



ASCENDUM

OIL ANALYSIS REPORT

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



Machine Id
VOLVO A45G 13414 (S/N 752168)
Component
Diesel Engine
Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number | | Client Info | | ASC0010230 | ASC0008586 | --- |
| Sample Date | | Client Info | | 14 May 2024 | 19 Feb 2024 | --- |
| Machine Age | hrs | Client Info | | 1823 | 653 | --- |
| Oil Age | hrs | Client Info | | 1170 | 0 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | N/A | Changed | --- |
| Filter Changed | | Client Info | | N/A | Changed | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|------|------|-----|
| Iron | ppm | ASTM D5185m | >100 | 14 | 32 | --- |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 2 | --- |
| Nickel | ppm | ASTM D5185m | >2 | 2 | 4 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 4 | --- |
| Lead | ppm | ASTM D5185m | >40 | 1 | 2 | --- |
| Copper | ppm | ASTM D5185m | >330 | 33 | 217 | --- |
| Tin | ppm | ASTM D5185m | >15 | 2 | 5 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

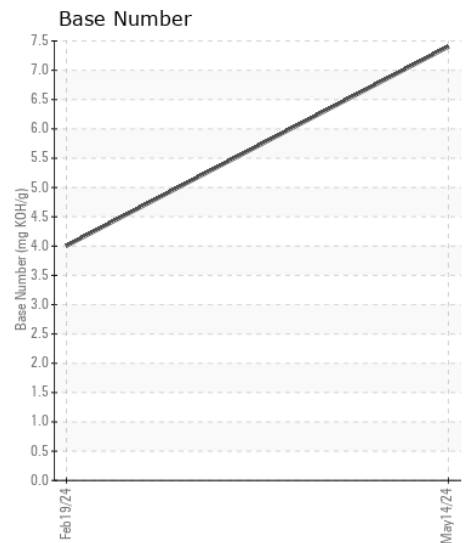
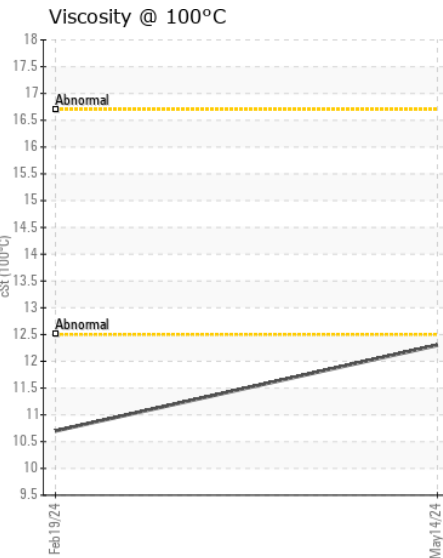
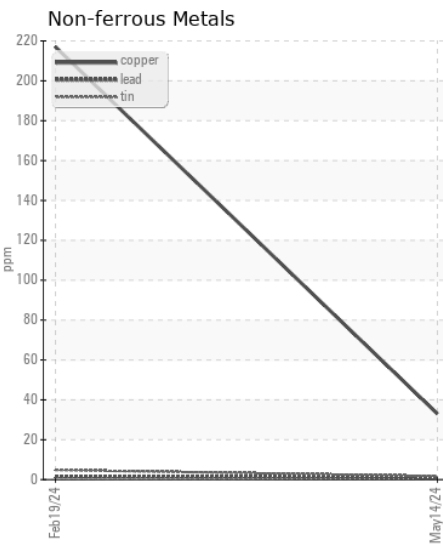
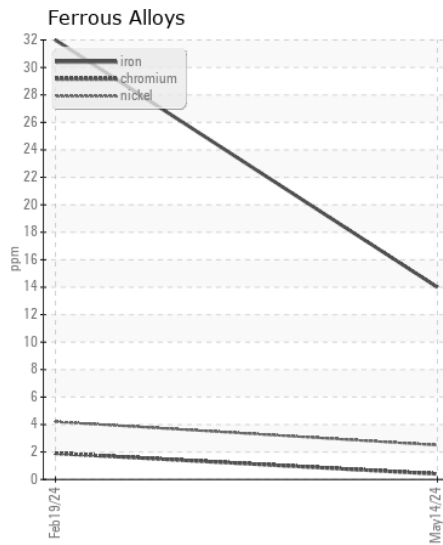
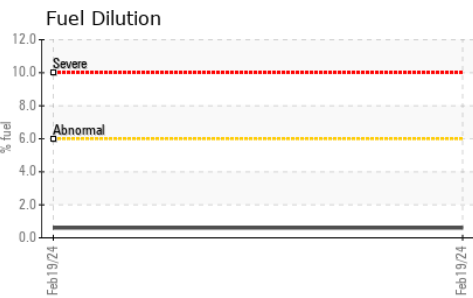
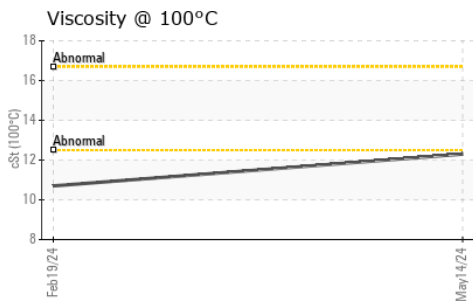
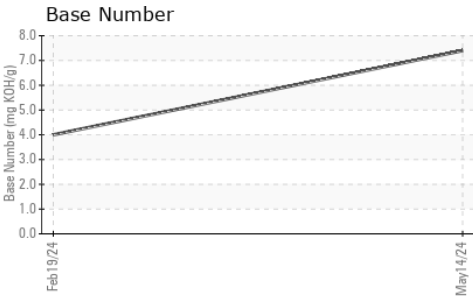
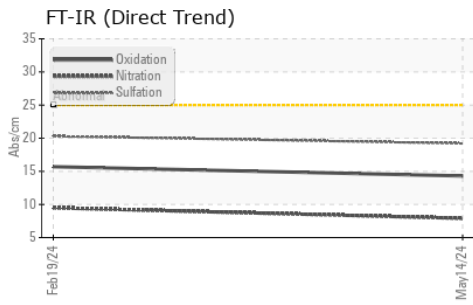
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|----------|-------------|-------|-------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | 5 | 27 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | --- |
| Fuel | % | ASTM D3524 | >6.0 | <1.0 | 0.6 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Glycol | | WC Method | | NEG | NEG | --- |
| Soot % | % | *ASTM D7844 | >3 | 0.5 | 0.5 | --- |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 7.9 | 9.5 | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.2 | 20.3 | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | 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 | | 2 | 3 | --- |
| Boron | ppm | ASTM D5185m | | 3 | 26 | --- |
| Barium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | | 61 | 95 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | 2 | --- |
| Magnesium | ppm | ASTM D5185m | | 904 | 20 | --- |
| Calcium | ppm | ASTM D5185m | | 1067 | 2345 | --- |
| Phosphorus | ppm | ASTM D5185m | | 998 | 1085 | --- |
| Zinc | ppm | ASTM D5185m | | 1183 | 1242 | --- |
| Sulfur | ppm | ASTM D5185m | | 3045 | 3752 | --- |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 14.3 | 15.7 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 7.4 | 4.0 | --- |
| Visc @ 100°C | cSt | ASTM D445 | | 12.3 | 10.7 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0010230

Lab Number : 06193742

Unique Number : 11050494

Test Package : CONST (Additional Tests: FuelDilution, TBN)

Received : 29 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Jonathan Hester

117 - ASCENDUM MACHINERY INC - GREENVILLE

2002 N GREENE ST

GREENVILLE, NC

US 27834

Contact: ALLEN WILLIAMS

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T:

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: (704)494-8197