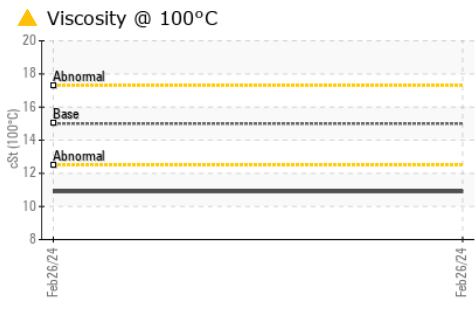
Light fuel dilution occurring.

| | | | | | | |
|------------------|----------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >25 | 14 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | --- | --- |
| Fuel | % | ASTM D3524 | >5 | ▲ 2.3 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | --- | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 6.8 | --- | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 16.8 | --- | --- |
| 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 | >0.2 | NEG | --- | --- |

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|--------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 11 | --- | --- |
| Boron | ppm | ASTM D5185m | 2.5 | 7 | --- | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 2 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0.7 | 10 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | 4 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 256 | 48 | --- | --- |
| Calcium | ppm | ASTM D5185m | 2057 | 2364 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 935 | 886 | --- | --- |
| Zinc | ppm | ASTM D5185m | 1223 | 1074 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 4079 | 4098 | --- | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 11.8 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | 10 | 7.3 | --- | --- |
| Visc @ 100°C | cSt | ASTM D445 | 15.0 | ▲ 10.9 | --- | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP446617 **Received** : 29 Feb 2024
Lab Number : 06104011 **Tested** : 04 Mar 2024
Unique Number : 10902241 **Diagnosed** : 04 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

ALTA EQUIPMENT/FLAGLER EQUIPMENT LLC
 9601 BOGGY CREEK RD
 ORLANDO, FL
 US 32824
 Contact: Robert LaPlante
 robert.laplante@altg.com
 T: (407)508-9736
 F: (407)659-8720

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)