WEAR CONTAMINATION FLUID CONDITION

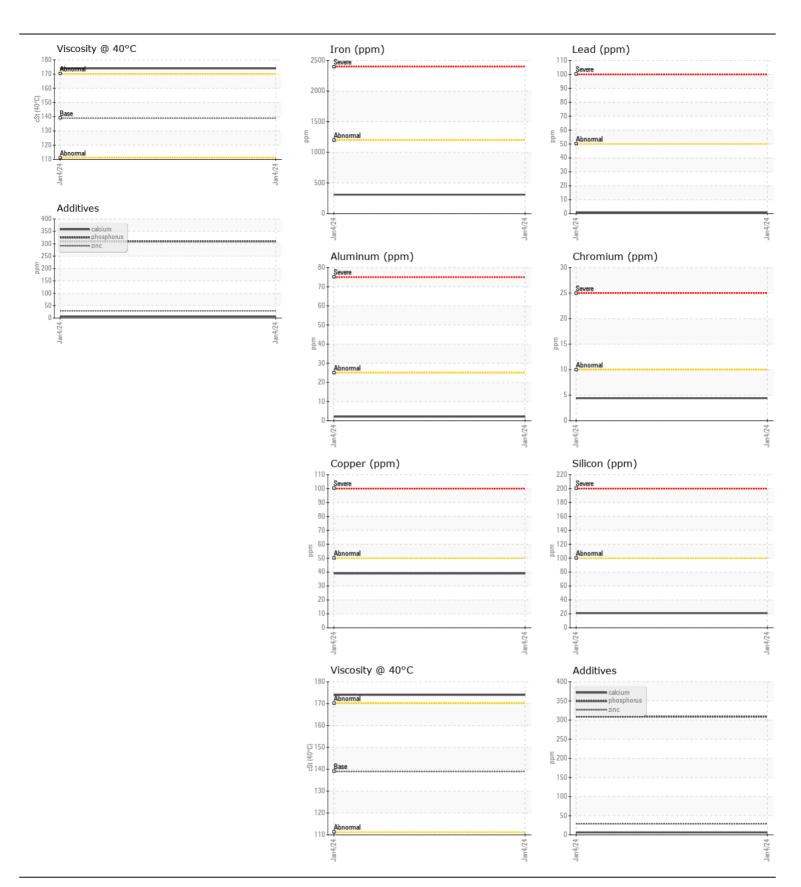
NORMAL NORMAL



[8000389977]
Machine Id
VOLVO EC220EL 315112

Swing Drive

| VOLVO PREMIUM GEAR OIL 8  | 0W-90 GL-5       | ( G    | AL)           |           |             |          |          |
|---|------------------|--------|---------------|-----------|-------------|----------|----------|
| RECOMMENDATION  | Test             | UOM    | Method        | Limit/Abn | Current     | History1 | History2 |
| Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.                       | Sample Number    |        | Client Info   |           | VCP393142   |          |          |
|   | Sample Date      |        | Client Info   |           | 04 Jan 2024 |          |          |
|   | Machine Age      | hrs    | Client Info   |           | 654         |          |          |
|   | Oil Age          | hrs    | Client Info   |           | 654         |          |          |
|   | Filter Age       | hrs    | Client Info   |           | 0           |          |          |
|   | Oil Changed      |        | Client Info   |           | Changed     |          |          |
|   | Filter Changed   |        | Client Info   |           | N/A         |          |          |
|   | Sample Status    |        |               |           | NORMAL      |          |          |
| WEAR  | Iron             | ppm    | ASTM D5185(m) | >1200     | 309         |          |          |
| All component wear rates are normal.  | Chromium         | ppm    | ASTM D5185(m) | >10       | 4           |          |          |
|   | Nickel           | ppm    | ASTM D5185(m) | >10       | <1          |          |          |
|   | Titanium         | ppm    | ASTM D5185(m) |           | 0           |          |          |
|   | Silver           | ppm    | ASTM D5185(m) |           | 0           |          |          |
|   | Aluminum         | ppm    | ASTM D5185(m) | >25       | 2           |          |          |
|   | Lead             | ppm    | ASTM D5185(m) | >50       | <1          |          |          |
|   | Copper           | ppm    | ASTM D5185(m) | >50       | 39          |          |          |
|   | Tin              | ppm    | ASTM D5185(m) | >10       | 0           |          |          |
|   | Vanadium         | ppm    | ASTM D5185(m) |           | 0           |          |          |
|   | White Metal      | scalar | Visual*       | NONE      | NONE        |          |          |
|   | Yellow Metal     | scalar | Visual*       | NONE      | NONE        |          |          |
| CONTAMINATION   | Silicon          | ppm    | ASTM D5185(m) | >100      | 21          |          |          |
| There is no indication of any contamination in the oil.   | Potassium        | ppm    | ASTM D5185(m) | >20       | <1          |          |          |
|   | Water            |        | WC Method     | >0.25     | NEG         |          |          |
|   | Silt             | scalar | Visual*       | NONE      | NONE        |          |          |
|   | Debris           | scalar | Visual*       | NONE      | NONE        |          |          |
|   | Sand/Dirt        | scalar | Visual*       | NONE      | NONE        |          |          |
|   | Appearance       | scalar | Visual*       | NORML     | NORML       |          |          |
|   | Odor             | scalar | Visual*       | NORML     | NORML       |          |          |
|   | Emulsified Water | scalar | Visual*       | >0.25     | NEG         |          |          |
| FLUID CONDITION   | Sodium           | ppm    | ASTM D5185(m) |           | 1           |          |          |
| Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service. | Boron            | ppm    | ASTM D5185(m) | 379       | <1          |          |          |
|   | Barium           | ppm    | ASTM D5185(m) | 0.0       | 2           |          |          |
|   | Molybdenum       | ppm    | ASTM D5185(m) | 8.0       | <1          |          |          |
|   | Manganese        | ppm    | ASTM D5185(m) | 0.0       | 6           |          |          |
|   | Magnesium        | ppm    | ASTM D5185(m) | 31        | <1          |          |          |
|   | Calcium          | ppm    | ASTM D5185(m) | 38        | 6           |          |          |
|   | Phosphorus       | ppm    | ASTM D5185(m) | 1077      | 309         |          |          |
|   | Zinc             | ppm    | ASTM D5185(m) | 46        | 29          |          |          |
|   | Sulfur           | ppm    | ASTM D5185(m) | 23526     | 13558       |          |          |
|   | Visc @ 40°C      | cSt    | ASTM D7279(m) | 139       | 174         |          |          |





CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number **Unique Number** 

: VCP393142 : 02608772

: 5709858 Test Package : MOB 1

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Recieved : 15 Jan 2024 Diagnosed : 15 Jan 2024

: Kevin Marson Diagnostician

STRONGCO EQUIPMENT INC. 55 ISNOR DRIVE, BURNSIDE INDUSTRIALPARK DARTMOUTH, NS

CA B3B 1N6 Contact: Lindsay Downs ldowns@strongco.com T: (902)468-5010 F: (902)468-2468

To discuss this sample report, contact Customer Service at 1-800-268-2131.

Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.