



OIL ANALYSIS REPORT

|                 |        |
|-----------------|--------|
| WEAR            | NORMAL |
| CONTAMINATION   | NORMAL |
| FLUID CONDITION | NORMAL |

Area  
**TUG 3123 CB LLC [SK00100447]**  
 Machine Id  
**VOLVO PENTA 51230082444- INBOARD**  
 Component  
**Center Gearbox**  
 Fluid  
**CHEVRON AUTOMATIC TRANS FLUID MD-3 (1 QTS)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

| Test           | UOM | Method      | Limit/Abn | Current     | History1    | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|----------|
| Sample Number  |     | Client Info |           | VPA062583   | VPA055487   | ---      |
| Sample Date    |     | Client Info |           | 17 Jun 2024 | 30 Jun 2023 | ---      |
| Machine Age    | hrs | Client Info |           | 95          | 20          | ---      |
| Oil Age        | hrs | Client Info |           | 95          | 20          | ---      |
| Filter Age     | hrs | Client Info |           | 0           | 0           | ---      |
| Oil Changed    |     | Client Info |           | Changed     | Changed     | ---      |
| Filter Changed |     | Client Info |           | Changed     | Changed     | ---      |
| Sample Status  |     |             |           | NORMAL      | NORMAL      | ---      |

**WEAR**

All component wear rates are normal.

|              |        |             |      |      |      |     |
|--------------|--------|-------------|------|------|------|-----|
| PQ           |        | ASTM D8184  |      | 25   | 35   | --- |
| Iron         | ppm    | ASTM D5185m | >150 | 17   | 32   | --- |
| Chromium     | ppm    | ASTM D5185m | >10  | 0    | <1   | --- |
| Nickel       | ppm    | ASTM D5185m | >10  | 0    | 0    | --- |
| Titanium     | ppm    | ASTM D5185m |      | 0    | 0    | --- |
| Silver       | ppm    | ASTM D5185m |      | 0    | 0    | --- |
| Aluminum     | ppm    | ASTM D5185m | >5   | <1   | 2    | --- |
| Lead         | ppm    | ASTM D5185m | >65  | 1    | 0    | --- |
| Copper       | ppm    | ASTM D5185m | >80  | 10   | 15   | --- |
| Tin          | ppm    | ASTM D5185m | >8   | 0    | 0    | --- |
| Vanadium     | ppm    | ASTM D5185m |      | <1   | 0    | --- |
| White Metal  | scalar | *Visual     | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual     | NONE | NONE | NONE | --- |

**CONTAMINATION**

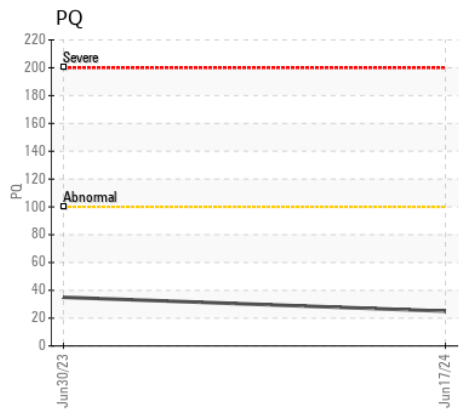
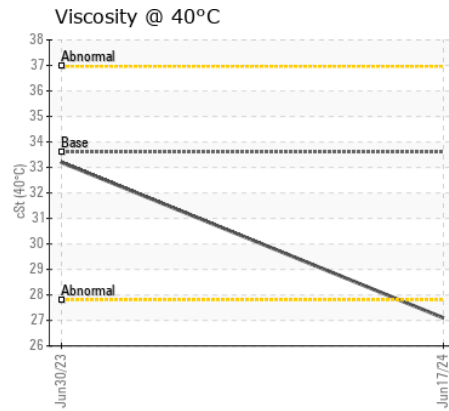
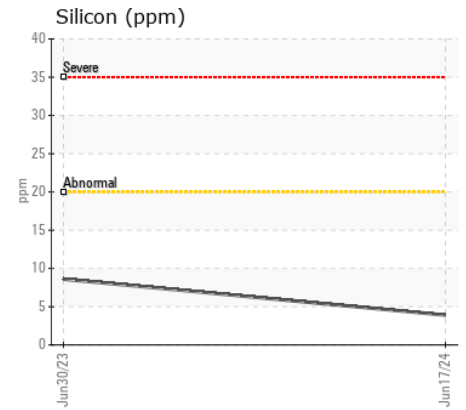
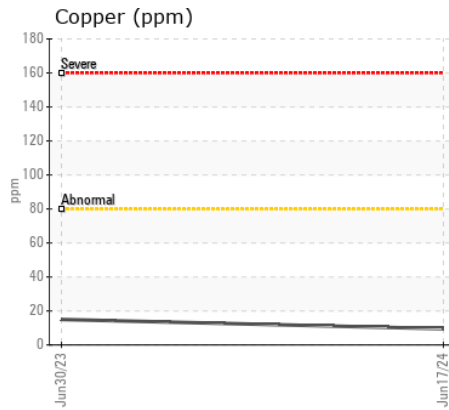
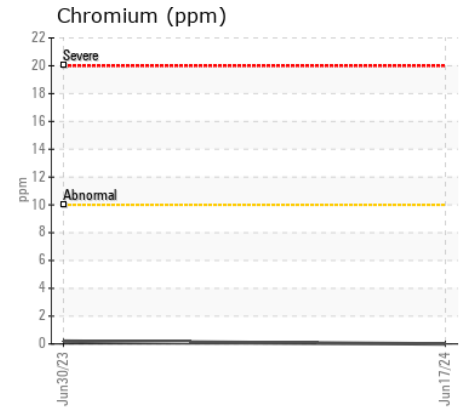
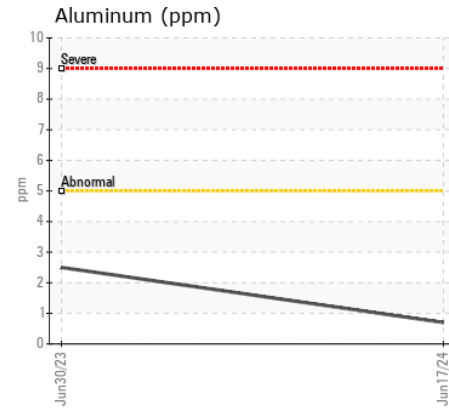
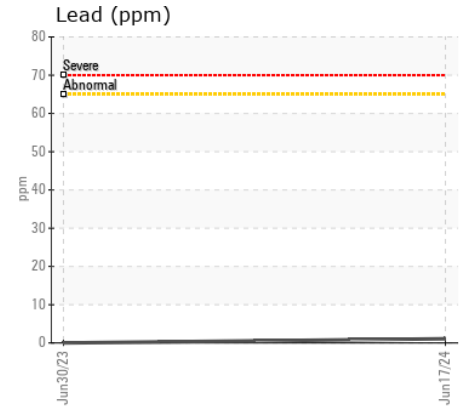
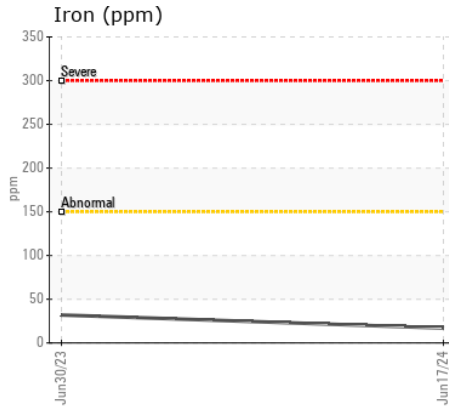
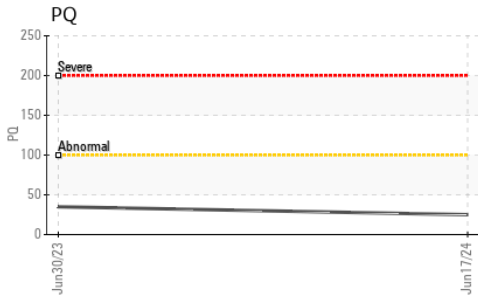
There is no indication of any contamination in the oil.

|                  |        |             |       |       |       |     |
|------------------|--------|-------------|-------|-------|-------|-----|
| Silicon          | ppm    | ASTM D5185m | >20   | 4     | 9     | --- |
| Potassium        | ppm    | ASTM D5185m | >20   | 1     | 0     | --- |
| Water            |        | WC Method   | >0.2  | NEG   | NEG   | --- |
| Silt             | scalar | *Visual     | NONE  | NONE  | LIGHT | --- |
| 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 | scalar | *Visual     | >0.2  | NEG   | NEG   | --- |

**FLUID CONDITION**

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

|            |     |             |  |      |      |     |
|------------|-----|-------------|--|------|------|-----|
| Sodium     | ppm | ASTM D5185m |  | 2    | <1   | --- |
| Boron      | ppm | ASTM D5185m |  | 56   | 55   | --- |
| Barium     | ppm | ASTM D5185m |  | <1   | 0    | --- |
| Molybdenum | ppm | ASTM D5185m |  | 2    | <1   | --- |
| Manganese  | ppm | ASTM D5185m |  | <1   | 0    | --- |
| Magnesium  | ppm | ASTM D5185m |  | 9    | 62   | --- |
| Calcium    | ppm | ASTM D5185m |  | 70   | 30   | --- |
| Phosphorus | ppm | ASTM D5185m |  | 186  | 357  | --- |
| Zinc       | ppm | ASTM D5185m |  | 52   | 275  | --- |
| Sulfur     | ppm | ASTM D5185m |  | 1354 | 6789 | --- |



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VPA062583 **Received** : 25 Jun 2024  
**Lab Number** : 06220433 **Tested** : 26 Jun 2024  
**Unique Number** : 11098630 **Diagnosed** : 27 Jun 2024 - Sean Felton  
**Test Package** : MOB 1 ( Additional Tests: PQ )

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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)