



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



Area
[W02008336]
Machine Id
VOLVO A30F 82256
Component
Diesel Engine
Fluid
{not provided} (11 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. (Customer Sample Comment: W02008336)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|----------|----------|
| Sample Number | | Client Info | | ML0002468 | --- | --- |
| Sample Date | | Client Info | | 21 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 14598 | --- | --- |
| Oil Age | hrs | Client Info | | 300 | --- | --- |
| Filter Age | hrs | Client Info | | 300 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-----|-----|
| Iron | ppm | ASTM D5185m | >200 | 12 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185m | >10 | 1 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | >2 | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >30 | 5 | --- | --- |
| Lead | ppm | ASTM D5185m | >40 | 1 | --- | --- |
| Copper | ppm | ASTM D5185m | >20 | 4 | --- | --- |
| Tin | ppm | ASTM D5185m | >20 | 2 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | --- | --- |
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

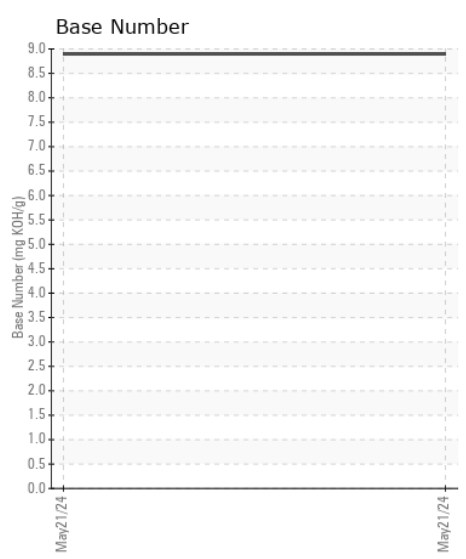
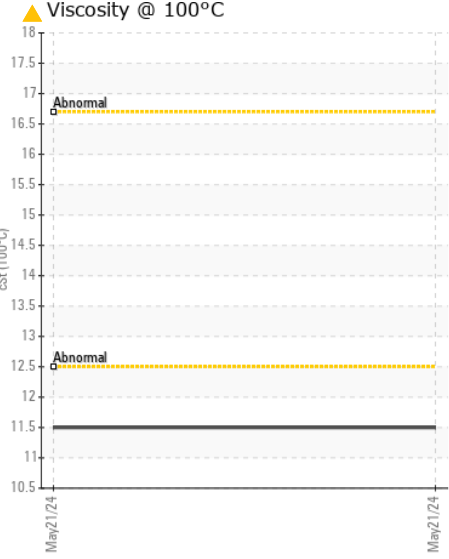
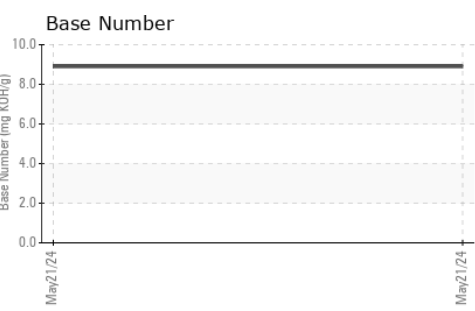
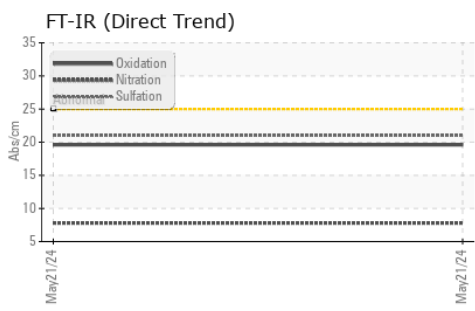
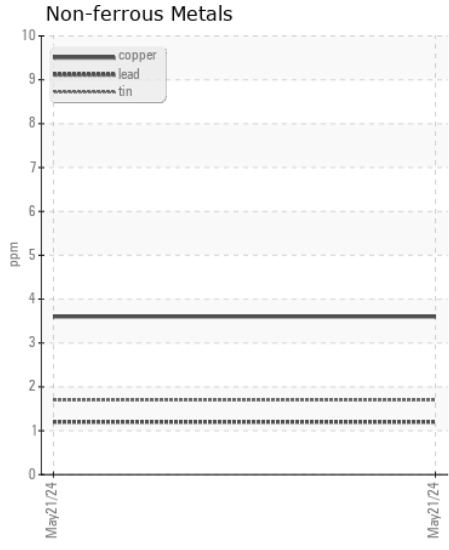
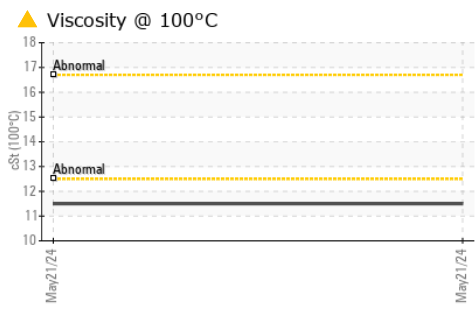
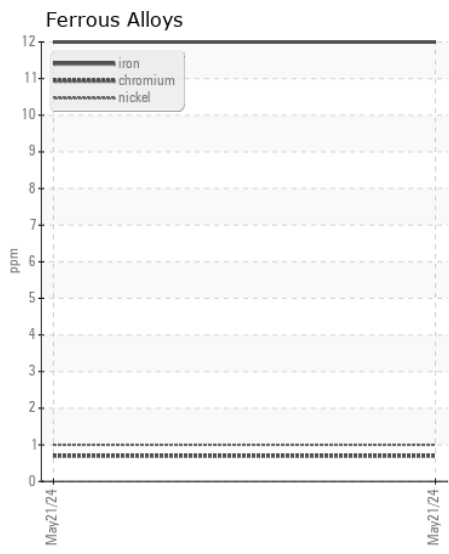
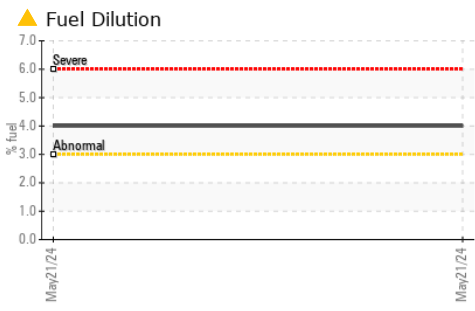
There is a moderate amount of fuel present in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|--------------|-----|-----|
| Silicon | ppm | ASTM D5185m | >20 | 10 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | --- | --- |
| Fuel | % | ASTM D3524 | >3.0 | ▲ 4.0 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Glycol | | WC Method | | NEG | --- | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.2 | --- | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.8 | --- | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.0 | --- | --- |
| 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

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

| | | | | | | |
|------------------|----------|-------------|-----|---------------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 3 | --- | --- |
| Boron | ppm | ASTM D5185m | | 48 | --- | --- |
| Barium | ppm | ASTM D5185m | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | 45 | --- | --- |
| Manganese | ppm | ASTM D5185m | | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185m | | 513 | --- | --- |
| Calcium | ppm | ASTM D5185m | | 1684 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | 716 | --- | --- |
| Zinc | ppm | ASTM D5185m | | 949 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 2864 | --- | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 19.6 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.9 | --- | --- |
| Visc @ 100°C | cSt | ASTM D445 | | ▲ 11.5 | --- | --- |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ML0002468 **Received** : 24 May 2024
Lab Number : 06190306 **Tested** : 30 May 2024
Unique Number : 11047058 **Diagnosed** : 30 May 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

MCCLUNG-LOGAN EQUIPMENT CO - MANASSAS
 8450 QUARRY ROAD
 MANASSAS, VA
 US 20110
 Contact: MIKE MAYHUGH
 MMAYHUGH@MCCLUNG-LOGAN.COM
 T: (703)393-7344
 F: (703)393-7844

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)