



ASCENDUM

OIL ANALYSIS REPORT

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

Area

Ascendum Machinery/250 Hour CSA

Machine Id

HITACHI ZX650LC-3 1767 (S/N 20066)

Component

Right Travel

Fluid

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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|----------|----------|
| Sample Number | | Client Info | | ASC0001754 | --- | --- |
| Sample Date | | Client Info | | 08 Jan 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 12252 | --- | --- |
| Oil Age | hrs | Client Info | | 12252 | --- | --- |
| Filter Age | hrs | Client Info | | 0 | --- | --- |
| Oil Changed | | Client Info | | Not Changd | --- | --- |
| Filter Changed | | Client Info | | None | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

WEAR

Gear wear is indicated.

| | | | | | | |
|--------------|--------|-------------|------|-------|-----|-----|
| Iron | ppm | ASTM D5185m | >500 | ▲ 729 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | 3 | --- | --- |
| Nickel | ppm | ASTM D5185m | >5 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185m | | 1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >100 | 8 | --- | --- |
| Lead | ppm | ASTM D5185m | >10 | 3 | --- | --- |
| Copper | ppm | ASTM D5185m | >60 | 1 | --- | --- |
| Tin | ppm | ASTM D5185m | >5 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| White Metal | scalar | *Visual | NONE | MODER | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |

CONTAMINATION

There is no indication of any contamination in the oil.

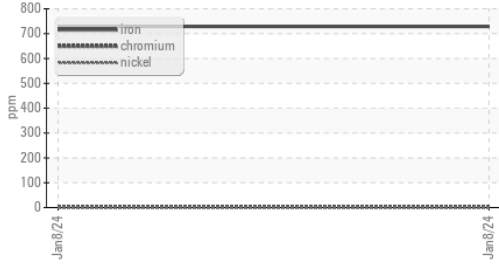
| | | | | | | |
|------------------|--------|-------------|-------|-------|-----|-----|
| Silicon | ppm | ASTM D5185m | >150 | 40 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 8 | --- | --- |
| Water | | WC Method | >0.2 | NEG | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | --- | --- |

FLUID CONDITION

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

| | | | | | | |
|-------------|-----|-------------|-------|-------|-----|-----|
| Sodium | ppm | ASTM D5185m | | 0 | --- | --- |
| Boron | ppm | ASTM D5185m | 111 | 11 | --- | --- |
| Barium | ppm | ASTM D5185m | 0.0 | 7 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 0.9 | <1 | --- | --- |
| Manganese | ppm | ASTM D5185m | 0.0 | 8 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 39 | 2 | --- | --- |
| Calcium | ppm | ASTM D5185m | 93 | 31 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 920 | 462 | --- | --- |
| Zinc | ppm | ASTM D5185m | 104 | 33 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 20179 | 16165 | --- | --- |
| Visc @ 40°C | cSt | ASTM D445 | 333 | 167 | --- | --- |

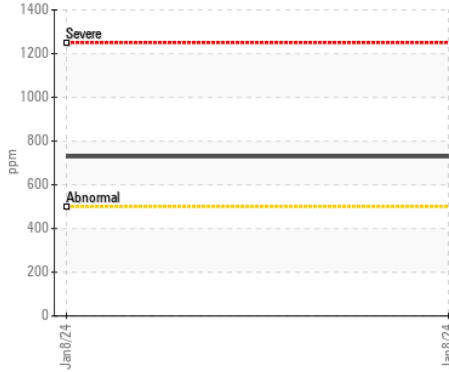
▲ Ferrous Alloys



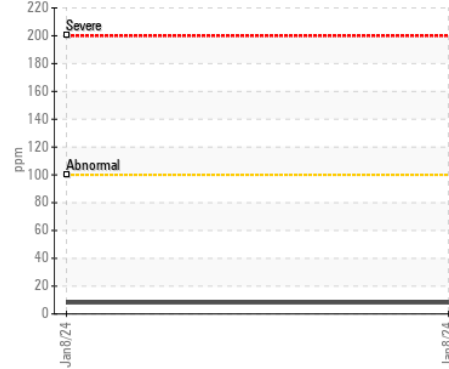
Viscosity @ 40°C



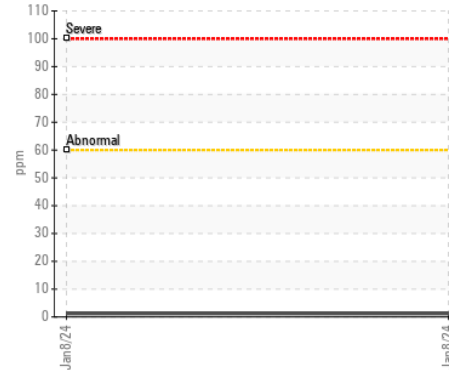
▲ Iron (ppm)



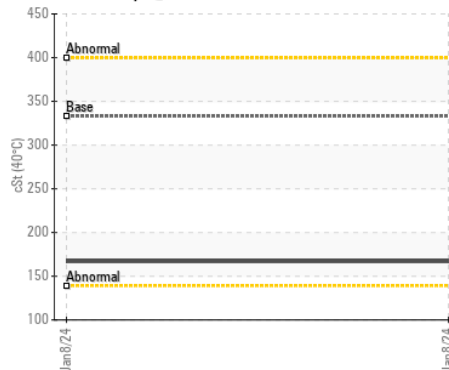
Aluminum (ppm)



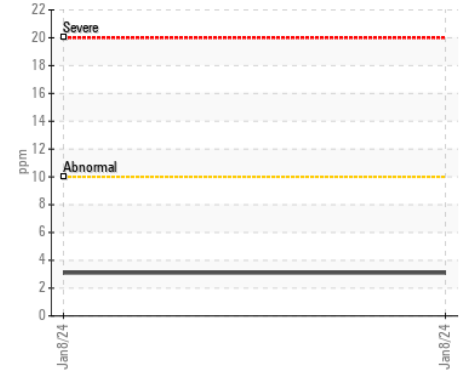
Copper (ppm)



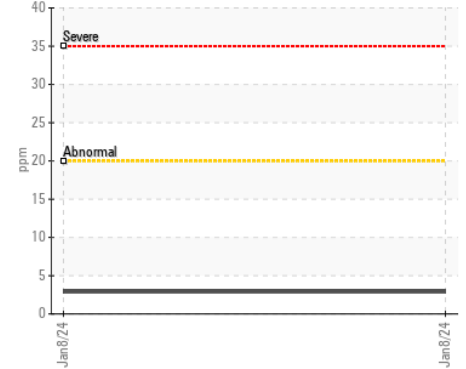
Viscosity @ 40°C



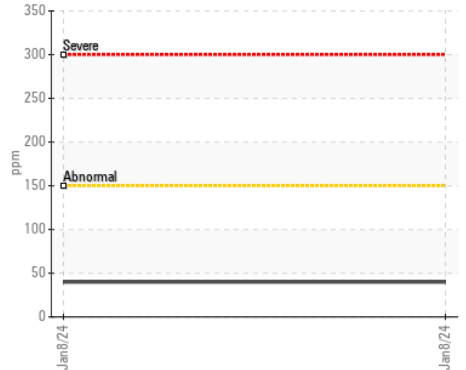
Lead (ppm)



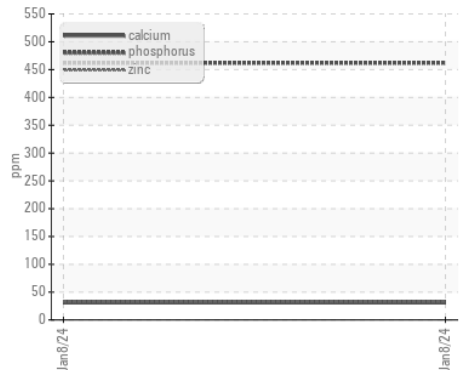
Chromium (ppm)



Silicon (ppm)



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001754 **Received** : 12 Jan 2024
Lab Number : 06059635 **Diagnosed** : 16 Jan 2024
Unique Number : 10831017 **Diagnostician** : Jonathan Hester
Test Package : MOBCE

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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)