



# CONSTRUCTION EQUIPMENT

SWA532686 VOLVO A40G 352020 - DROP BOX



**Sample No:** VCP423815  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA532686



## SAMPLE INFORMATION

|               |                    |             |             |     |
|---------------|--------------------|-------------|-------------|-----|
| Sample Number | <b>VCP423815</b>   | VCP322899   | VCP342328   | --- |
| Sample Date   | <b>16 Apr 2024</b> | 02 Apr 2024 | 11 Nov 2021 | --- |
| Machine Hours | <b>6476</b>        | 6397        | 4531        | --- |
| Oil Hours     | <b>0</b>           | 0           | 0           | --- |
| Oil Changed   | <b>Changed</b>     | Not Changd  | Not Changd  | --- |
| Sample Status | <b>ABNORMAL</b>    | ABNORMAL    | NORMAL      | --- |

**LIBERTY ENVIRONMENTALIST INC**  
 7900 S MERIDIAN  
 CLARKLAKE, MI  
 US 49234  
 Contact: SERVICE MANAGER



## OIL CONDITION

|             |     |             |     |     |     |
|-------------|-----|-------------|-----|-----|-----|
| Visc @ 40°C | cSt | <b>43.7</b> | 146 | 144 | --- |
|-------------|-----|-------------|-----|-----|-----|

T: (517)787-1177  
 F:



## CONTAMINATION

| Water     | %   | NEG       | NEG | NEG | --- |
|-----------|-----|-----------|-----|-----|-----|
| Silicon   | ppm | <b>18</b> | 52  | 43  | --- |
| Sodium    | ppm | <b>5</b>  | 6   | 4   | --- |
| Potassium | ppm | <b>0</b>  | 3   | 0   | --- |

## Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is higher than normal. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.



## WEAR METALS

|            |     |              |     |     |     |
|------------|-----|--------------|-----|-----|-----|
| Iron       | ppm | <b>41</b>    | 635 | 187 | --- |
| Copper     | ppm | <b>103</b>   | 4   | 3   | --- |
| Lead       | ppm | <b>0</b>     | 0   | 0   | --- |
| Tin        | ppm | <b>0</b>     | 0   | 0   | --- |
| Aluminum   | ppm | <b>&lt;1</b> | 49  | 19  | --- |
| Chromium   | ppm | <b>0</b>     | 7   | 2   | --- |
| Molybdenum | ppm | <b>0</b>     | 31  | 18  | --- |
| Nickel     | ppm | <b>1</b>     | 4   | 0   | --- |
| Titanium   | ppm | <b>0</b>     | <1  | <1  | --- |
| Silver     | ppm | <b>0</b>     | 0   | 0   | --- |
| Manganese  | ppm | <b>0</b>     | 6   | 3   | --- |
| Vanadium   | ppm | <b>0</b>     | 0   | 0   | --- |



## ADDITIVES

|            |     |             |      |      |     |
|------------|-----|-------------|------|------|-----|
| Calcium    | ppm | <b>3717</b> | 216  | 262  | --- |
| Magnesium  | ppm | <b>26</b>   | 75   | 60   | --- |
| Zinc       | ppm | <b>1367</b> | 141  | 130  | --- |
| Phosphorus | ppm | <b>1154</b> | 1068 | 1001 | --- |
| Barium     | ppm | <b>0</b>    | 0    | 0    | --- |
| Boron      | ppm | <b>111</b>  | 106  | 111  | --- |

**Depot:** LIBCLA  
**Unique No:** 10994026  
**Signed:** Jonathan Hester  
**Report Date:** 25 Apr 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

