



ASCENDUM

OIL ANALYSIS REPORT

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



Machine Id
VOLVO A40G 353033
Component
Front Axle
Fluid
VOLVO SUPER GEAR OIL 75W-80-GO102 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | ASC0009013 | ASC0002610 | VCP410410 |
| Sample Date | | Client Info | | 03 Jul 2024 | 17 Nov 2023 | 10 Aug 2023 |
| Machine Age | hrs | Client Info | | 4015 | 2964 | 2626 |
| Oil Age | hrs | Client Info | | 4015 | 2964 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Not Changd | Not Changd |
| Filter Changed | | Client Info | | N/A | N/A | Not Changd |
| Sample Status | | | | SEVERE | NORMAL | NORMAL |

WEAR

Gear wear is indicated.

| | | | | | | |
|--------------|--------|-------------|------|---------------|------|------|
| Iron | ppm | ASTM D5185m | >900 | ▲ 2210 | 111 | 188 |
| Chromium | ppm | ASTM D5185m | >20 | ▲ 25 | 1 | 3 |
| Nickel | ppm | ASTM D5185m | >10 | 2 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 7 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >30 | ● 62 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m | >150 | 3 | <1 | <1 |
| Tin | ppm | ASTM D5185m | >20 | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | MODER | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

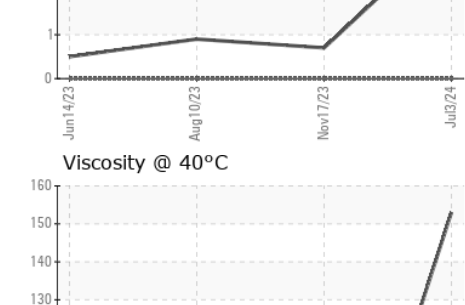
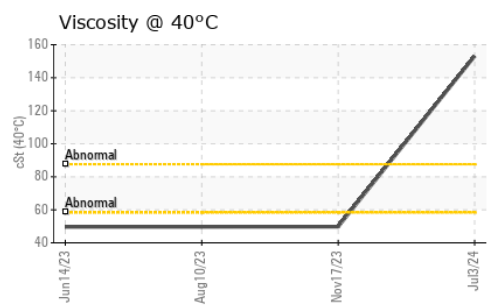
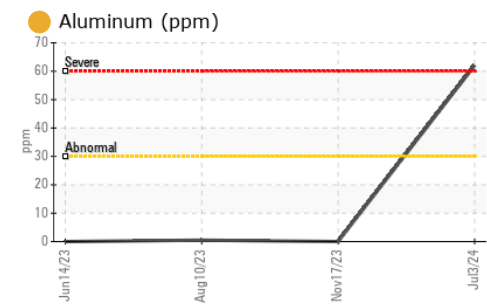
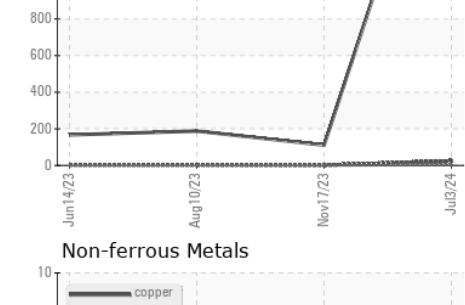
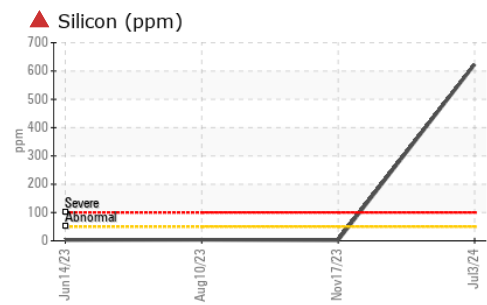
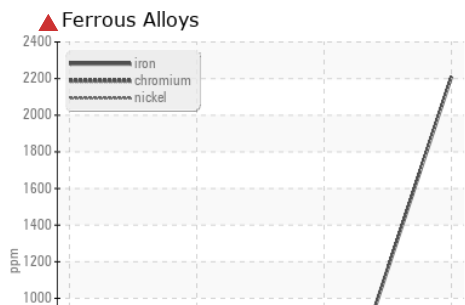
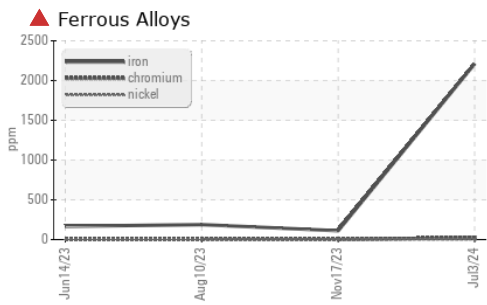
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >50 | ▲ 623 | 2 | 3 |
| Potassium | ppm | ASTM D5185m | >20 | 15 | 1 | 2 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | MODER | LIGHT |
| 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 oil is no longer serviceable due to the presence of contaminants.

| | | | | | | |
|-------------|-----|-------------|--|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 2 | 2 | 0 |
| Boron | ppm | ASTM D5185m | | 106 | 268 | 325 |
| Barium | ppm | ASTM D5185m | | 0 | 0 | 2 |
| Molybdenum | ppm | ASTM D5185m | | 3 | 3 | 5 |
| Manganese | ppm | ASTM D5185m | | 19 | 3 | 5 |
| Magnesium | ppm | ASTM D5185m | | 5 | 0 | 1 |
| Calcium | ppm | ASTM D5185m | | 134 | 30 | 27 |
| Phosphorus | ppm | ASTM D5185m | | 895 | 2366 | 2444 |
| Zinc | ppm | ASTM D5185m | | 29 | 20 | 19 |
| Sulfur | ppm | ASTM D5185m | | 29867 | 28176 | 35406 |
| Visc @ 40°C | cSt | ASTM D445 | | 153 | 49.7 | 49.6 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009013
Lab Number : 06238612
Unique Number : 11127446
Test Package : CONST

117 - ASCENDUM MACHINERY INC - GREENVILLE
 2002 N GREENE ST
 GREENVILLE, NC
 US 27834

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)

Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 18 Jul 2024 - Sean Felton

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