



# CONSTRUCTION EQUIPMENT

13946 BROOKS TAKEUCHI TL8 200809153 - DIESEL ENGINE



**Sample No:** VCP447969  
**Oil Type:** DIESEL ENGINE OIL SAE 40  
**Job No:** 13946 BROOKS



## SAMPLE INFORMATION

|               |                    |             |     |     |
|---------------|--------------------|-------------|-----|-----|
| Sample Number | <b>VCP447969</b>   | VCP300479   | --- | --- |
| Sample Date   | <b>08 Dec 2023</b> | 04 Aug 2021 | --- | --- |
| Machine Hours | <b>384</b>         | 230         | --- | --- |
| Oil Hours     | <b>0</b>           | 0           | --- | --- |
| Oil Changed   | <b>Changed</b>     | Changed     | --- | --- |
| Sample Status | <b>NORMAL</b>      | NORMAL      | --- | --- |

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## OIL CONDITION

|                  |          |             |      |     |     |
|------------------|----------|-------------|------|-----|-----|
| Visc @ 100°C     | cSt      | <b>12.6</b> | 13.5 | --- | --- |
| Base Number (BN) | mg KOH/g | <b>6.6</b>  | ---  | --- | --- |
| Oxidation (PA)   | %        | <b>79</b>   | 63   | --- | --- |

## Diagnosis

Resample at the next service interval to monitor. Metal levels are typical for a new component breaking in. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



## CONTAMINATION

|                |     |                |      |     |     |
|----------------|-----|----------------|------|-----|-----|
| Water          | %   | <b>NEG</b>     | NEG  | --- | --- |
| Soot %         | %   | <b>0.3</b>     | 0.2  | --- | --- |
| Nitration (PA) | %   | <b>95</b>      | 79   | --- | --- |
| Sulfation (PA) | %   | <b>58</b>      | 56   | --- | --- |
| Glycol         | %   | <b>NEG</b>     | NEG  | --- | --- |
| Fuel           | %   | <b>&lt;1.0</b> | <1.0 | --- | --- |
| Silicon        | ppm | <b>6</b>       | 5    | --- | --- |
| Sodium         | ppm | <b>2</b>       | 4    | --- | --- |
| Potassium      | ppm | <b>&lt;1</b>   | 2    | --- | --- |



## WEAR METALS

|            |     |              |    |     |     |
|------------|-----|--------------|----|-----|-----|
| Iron       | ppm | <b>13</b>    | 15 | --- | --- |
| Copper     | ppm | <b>7</b>     | 13 | --- | --- |
| Lead       | ppm | <b>&lt;1</b> | <1 | --- | --- |
| Tin        | ppm | <b>0</b>     | <1 | --- | --- |
| Aluminum   | ppm | <b>2</b>     | 0  | --- | --- |
| Chromium   | ppm | <b>0</b>     | <1 | --- | --- |
| Molybdenum | ppm | <b>49</b>    | 82 | --- | --- |
| Nickel     | ppm | <b>0</b>     | 0  | --- | --- |
| Titanium   | ppm | <b>0</b>     | 0  | --- | --- |
| Silver     | ppm | <b>0</b>     | <1 | --- | --- |
| Manganese  | ppm | <b>&lt;1</b> | 1  | --- | --- |
| Vanadium   | ppm | <b>0</b>     | <1 | --- | --- |



## ADDITIVES

|            |     |             |      |     |     |
|------------|-----|-------------|------|-----|-----|
| Calcium    | ppm | <b>1396</b> | 2152 | --- | --- |
| Magnesium  | ppm | <b>758</b>  | 174  | --- | --- |
| Zinc       | ppm | <b>906</b>  | 1199 | --- | --- |
| Phosphorus | ppm | <b>737</b>  | 1050 | --- | --- |
| Barium     | ppm | <b>0</b>    | <1   | --- | --- |
| Boron      | ppm | <b>30</b>   | 74   | --- | --- |

**Depot:** VOLVO8882  
**Unique No:** 10790946  
**Signed:** Wes Davis  
**Report Date:** 18 Dec 2023

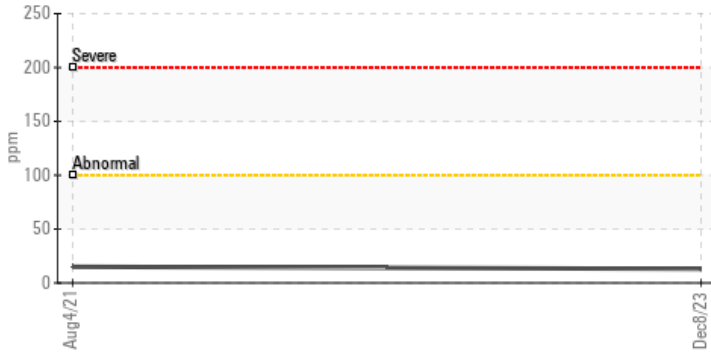


# CONSTRUCTION EQUIPMENT

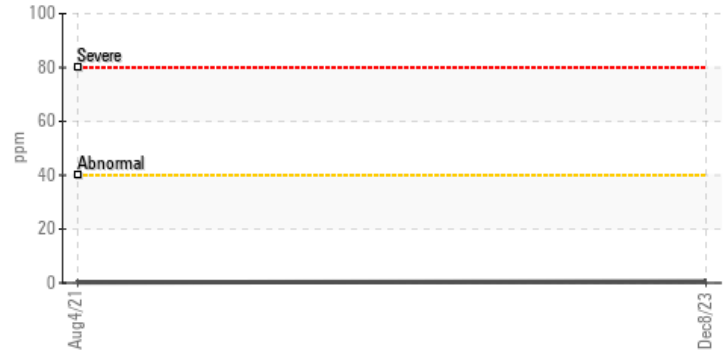


## GRAPHS

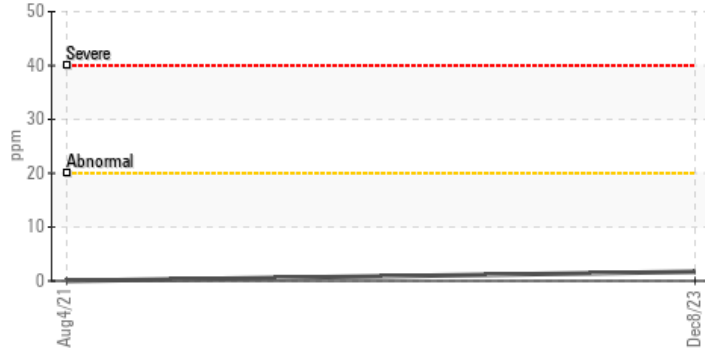
### Iron (ppm)



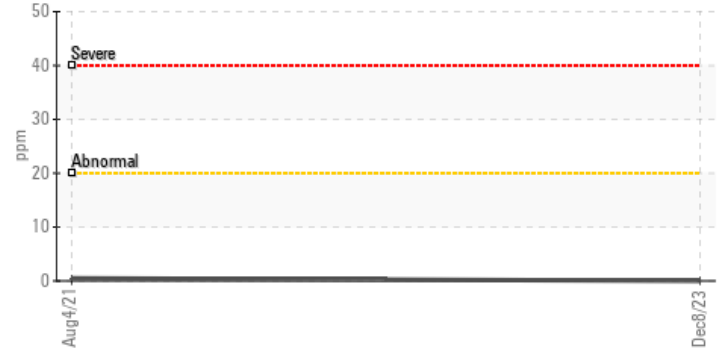
### Lead (ppm)



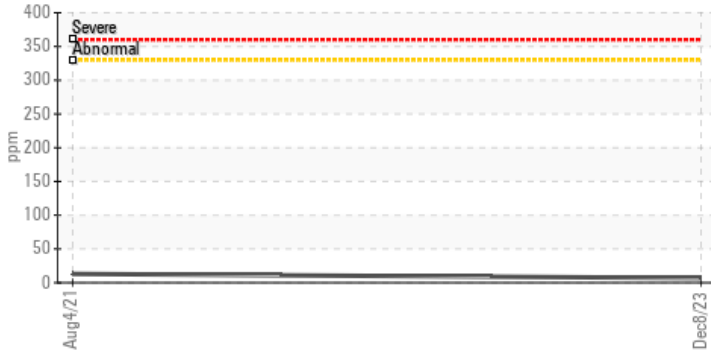
### Aluminum (ppm)



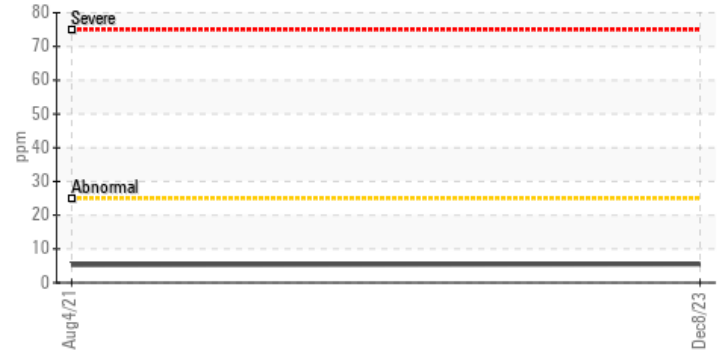
### Chromium (ppm)



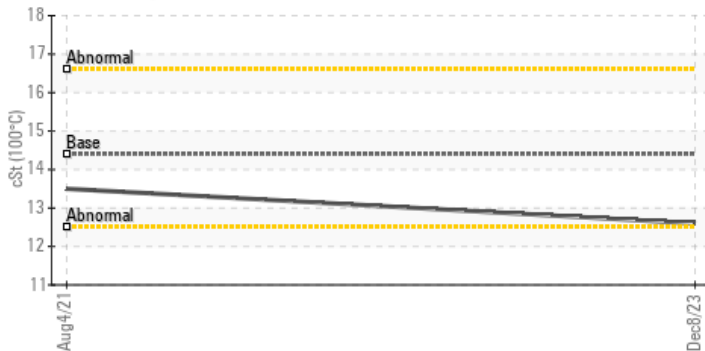
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 100°C



### Base Number

