



OIL ANALYSIS REPORT

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

Area
[SPM540957 OMNISOURCE]
 Machine Id
SENNEBOGEN 830M 830.0.2031
 Component
Front Left Final Drive
 Fluid
VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number | | Client Info | | VCP402973 | VCP320753 | VCP290702 |
| Sample Date | | Client Info | | 12 May 2023 | 15 Sep 2021 | 23 Nov 2020 |
| Machine Age | hrs | Client Info | | 7105 | 5198 | 4259 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | Changed | Not Changed | Not Changed |
| Sample Status | | | | NORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|-------|-------|-------|
| Iron | ppm | ASTM D5185m | >500 | 141 | 100 | 147 |
| Chromium | ppm | ASTM D5185m | >10 | 1 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >25 | 0 | <1 | <1 |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 10 | 13 | 25 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | MODER | LIGHT | MODER |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

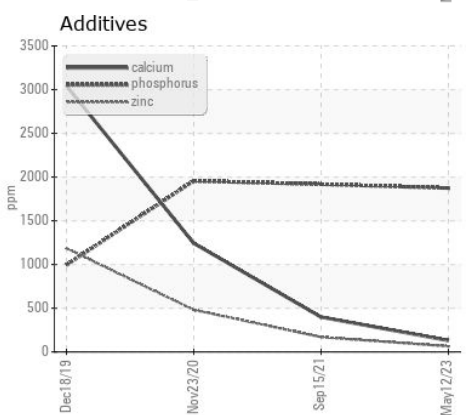
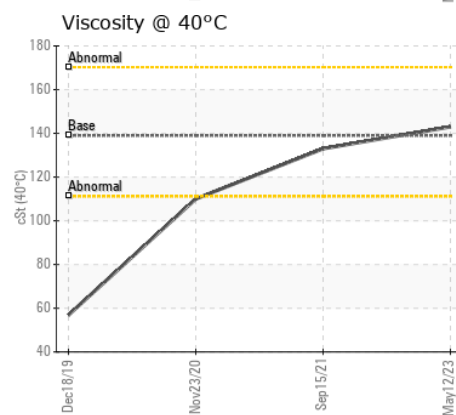
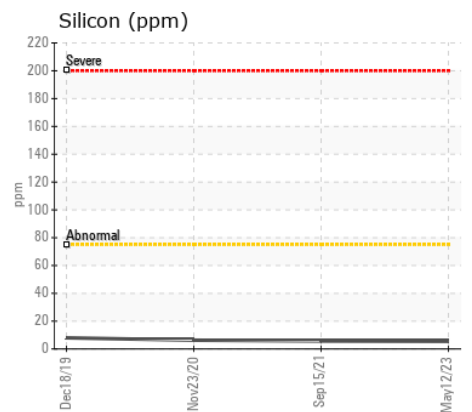
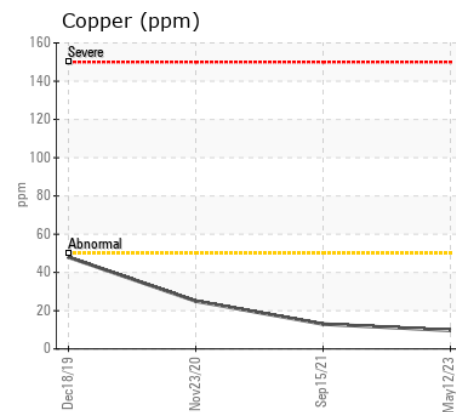
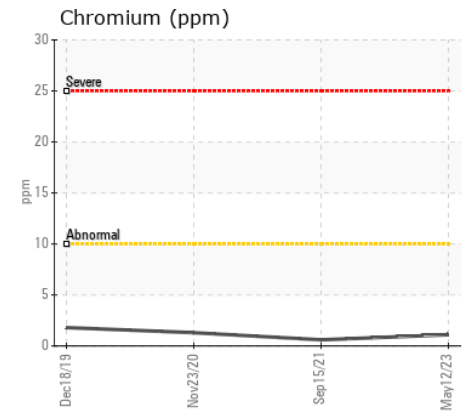
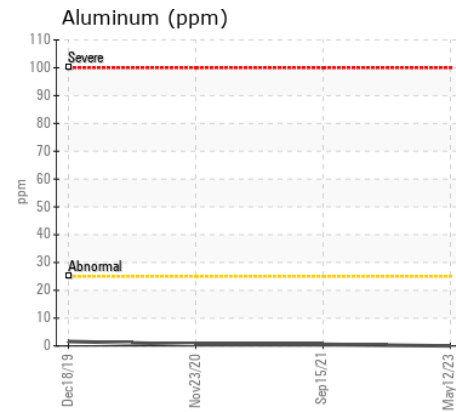
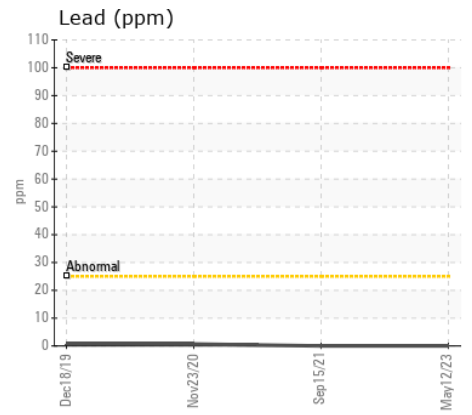
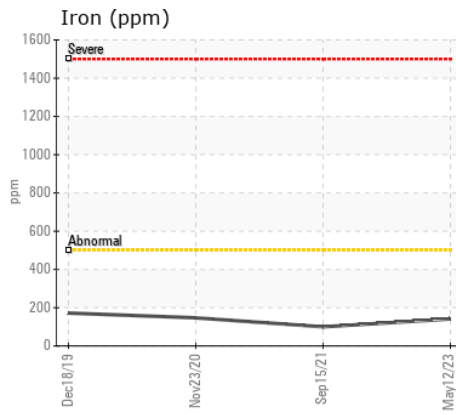
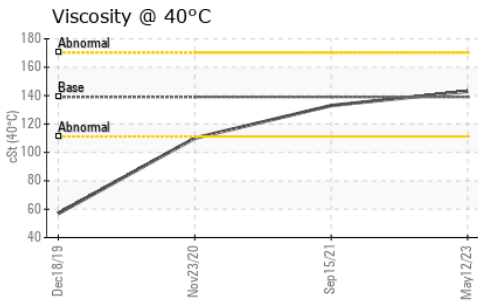
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|-------|-------|-------|
| Silicon | ppm | ASTM D5185m | >75 | 6 | 6 | 6 |
| Potassium | ppm | ASTM D5185m | >20 | 1 | 0 | <1 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| 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 |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|-------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 10 | 8 | 15 |
| Boron | ppm | ASTM D5185m | 379 | 81 | 129 | 131 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.8 | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | 0.0 | 2 | 2 | 2 |
| Magnesium | ppm | ASTM D5185m | 31 | 4 | 2 | 4 |
| Calcium | ppm | ASTM D5185m | 38 | 131 | 399 | 1243 |
| Phosphorus | ppm | ASTM D5185m | 1077 | 1874 | 1918 | 1956 |
| Zinc | ppm | ASTM D5185m | 46 | 64 | 170 | 481 |
| Sulfur | ppm | ASTM D5185m | 23526 | 22013 | 19587 | 17606 |
| Visc @ 40°C | cSt | ASTM D445 | 139 | 143 | 133 | 110 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP402973
Lab Number : 05852134
Unique Number : 10481489
Test Package : MOB 1

Received : 19 May 2023
Tested : 22 May 2023
Diagnosed : 22 May 2023 - Wes Davis

ALTA CONSTRUCTION EQUIPMENT LLC
 G-3283 S. DORT HIGHWAY
 BURTON, MI
 US 48529
 Contact: BURTON SERVICE
 BURTON.SERVICE@ALTAEQUIPMENT.COM

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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