

[MAYBERRY ST TERMINAL] HITACHI ZX345 HCMDD560A00010287

Swing Drive Gear Case

JOHN DEERE GL-5 80W90 (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|------------------|------------|-------------|-----------|-------------|-------------|-------------|
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | JR0225311 | JR0169046 | JR0122006 |
| | Sample Date | | Client Info | | 24 Jun 2024 | 12 Apr 2023 | 31 Jan 2023 |
| | Machine Age | hrs | Client Info | | 2027 | 1430 | 1276 |
| | Oil Age | hrs | Client Info | | 0 | 154 | 0 |
| | Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| | Oil Changed | | Client Info | | Changed | Not Changd | Changed |
| | Filter Changed | | Client Info | | Not Changd | N/A | Changed |
| | Sample Status | | | | NORMAL | NORMAL | ATTENTION |
| WEAR | PQ | | ASTM D8184 | | 29 | 12 | 31 |
| All component wear rates are normal. | Iron | ppm | ASTM D5185m | >200 | 99 | 2 | 20 |
| | Chromium | ppm | ASTM D5185m | >10 | 1 | 0 | <1 |
| | Nickel | ppm | ASTM D5185m | >10 | <1 | 0 | 0 |
| | Titanium | ppm | ASTM D5185m | | <1 | 0 | 0 |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Aluminum | ppm | ASTM D5185m | | 2 | 0 | <1 |
| | Lead | ppm | ASTM D5185m | | <1 | 0 | 0 |
| | Copper | ppm | ASTM D5185m | | <1 | <1 | 6 |
| | Tin | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| CONTAMINATION There is no indication of any contamination in the oil. | Silicon | | ASTM D5185m | | 9 | <1 | 16 |
| | Potassium | ppm ppm | ASTM D5185m | >20 | 2 | 0 | 8 |
| | Water | ppm | | >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 | | *Visual | >0.2 | NEG | NEG | NEG |
| | | | | | | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | 0 | 0 | 2 |
| The condition of the oil is acceptable for the time in service. | Boron | ppm | ASTM D5185m | | 23 | 41 | 337 |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| | Molybdenum | ppm | ASTM D5185m | | <1 | <1 | 0 |
| | Manganese | ppm | ASTM D5185m | | 2 | <1 | 4 |
| | Magnesium | ppm | ASTM D5185m | | 3 | 4 | 71 |
| | Calcium | ppm | ASTM D5185m | | 8 | 14 | 11 |
| | Phosphorus | ppm | ASTM D5185m | | 508 | 489 | 1288 |
| | Zinc | ppm | ASTM D5185m | | 16 | 7 | 6 |
| | Sulfur | ppm | ASTM D5185m | | 17685 | 22540 | 25974 |
| | N# 0 ···· | | | | | 105 | |

Visc @ 40°C

cSt

ASTM D445

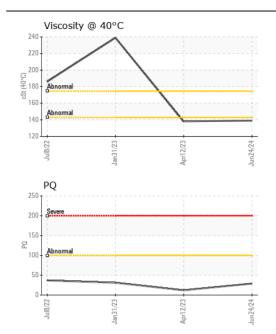
Submitted By: TECHNICIAN ACCOUNT

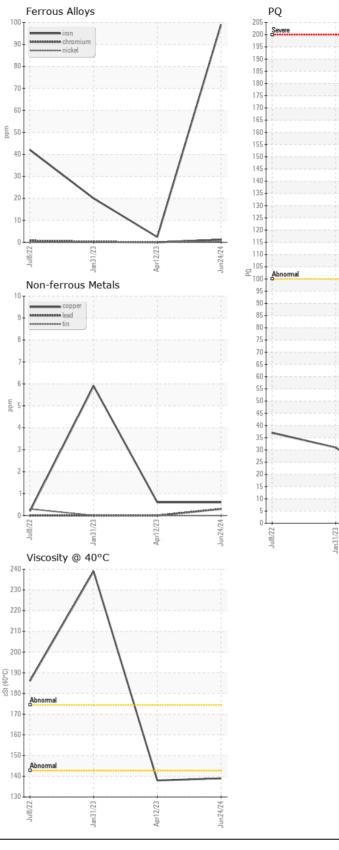
138

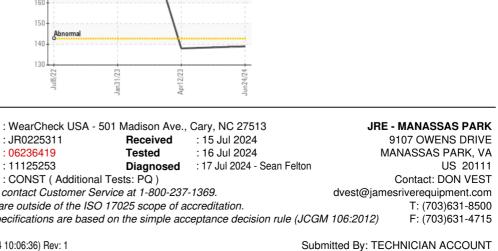
139

239

WEAR NORMAL CONTAMINATION NORMAL **FLUID CONDITION** NORMAL









Diagnosed Unique Number : 11125253 : 17 Jul 2024 - Sean Felton Test Package : CONST (Additional Tests: PQ) 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

Tested

Laboratory

Sample No.

Lab Number : 06236419

: JR0225311

Page 2 of 2

Apr12/23

Jun24/24