**CONSTRUCTION EQUIPMENT** 

SW-30086 SEG 1 RANGO VOLVO R100E 121020 - HYDRAULIC SY

VCP422760 Sample No: **Oil Type:** {unknown} Job No: SW-30086 SEG 1 RANGO

TOTATO

| VOLVO             |           |               |      |   |
|-------------------|-----------|---------------|------|---|
|                   | FORMATION |               |      |   |
| Sample Number     |           | VCP422760     | <br> |   |
| Sample Date       |           | 20 Feb 2024   | <br> |   |
| Machine Hours     |           | 4057          | <br> |   |
| Oil Hours         |           | 0             | <br> |   |
| Oil Changed       |           | Not Changd    | <br> |   |
| Sample Status     |           | SEVERE        | <br> |   |
|                   |           |               |      |   |
| VOLVO             |           |               |      |   |
| OIL CONDI         |           |               |      |   |
| Visc @ 40°C       | cSt       | <b>43.6</b>   | <br> |   |
| Acid Number (AN)  | mg KOH/g  | 0.54          | <br> |   |
|                   |           |               |      |   |
| CONTAMIN          |           |               |      |   |
|                   |           |               |      | - |
| Water             | %         | NEG           | <br> |   |
| Particles >4µm    |           | <b>65472</b>  | <br> |   |
| Particles >6µm    |           | <b>A</b> 8777 | <br> |   |
| Particles >14µm   |           | <b>A</b> 348  | <br> |   |
| ISO 4406:1999 (c) |           | 23/20/16      | <br> |   |
| Silicon           | ppm       | <b>4</b> 2    | <br> |   |
| Sodium            | ppm       | 0             | <br> |   |
| Potassium         | ppm       | 0             | <br> |   |
|                   |           |               |      |   |

VEAD METALS

| WEAR M     | ICIALS |              |      |  |
|------------|--------|--------------|------|--|
| Iron       | ppm    | 8            | <br> |  |
| Copper     | ppm    | <b>A</b> 358 | <br> |  |
| Lead       | ppm    | □ <1         | <br> |  |
| Tin        | ppm    | 0            | <br> |  |
| Aluminum   | ppm    | 5            | <br> |  |
| Chromium   | ppm    |              | <br> |  |
| Molybdenum | ppm    | 0            | <br> |  |
| Nickel     | ppm    | 8            | <br> |  |
| Titanium   | ppm    | <1           | <br> |  |
| Silver     | ppm    | 0            | <br> |  |
| Manganese  | ppm    | <1           | <br> |  |
| Vanadium   | ppm    | 0            | <br> |  |

| Calcium    | ppm | 1818 |  |  |  |  |
|------------|-----|------|--|--|--|--|
| Magnesium  | ppm | 9    |  |  |  |  |
| Zinc       | ppm | 648  |  |  |  |  |
| Phosphorus | ppm | 581  |  |  |  |  |
| Barium     | ppm | 0    |  |  |  |  |
| Boron      | ppm | 0    |  |  |  |  |



2975 WEST 2100 SOUTH SALT LAKE CITY, UT US 84119 Contact: TJ LARK tlark@arnoldmachinery.com T: (801)972-4000 F: (801)975-9434

## Diagnosis

We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The copper level is severe. There is a high amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: VOLV08770 Unique No: 10899787 Signed: Jonathan Hester Report Date: 29 Feb 2024

Contact/Location: TJ LARK - VOLVO8770

## **CONSTRUCTION EQUIPMENT**



GRAPHS

VOLVO

## Ferrous Alloys Particle Count 10 <del>-</del> 491,520 -26 iron 9 chromium 245,760 -25 nickel 8 122,880 -24 61,440 -23 ß mda E, 30,720 -22 15,360 -21 2 7,680 -20 Abnormal 3,840 -19 0. ...... 1,920 -18 🛛 Feb20/24 umber of particles (per 1 ml) Feb20/24 4406:1999 Cleanlines 960 17 Non-ferrous Metals 480 16 400 15 copper 240 M lead 350 14 00 120 300 -13 60. 250 30 -12 튭 200 15 11 150 8 10 100 4 9 50 2 -8 0 Feb20/24 Feb20/24 0, 21µ 14µ 38µ Viscosity @ 40°C Acid Number 52 0.55 Abnormal 0.50 50 0.45 48 (<sup>B</sup>/HOX 0.35 (0°0) tso 44 Ē 0.30 Vin Number Vicio Acid 42 0.10 40. Abnormal 0.05 0.00 38 Feb20/24. Feb20/24 Feb20/24 Feb20/24

Report Id: VOLVO8770 [WUSCAR] 06101557 (Generated: 02/29/2024 10:45:13) Rev: 1

Contact/Location: TJ LARK - VOLVO8770