



# VOLVO

## OIL ANALYSIS REPORT

|                 |               |
|-----------------|---------------|
| WEAR            | <b>NORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b> |
| FLUID CONDITION | <b>NORMAL</b> |

Area  
**[SPM702771 WASTE MGMT]**

Machine Id  
**VOLVO L220E 2194**

Component  
**Rear Axle**

Fluid  
**VOLVO WET BRAKE TRANSAXLE OIL (--- GAL)**



### RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2    |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number  |     | Client Info |           | <b>VCP427391</b>   | VCP422729   | VCP365273   |
| Sample Date    |     | Client Info |           | <b>08 Jul 2024</b> | 25 Apr 2023 | 10 Oct 2022 |
| Machine Age    | hrs | Client Info |           | <b>25071</b>       | 24189       | 25053       |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 0           | 0           |
| Oil Changed    |     | Client Info |           | <b>Not Changed</b> | Not Changed | Not Changed |
| Filter Changed |     | Client Info |           | <b>Not Changed</b> | Not Changed | Not Changed |
| Sample Status  |     |             |           | <b>NORMAL</b>      | ABNORMAL    | NORMAL      |

### WEAR

All component wear rates are normal.

|              |        |             |      |              |       |      |
|--------------|--------|-------------|------|--------------|-------|------|
| Iron         | ppm    | ASTM D5185m | >500 | <b>34</b>    | 23    | 16   |
| Chromium     | ppm    | ASTM D5185m | >20  | <b>&lt;1</b> | <1    | <1   |
| Nickel       | ppm    | ASTM D5185m | >10  | <b>&lt;1</b> | 0     | 0    |
| Titanium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | <1    | <1   |
| Silver       | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0     | 0    |
| Aluminum     | ppm    | ASTM D5185m | >30  | <b>2</b>     | <1    | <1   |
| Lead         | ppm    | ASTM D5185m | >50  | <b>0</b>     | 0     | <1   |
| Copper       | ppm    | ASTM D5185m | >120 | <b>2</b>     | 0     | 1    |
| Tin          | ppm    | ASTM D5185m | >20  | <b>0</b>     | 0     | <1   |
| Vanadium     | ppm    | ASTM D5185m |      | <b>&lt;1</b> | 0     | 0    |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | MODER | NONE |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE  | NONE |

### CONTAMINATION

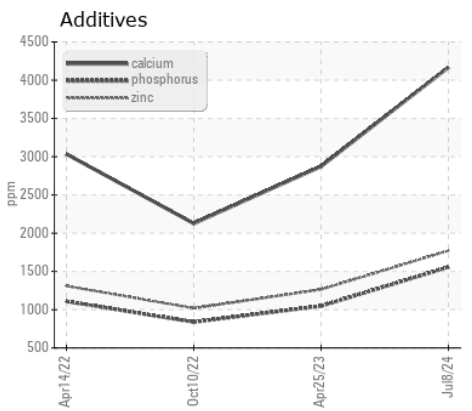
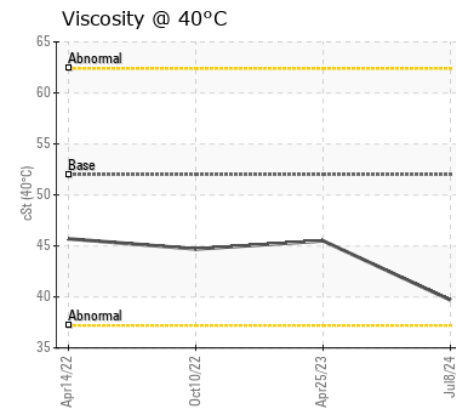
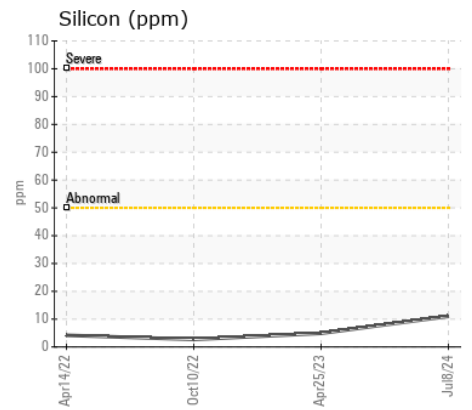
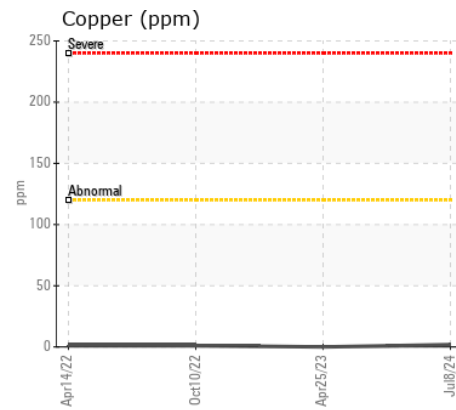
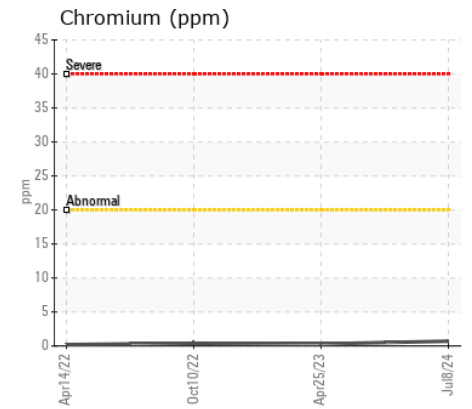
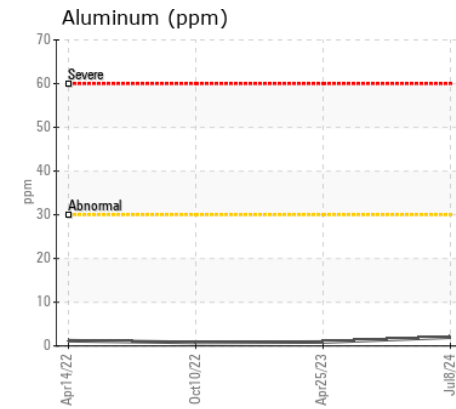
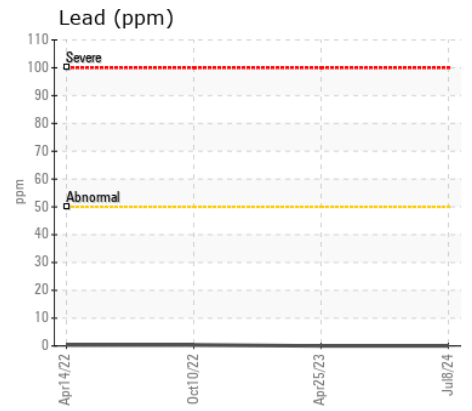
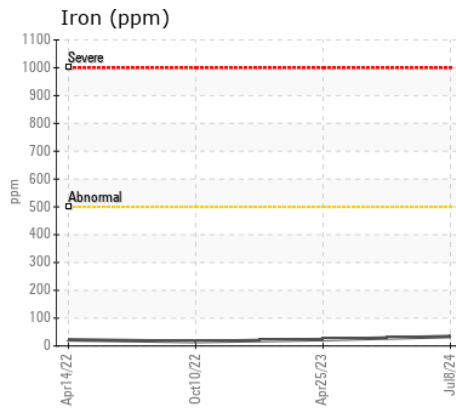
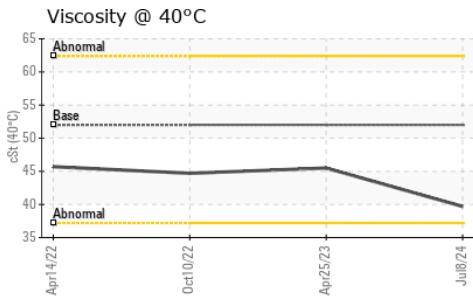
There is no indication of any contamination in the oil.

|                  |        |             |       |              |         |       |
|------------------|--------|-------------|-------|--------------|---------|-------|
| Silicon          | ppm    | ASTM D5185m | >50   | <b>11</b>    | 5       | 3     |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>4</b>     | 0       | 0     |
| Water            |        | WC Method   | >0.2  | <b>NEG</b>   | NEG     | NEG   |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE    | NONE  |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | ▲ MODER | NONE  |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE    | NONE  |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML   | NORML |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML   | NORML |
| Emulsified Water | scalar | *Visual     | >0.2  | <b>NEG</b>   | NEG     | NEG   |

### FLUID CONDITION

The condition of the oil is acceptable for the time in service.

|             |     |             |      |              |       |      |
|-------------|-----|-------------|------|--------------|-------|------|
| Sodium      | ppm | ASTM D5185m |      | <b>8</b>     | 1     | 0    |
| Boron       | ppm | ASTM D5185m | 100  | <b>141</b>   | 13    | 6    |
| Barium      | ppm | ASTM D5185m | 0    | <b>0</b>     | 0     | 0    |
| Molybdenum  | ppm | ASTM D5185m | 0    | <b>&lt;1</b> | <1    | <1   |
| Manganese   | ppm | ASTM D5185m |      | <b>1</b>     | <1    | <1   |
| Magnesium   | ppm | ASTM D5185m | 0    | <b>9</b>     | 9     | 7    |
| Calcium     | ppm | ASTM D5185m | 3800 | <b>4168</b>  | 2873  | 2126 |
| Phosphorus  | ppm | ASTM D5185m | 1200 | <b>1556</b>  | 1047  | 838  |
| Zinc        | ppm | ASTM D5185m | 1500 | <b>1770</b>  | 1264  | 1018 |
| Sulfur      | ppm | ASTM D5185m | 6500 | <b>4725</b>  | 10939 | 8677 |
| Visc @ 40°C | cSt | ASTM D445   | 52.0 | <b>39.7</b>  | 45.5  | 44.7 |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP427391 **Received** : 18 Jul 2024  
**Lab Number** : 06240672 **Tested** : 19 Jul 2024  
**Unique Number** : 11129506 **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : MOB 1

**WASTE MANAGEMENT - GARY**  
 1508 SHERMAN ST  
 GARY, IN  
 US 46406  
 Contact: TARA RORK

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)

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F: