

.

46.8 ----

164

0.08

134

0.14

46.5

ppm ASTM D5185m 13

Acid Number (AN) mg KOH/g ASTM D8045 0.06

Visc @ 40°C cSt ASTM D445 47

Sulfur

History2

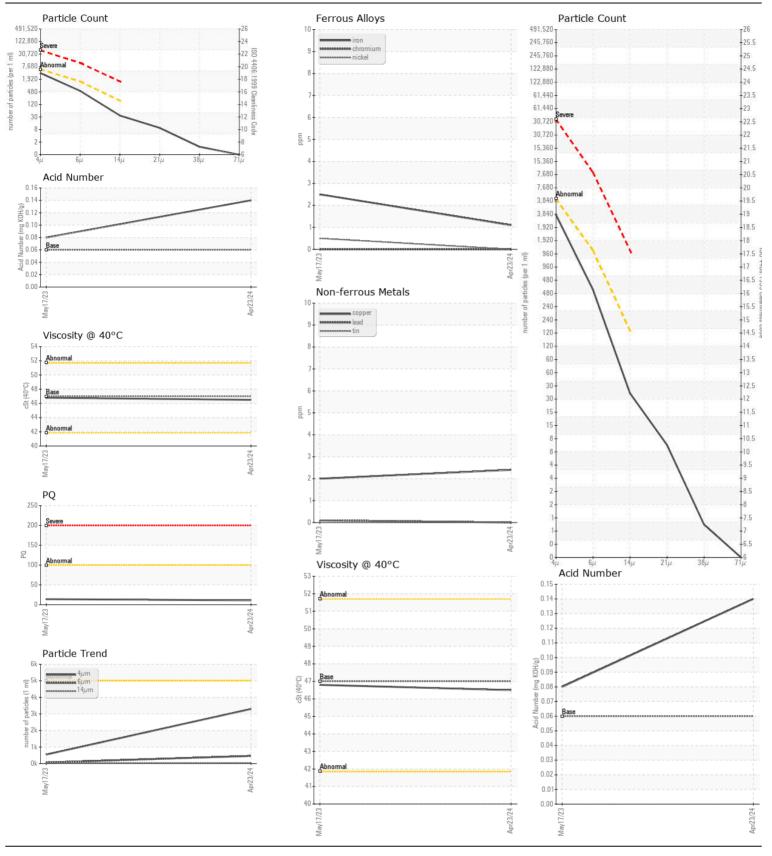
[W66478]

HITACHI 1FFDC571LNF341038

Hydraulic System

HITACHI HYDRAULIC SUPER EX 46HN (--- GAL)

| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History |
|---|------------------|--------|-------------------|------------|-------------|-----------|---------|
| Resample at the next service interval to monitor. | Sample Number | UOIVI | Client Info | LIIIIUAUII | JR0205846 | JR0139336 | |
| | Sample Date | | Client Info | | 23 Apr 2024 | | |
| | Machine Age | hrs | Client Info | | 892 | 444 | |
| | Oil Age | hrs | Client Info | | 892 | 444 | |
| | Filter Age | hrs | Client Info | | 892 | 444 | |
| | Oil Changed | 1110 | Client Info | | Not Changd | N/A | |
| | Filter Changed | | Client Info | | Changed | N/A | |
| | Sample Status | | | | NORMAL | NORMAL | |
| WEAR | PQ | | ASTM D8184 | | 11 | 14 | |
| All component wear rates are normal. | Iron | ppm | ASTM D5185m | >20 | 1 | 2 | |
| | Chromium | ppm | ASTM D5185m | | 0 | 0 | |
| | Nickel | ppm | ASTM D5185m | | 0 | <1 | |
| | Titanium | ppm | ASTM D5185m | 210 | 0 | 0 | |
| | Silver | ppm | ASTM D5185m | | 0 | 0 | |
| | Aluminum | ppm | ASTM D5185m | >10 | 0 | 0 | |
| | Lead | ppm | ASTM D5185m | | 0 | <1 | |
| | Copper | ppm | ASTM D5185m | | 2 | 2 | |
| | Tin | ppm | ASTM D5185m | | 0 | <1 | |
| | Vanadium | ppm | ASTM D5185m | | 0 | 0 | |
| | White Metal | scalar | *Visual | NONE | NONE | NONE | |
| | Yellow Metal | scalar | *Visual | NONE | NONE | NONE | |
| CONTAMINATION | Silicon | ppm | ASTM D5185m | >20 | 1 | 1 | |
| | Potassium | ppm | ASTM D5185m | >20 | 0 | <1 | |
| There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. | Water | | WC Method | | NEG | NEG | |
| | Particles >4µm | | ASTM D7647 | | 3300 | 547 | |
| | Particles >6µm | | ASTM D7647 | | 465 | 69 | |
| | Particles >14µm | | ASTM D7647 | >160 | 31 | 17 | |
| | Particles >21µm | | ASTM D7647 | | 8 | 6 | |
| | Particles >38µm | | ASTM D7647 | >10 | 1 | 0 | |
| | Particles >71µm | | ASTM D7647 | >3 | 0 | 0 | |
| | Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | 19/16/12 | 16/13/11 | |
| | 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 | >0.1 | NEG | NEG | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185m | | <1 | 0 | |
| The AN level is acceptable for this fluid. The condition of the oil is suitable for further service. | Boron | ppm | ASTM D5185m | | 0 | 0 | |
| | Barium | ppm | ASTM D5185m | | 0 | 0 | |
| | Molybdenum | ppm | ASTM D5185m | | 0 | <1 | |
| | Manganese | ppm | ASTM D5185m | | 0 | 0 | |
| | Magnesium | ppm | ASTM D5185m | | 0 | <1 | |
| | Calcium | ppm | ASTM D5185m | | 0 | 2 | |
| | Phosphorus | ppm | ASTM D5185m | 827 | 455 | 520 | |
| | Zinc | ppm | ASTM D5185m | 0 | 22 | 29 | |
| | 0.11 | | A OTH A D D C C C | 10 | | 1 | |



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **JRE - CHARLOTTE** Sample No. : JR0205846 9550 STATESVILLE ROAD Received : 26 Apr 2024 Lab Number : 06161364 Tested : 29 Apr 2024 CHARLOTTE, NC : 30 Apr 2024 - Don Baldridge Unique Number : 10996787 Diagnosed US 28269 Test Package : CONST (Additional Tests: PQ) Contact: CHARLOTTE SHOP Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. myoung@jamesriverequipment.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (704)597-0211 F: (704)596-6198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: RALEIGH SHOP Page 2 of 2