



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

Machine Id
HITACHI ZX210LC E-26 (S/N 1FFDCJ70CFE330715)

Component
Left Final Drive

Fluid
GEAR OIL SAE 80W90 (--- 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. Resample at the next service interval to monitor.

WEAR

The iron level has decreased, but is still abnormal. Gear wear is indicated.

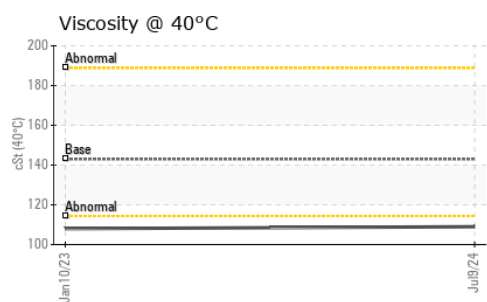
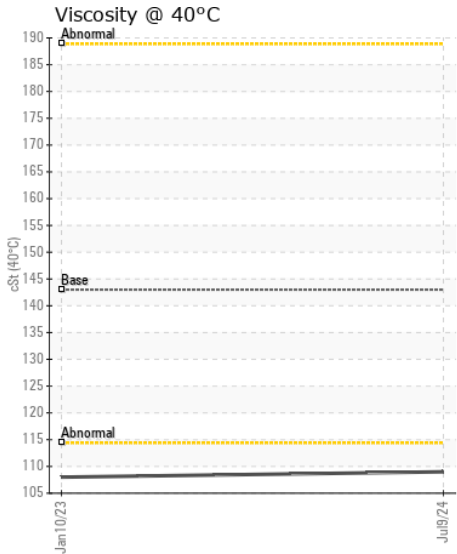
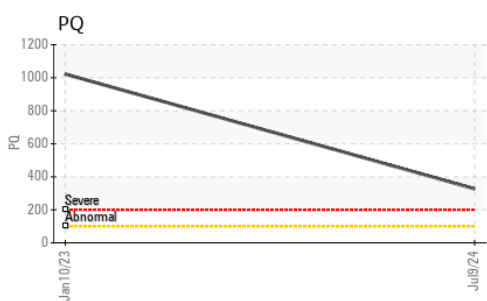
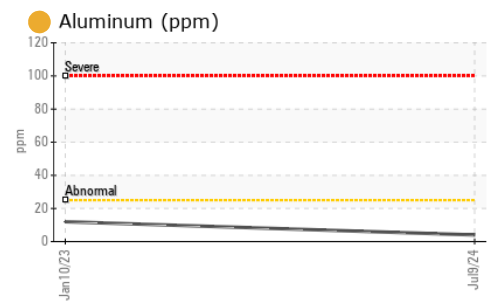
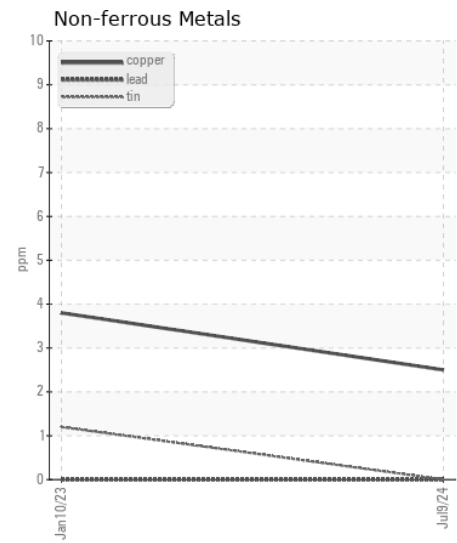
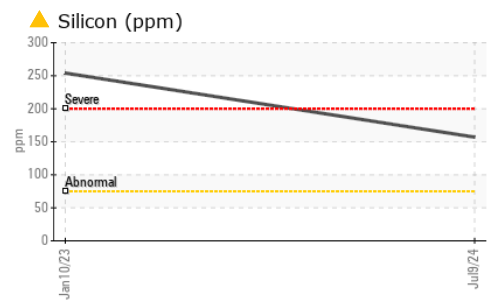
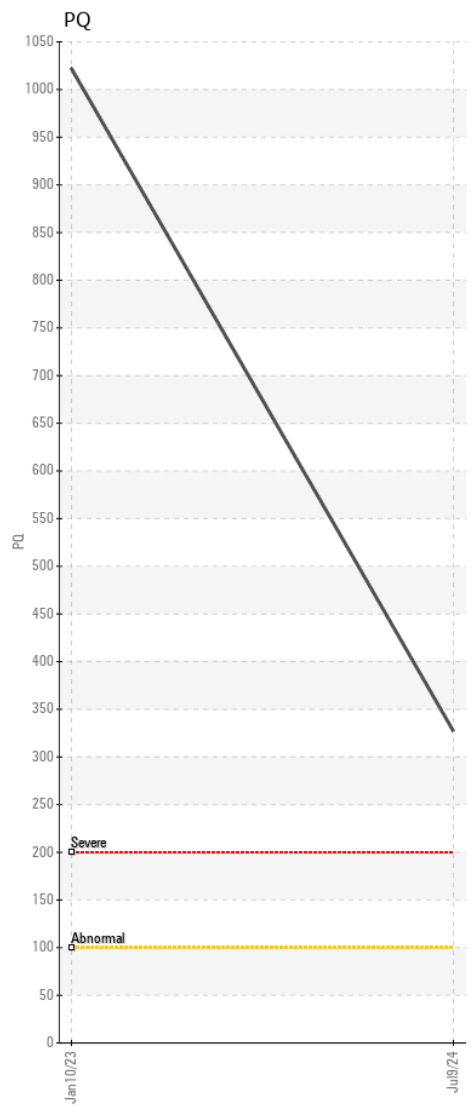
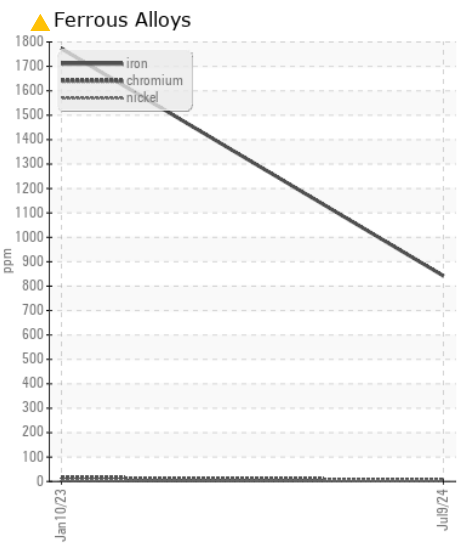
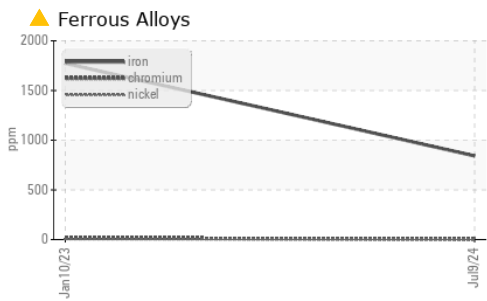
CONTAMINATION

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

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 | | JR06233460 | JR0121720 | --- |
| Sample Date | | Client Info | | 09 Jul 2024 | 10 Jan 2023 | --- |
| Machine Age | hrs | Client Info | | 8247 | 7129 | --- |
| Oil Age | hrs | Client Info | | 1118 | 820 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | N/A | N/A | --- |
| Sample Status | | | | ABNORMAL | ABNORMAL | --- |
| PQ | | ASTM D8184 | | 327 | 1022 | --- |
| Iron | ppm | ASTM D5185m | >500 | ▲ 842 | ▲ 1773 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 5 | ▲ 15 | --- |
| Nickel | ppm | ASTM D5185m | >10 | 2 | 5 | --- |
| Titanium | ppm | ASTM D5185m | | 1 | 2 | --- |
| Silver | ppm | ASTM D5185m | | <1 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | ● 4 | ● 12 | --- |
| Lead | ppm | ASTM D5185m | >25 | 0 | 0 | --- |
| Copper | ppm | ASTM D5185m | >50 | 2 | 4 | --- |
| Tin | ppm | ASTM D5185m | >10 | 0 | 1 | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | <1 | --- |
| White Metal | scalar | *Visual | NONE | NONE | MODER | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Silicon | ppm | ASTM D5185m | >75 | ▲ 157 | 254 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 4 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Silt | scalar | *Visual | NONE | NONE | NONE | --- |
| Debris | scalar | *Visual | NONE | NONE | NONE | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | NONE | --- |
| Appearance | scalar | *Visual | NORML | NORML | NORML | --- |
| Odor | scalar | *Visual | NORML | NORML | NORML | --- |
| Emulsified Water | scalar | *Visual | >0.2 | NEG | 0.2% | --- |
| Sodium | ppm | ASTM D5185m | >170 | 0 | 2 | --- |
| Boron | ppm | ASTM D5185m | 400 | 6 | 16 | --- |
| Barium | ppm | ASTM D5185m | 200 | 0 | <1 | --- |
| Molybdenum | ppm | ASTM D5185m | 12 | <1 | 1 | --- |
| Manganese | ppm | ASTM D5185m | | 6 | 14 | --- |
| Magnesium | ppm | ASTM D5185m | 12 | 5 | 1 | --- |
| Calcium | ppm | ASTM D5185m | 150 | 110 | 14 | --- |
| Phosphorus | ppm | ASTM D5185m | 1650 | 471 | 571 | --- |
| Zinc | ppm | ASTM D5185m | 125 | 32 | 16 | --- |
| Sulfur | ppm | ASTM D5185m | 22500 | 17750 | 14728 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 109 | 108 | --- |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR06233460 **Received** : 11 Jul 2024
Lab Number : 06233460 **Tested** : 12 Jul 2024
Unique Number : 11116953 **Diagnosed** : 13 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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Certificate L2367
 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)