



ASCENDUM

OIL ANALYSIS REPORT

WEAR

NORMAL

CONTAMINATION

ATTENTION

FLUID CONDITION

NORMAL

Area

Ascendum Machinery

Machine Id

VOLVO EC380E EX-02 (S/N 310020)

Component

Swing Drive

Fluid

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

Appearance is milky. There is a light concentration of water present in the oil.

FLUID CONDITION

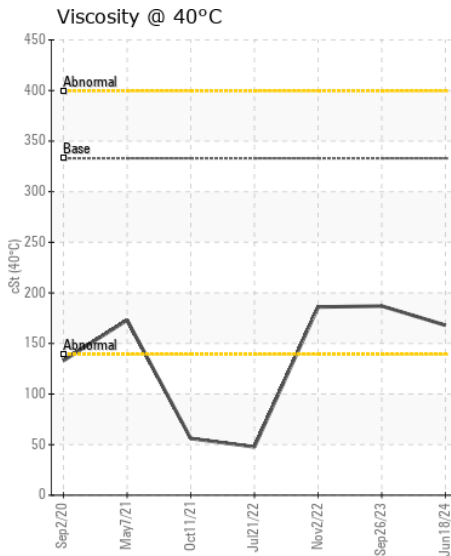
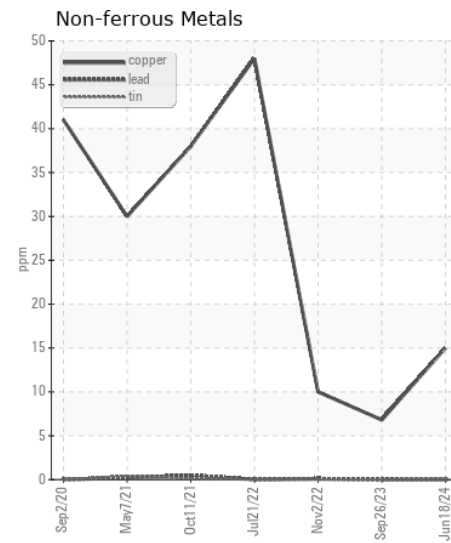
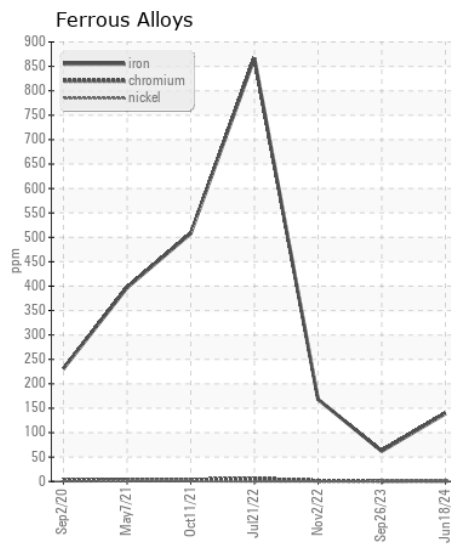
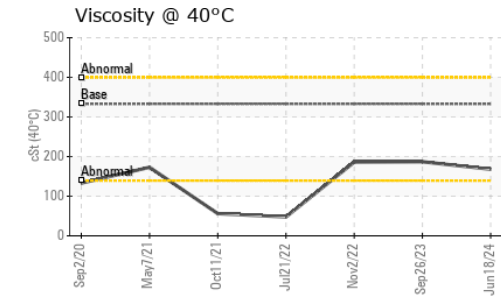
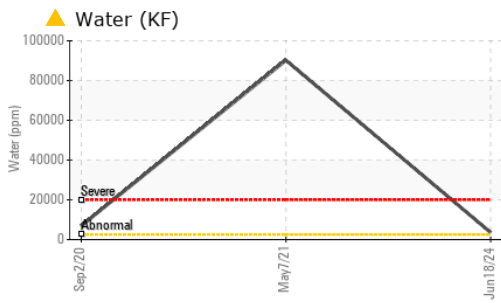
The condition of the oil is acceptable for the time in service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | ASC0009779 | ASC0001416 | VCP0004480 |
| Sample Date | | Client Info | | 18 Jun 2024 | 26 Sep 2023 | 02 Nov 2022 |
| Machine Age | hrs | Client Info | | 11997 | 11014 | 10493 |
| Oil Age | hrs | Client Info | | 983 | 521 | 555 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ATTENTION | NORMAL | NORMAL |

| | | | | | | |
|--------------|--------|-------------|-------|--------------|------|-------|
| Iron | ppm | ASTM D5185m | >1200 | 139 | 62 | 168 |
| Chromium | ppm | ASTM D5185m | >10 | 1 | <1 | 1 |
| Nickel | ppm | ASTM D5185m | >10 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >25 | 3 | 3 | 4 |
| Lead | ppm | ASTM D5185m | >50 | 0 | 0 | <1 |
| Copper | ppm | ASTM D5185m | >50 | 15 | 7 | 10 |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | VLITE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

| | | | | | | |
|------------------|--------|-------------|-------|----------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >100 | 10 | 8 | 14 |
| Potassium | ppm | ASTM D5185m | >20 | 3 | 1 | <1 |
| Water | % | ASTM D6304 | >0.25 | ▲ 0.357 | --- | --- |
| ppm Water | ppm | ASTM D6304 | >2500 | ▲ 3570 | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | LIGHT |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Appearance | scalar | *Visual | NORML | ● MILKY | NORML | NORML |
| Odor | scalar | *Visual | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | *Visual | >0.25 | 0.2% | NEG | NEG |

| | | | | | | |
|-------------|-----|-------------|-------|--------------|-------|-------|
| Sodium | ppm | ASTM D5185m | | 3 | 0 | 2 |
| Boron | ppm | ASTM D5185m | 111 | 127 | 160 | 117 |
| Barium | ppm | ASTM D5185m | 0.0 | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185m | 0.9 | <1 | 2 | 2 |
| Manganese | ppm | ASTM D5185m | 0.0 | 2 | <1 | 2 |
| Magnesium | ppm | ASTM D5185m | 39 | 9 | 10 | 11 |
| Calcium | ppm | ASTM D5185m | 93 | 252 | 210 | 121 |
| Phosphorus | ppm | ASTM D5185m | 920 | 983 | 922 | 1073 |
| Zinc | ppm | ASTM D5185m | 104 | 218 | 168 | 122 |
| Sulfur | ppm | ASTM D5185m | 20179 | 27656 | 25700 | 29466 |
| Visc @ 40°C | cSt | ASTM D445 | 333 | 168 | 187 | 186 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009779 **Received** : 21 Jun 2024
Lab Number : 06217184 **Tested** : 24 Jun 2024
Unique Number : 11090048 **Diagnosed** : 24 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

CAROLINA EXCAVATING
 1036 BRANCHVIEW DR, SUITE 106
 CONCORD, NC
 US 28025
 Contact: KEVIN LADGERWOOD
 kevin@carlinaexcavation.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)

T:
F: