CONST ASCENDUM

OIL ANALYSIS REPORT

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

Machine Id
## VOLVO A30G 752490
Component
## Diesel Engine
Fluid
## VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

## RECOMMENDATION

Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

## CONTAMINATION

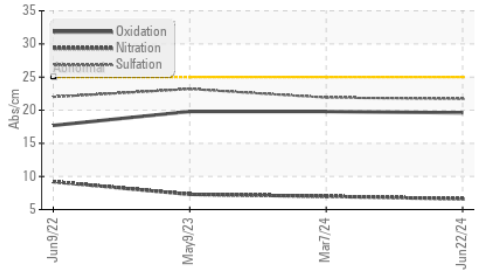
There is no indication of any contamination in the oil.

## FLUID CONDITION

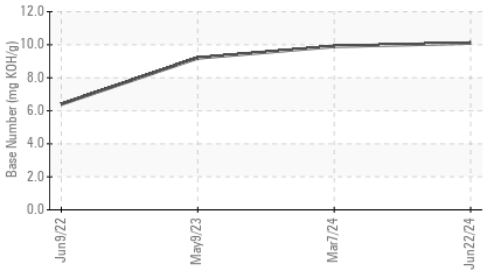
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | ASC0009749 | ASC0007579 | VCP393701 |
| Sample Date | | Client Info | | 22 Jun 2024 | 07 Mar 2024 | 09 May 2023 |
| Machine Age | hrs | Client Info | | 2602 | 2602 | 1798 |
| Oil Age | hrs | Client Info | | 2602 | 804 | 1000 |
| 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 | MARGINAL |
| Iron | ppm | ASTM D5185m | >100 | 9 | 29 | 15 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | <1 | <1 |
| Nickel | ppm | ASTM D5185m | >2 | 1 | 5 | 3 |
| Titanium | ppm | ASTM D5185m | | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | >2 | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 2 | 3 | 0 |
| Lead | ppm | ASTM D5185m | >40 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >330 | 4 | 14 | ▲ 90 |
| Tin | ppm | ASTM D5185m | >15 | 0 | <1 | 1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >25 | 4 | 8 | 8 |
| Potassium | ppm | ASTM D5185m | >20 | 2 | 2 | 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 | 0.2 | 0.2 | 0.3 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 6.6 | 7.0 | 7.3 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 21.7 | 21.9 | 23.2 |
| 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 |
| Sodium | ppm | ASTM D5185m | | 1 | 0 | 3 |
| Boron | ppm | ASTM D5185m | | 46 | 49 | 47 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | | 40 | 44 | 48 |
| Manganese | ppm | ASTM D5185m | | 0 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 491 | 503 | 484 |
| Calcium | ppm | ASTM D5185m | | 1693 | 1777 | 1682 |
| Phosphorus | ppm | ASTM D5185m | | 914 | 1018 | 933 |
| Zinc | ppm | ASTM D5185m | | 1189 | 1125 | 1097 |
| Sulfur | ppm | ASTM D5185m | | 3037 | 3381 | 2963 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 19.6 | 19.8 | 19.8 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 10.1 | 9.9 | 9.2 |
| Visc @ 100°C | cSt | ASTM D445 | | 12.6 | 12.1 | 12.5 |

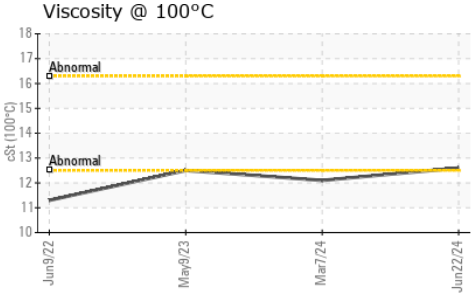
FT-IR (Direct Trend)



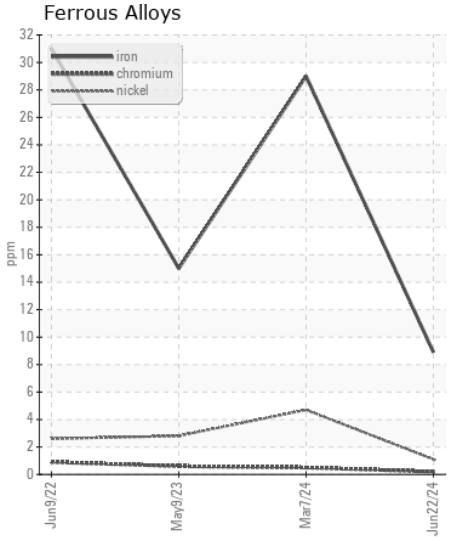

Base Number



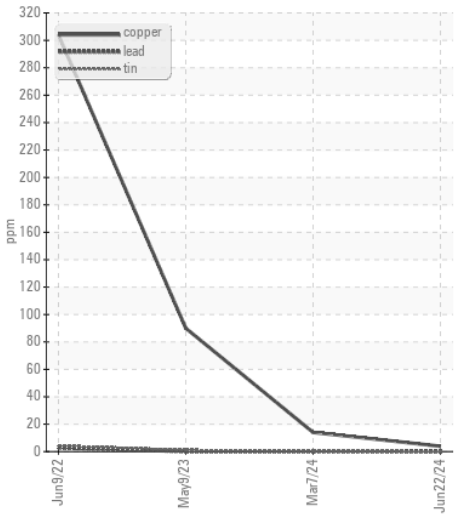

Viscosity @ 100°C



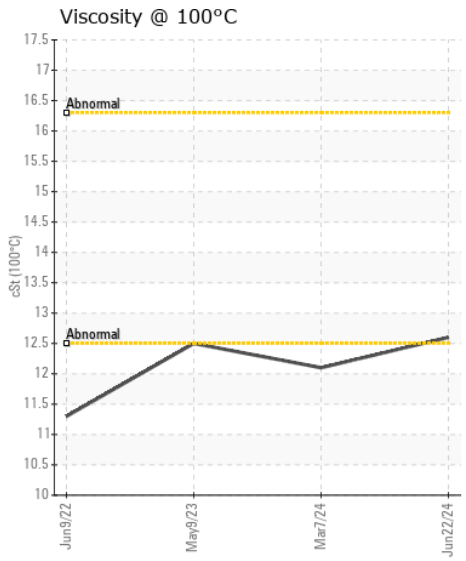

Ferrous Alloys



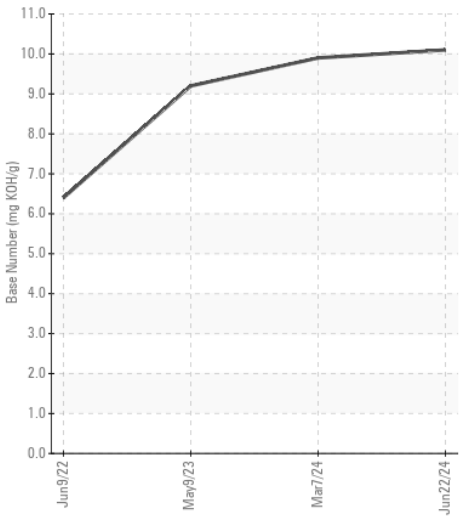

Non-ferrous Metals




Viscosity @ 100°C




Base Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : ASC0009749
**Lab Number** : 06220800
**Unique Number** : 11098997
**Test Package** : CONST ( Additional Tests: TBN )

**Received** : 26 Jun 2024
**Tested** : 26 Jun 2024
**Diagnosed** : 26 Jun 2024 - Wes Davis

*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)*

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