



THE G. W. VAN KEPPEL CO.  
Construction Equipment

# OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO L180H 005445**  
Component  
**Transmission (Auto)**  
Fluid  
**VOLVO AT 102 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current            | History1    | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number  |     | Client Info |           | <b>VKC0001246</b>  | VKC0000789  | ---      |
| Sample Date    |     | Client Info |           | <b>10 Jun 2024</b> | 07 Mar 2023 | ---      |
| Machine Age    | hrs | Client Info |           | <b>7919</b>        | 4968        | ---      |
| Oil Age        | hrs | Client Info |           | <b>0</b>           | 1000        | ---      |
| Filter Age     | hrs | Client Info |           | <b>0</b>           | 1000        | ---      |
| Oil Changed    |     | Client Info |           | <b>Not Changd</b>  | Not Changd  | ---      |
| Filter Changed |     | Client Info |           | <b>N/A</b>         | Changed     | ---      |
| Sample Status  |     |             |           | <b>NORMAL</b>      | NORMAL      | ---      |

## WEAR

All component wear rates are normal.

|              |        |             |      |              |      |     |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron         | ppm    | ASTM D5185m | >160 | <b>42</b>    | 141  | --- |
| Chromium     | ppm    | ASTM D5185m | >5   | <b>0</b>     | 1    | --- |
| Nickel       | ppm    | ASTM D5185m | >5   | <b>&lt;1</b> | <1   | --- |
| Titanium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| Silver       | ppm    | ASTM D5185m | >5   | <b>0</b>     | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >50  | <b>&lt;1</b> | 2    | --- |
| Lead         | ppm    | ASTM D5185m | >50  | <b>0</b>     | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >225 | <b>5</b>     | 12   | --- |
| Tin          | ppm    | ASTM D5185m | >10  | <b>0</b>     | 0    | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <b>0</b>     | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | <b>NONE</b>  | NONE | --- |

## CONTAMINATION

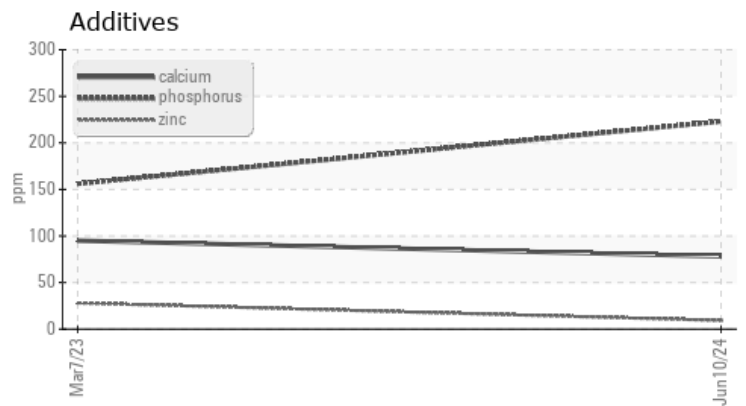
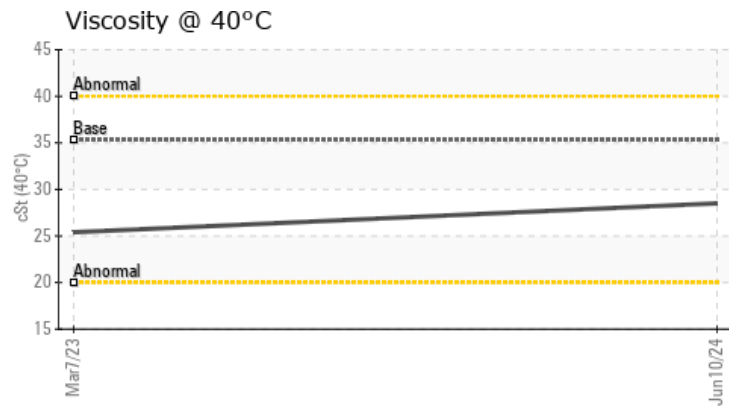
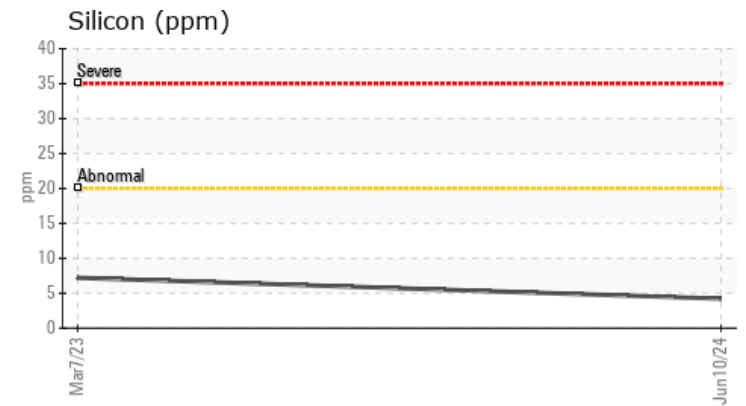
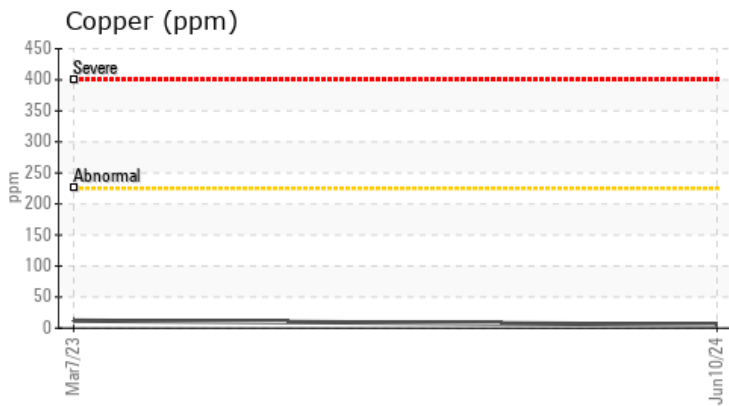
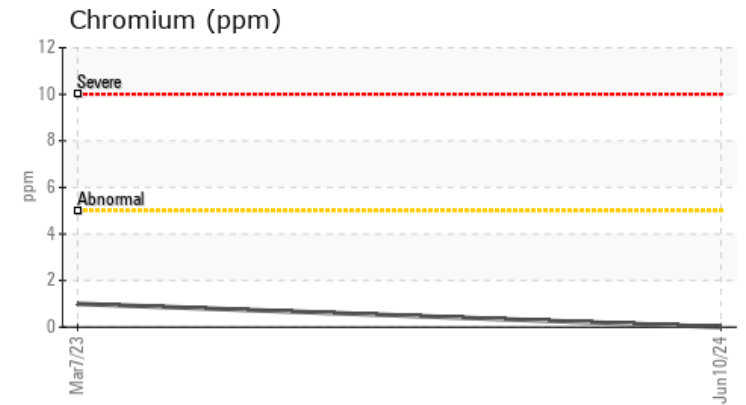
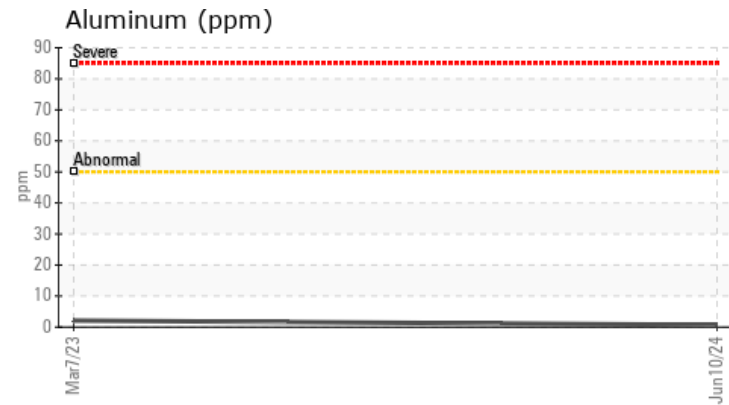
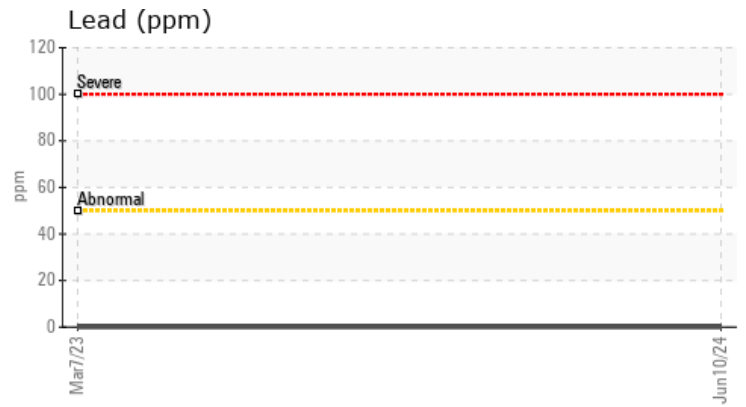
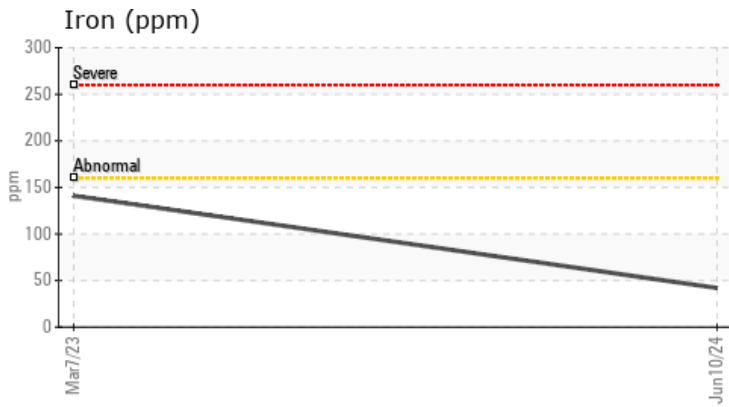
There is no indication of any contamination in the oil.

|                  |        |             |       |              |       |     |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >20   | <b>4</b>     | 7     | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | <b>2</b>     | 2     | --- |
| Water            |        | WC Method   | >0.1  | <b>NEG</b>   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Debris           | scalar | *Visual     | NONE  | <b>NONE</b>  | VLITE | --- |
| Sand/Dirt        | scalar | *Visual     | NONE  | <b>NONE</b>  | NONE  | --- |
| Appearance       | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Odor             | scalar | *Visual     | NORML | <b>NORML</b> | NORML | --- |
| Emulsified Water | scalar | *Visual     | >0.1  | <b>NEG</b>   | NEG   | --- |

## FLUID CONDITION

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

|            |     |             |      |             |      |     |
|------------|-----|-------------|------|-------------|------|-----|
| Sodium     | ppm | ASTM D5185m |      | <b>4</b>    | 5    | --- |
| Boron      | ppm | ASTM D5185m | 187  | <b>78</b>   | 49   | --- |
| Barium     | ppm | ASTM D5185m | 0.0  | <b>0</b>    | 3    | --- |
| Molybdenum | ppm | ASTM D5185m | 0.0  | <b>0</b>    | <1   | --- |
| Manganese  | ppm | ASTM D5185m | 0.0  | <b>2</b>    | 5    | --- |
| Magnesium  | ppm | ASTM D5185m | 6.8  | <b>2</b>    | 2    | --- |
| Calcium    | ppm | ASTM D5185m | 215  | <b>78</b>   | 95   | --- |
| Phosphorus | ppm | ASTM D5185m | 445  | <b>223</b>  | 156  | --- |
| Zinc       | ppm | ASTM D5185m | 56   | <b>9</b>    | 28   | --- |
| Sulfur     | ppm | ASTM D5185m | 1336 | <b>2318</b> | 2032 | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : VKC0001246

**Lab Number** : 06212693

**Unique Number** : 11085557

**Test Package** : MOBCE

**Received** : 17 Jun 2024

**Tested** : 18 Jun 2024

**Diagnosed** : 19 Jun 2024 - Angela Borella

**GW VAN KEPPEL CO**

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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)