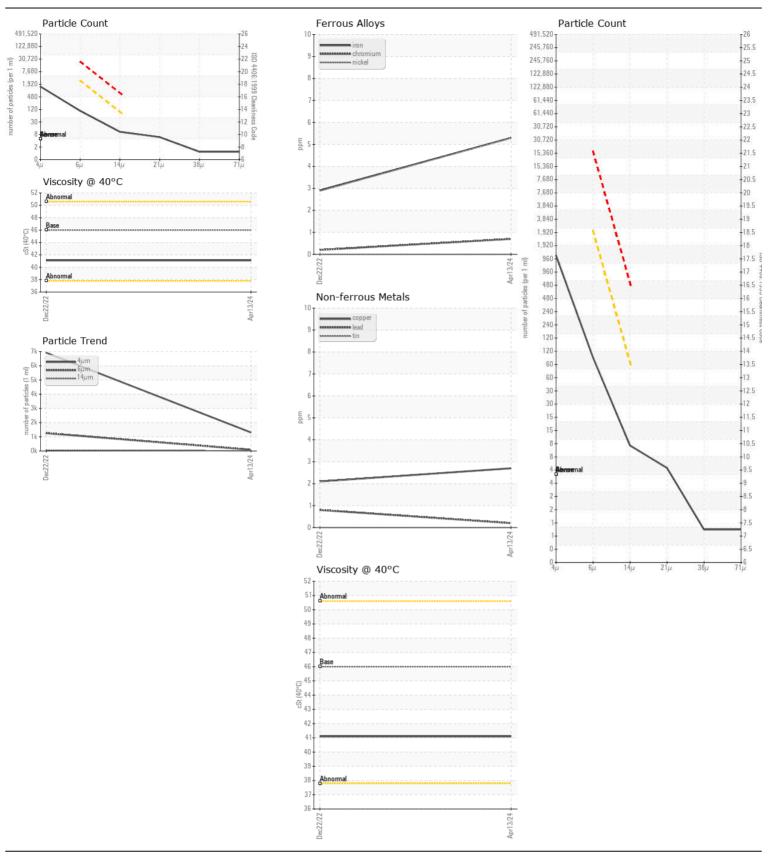


[399876] 622667

Hydraulic System

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

| | | | | | () | | |
|---|------------------|------------|--------------------------------|-------------|-------------|-------------|----------|
| RECOMMENDATION | Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
| Resample at the next service interval to monitor. | Sample Number | | Client Info | | VCP450208 | VCP352911 | |
| | Sample Date | | Client Info | | 13 Apr 2024 | 22 Dec 2022 | |
| | Machine Age | hrs | Client Info | | 3000 | 1053 | |
| | Oil Age | hrs | Client Info | | 3000 | 1000 | |
| | Filter Age | hrs | Client Info | | 0 | 0 | |
| | Oil Changed | | Client Info | | Not Changd | Not Changd | |
| | Filter Changed | | Client Info | | Not Changd | Not Changd | |
| | Sample Status | | | | NORMAL | NORMAL | |
| WEAR | Iron | ppm | ASTM D5185(m) | <u>∖</u> 50 | 5 | 3 | |
| All component wear rates are normal. | Chromium | ppm | ASTM D5185(m) | | <1 | <1 | |
| | Nickel | ppm | ASTM D5185(m) | >10 | 0 | 0 | |
| | Titanium | ppm | ASTM D5185(m) | 210 | 0 | 0 | |
| | Silver | ppm | ASTM D5185(m) | | 0 | 0 | |
| | Aluminum | | ASTM D5185(m) | > 20 | ۰ <1 | <1 | |
| | Lead | ppm | ASTM D5185(m) ASTM D5185(m) | >20 >20 | <1 <1 | <1 | |
| | Copper | ppm | ASTM D5185(m) | | 3 | 2 | |
| | Tin | ppm | ASTM D5185(m) ASTM D5185(m) | | 0 | 2 | |
| | Vanadium | ppm ppm | ASTM D5185(m) | 220 | 0 | 0 | |
| | White Metal | scalar | Visual* | NONE | NONE | NONE | |
| | Yellow Metal | | Visual* | NONE | NONE | NONE | |
| | | scalar | visual | NONE | | NONE | |
| CONTAMINATION | Silicon | ppm | ASTM D5185(m) | >20 | 3 | 3 | |
| The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. | Potassium | ppm | ASTM D5185(m) | >20 | <1 | <1 | |
| | Water | | WC Method | >0.1 | NEG | NEG | |
| | Particles >4µm | | ASTM D7647 | | 1304 | 6919 | |
| | Particles >6µm | | ASTM D7647 | >2500 | 90 | 1257 | |
| | Particles >14µm | | ASTM D7647 | | 9 | 62 | |
| | Particles >21µm | | ASTM D7647 | | 5 | 7 | |
| | Particles >38µm | | ASTM D7647 | >4 | 1 | 0 | |
| | Particles >71µm | | ASTM D7647 | >3 | 1 | 0 | |
| | Oil Cleanliness | | ISO 4406 (c) | >/18/13 | 18/14/10 | 20/17/13 | |
| | 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 | | Visual* | >0.1 | NEG | NEG | |
| | | | | | | | |
| FLUID CONDITION | Sodium | ppm | ASTM D5185(m) | | <1 | <1 | |
| The condition of the oil is acceptable for the time in service. | Boron | ppm | ASTM D5185(m) | 14 | <1 | <1 | |
| | Barium | ppm | ASTM D5185(m) | 0.0 | 0 | 0 | |
| | Molybdenum | ppm | ASTM D5185(m) | 0.0 | 0 | <1 | |
| | Manganese | ppm | ASTM D5185(m) | 0.0 | <1 | <1 | |
| | Magnesium | ppm | ASTM D5185(m) | 2.6 | 4 | 4 | |
| | Calcium | ppm | ASTM D5185(m) | 49 | 63 | 61 | |
| | Phosphorus | ppm | ASTM D5185(m) | 354 | 333 | 366 | |
| | Zinc | ppm | ASTM D5185(m) | 419 | 430 | 426 | |
| | Sulfur | ppm | ASTM D5185(m) | 3719 | 2058 | 2233 | |
| | | | | | | | |



CRH CANADA GROUP INC. Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. Received P.O. BOX 5400 : VCP450208 : 17 Apr 2024 Ø CONCORD, ON Lab Number : 02629664 Tested : 18 Apr 2024 ISO 17025:2017 Accredited Laboratory : 18 Apr 2024 - Wes Davis CA L4K 1B6 Unique Number : 5762796 Diagnosed Test Package : MOB 1 (Additional Tests: PrtCount) Contact: Dan Brown To discuss this sample report, contact Customer Service at 1-800-268-2131. dan.brown@ca.crh.com T: Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F: Validity of results and interpretation are based on the sample and information as supplied.