**CONSTRUCTION EQUIPMENT** SPM538832 WHEELER DA VOLVO L90H 626490 - DIESEL ENGINE

Sample No: VCP406927

VOLVO

**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 Job No: SPM538832 WHEELER DA

## **SAMPLE INFORMATION**

| Sample Number    | -        | VCP406927   | VCP397207   | <br> |
|------------------|----------|-------------|-------------|------|
| Sample Date      |          | 14 Apr 2023 | 17 Jan 2023 | <br> |
| Machine Hours    |          | 1006        | 460         | <br> |
| Oil Hours        |          | 0           | 0           | <br> |
| Oil Changed      |          | Changed     | Changed     | <br> |
| Sample Status    |          | NORMAL      | NORMAL      | <br> |
|                  |          |             |             |      |
| OIL CONDI        |          |             |             |      |
|                  |          | ÷           |             |      |
| Visc @ 100°C     | cSt      | <b>14.6</b> | 13.6        | <br> |
| Base Number (BN) | mg KOH/g | 7.0         | 9.0         | <br> |
| Oxidation (PA)   | %        | 77          | 75          | <br> |
|                  |          |             |             |      |
|                  |          |             |             |      |
|                  | IATION   | ÷           |             |      |
| Soot %           | %        | 0.6         | 0.4         | <br> |
| Nitration (PA)   | %        | 87          | 78          | <br> |
| Sulfation (PA)   | %        | 60          | 58          | <br> |
| Glycol           | %        | NEG         | NEG         | <br> |
| Fuel             | %        | <1.0        | < 1.0       | <br> |
| Silicon          | ppm      | 2           | 14          | <br> |
| Sodium           | ppm      | 3           | 0           | <br> |
| Potassium        | ppm      | 2           | 1           | <br> |
|                  |          |             |             |      |

Potassium 1

| WEAR N     | METALS |    |            |      |
|------------|--------|----|------------|------|
| Iron       | ppm    | 34 | 37         | <br> |
| Copper     | ppm    | 5  | 9          | <br> |
| Lead       | ppm    | 0  | 3          | <br> |
| Tin        | ppm    | 2  | 5          | <br> |
| Aluminum   | ppm    | 8  | 27         | <br> |
| Chromium   | ppm    | 3  | 5          | <br> |
| Molybdenum | ppm    | 69 | 54         | <br> |
| Nickel     | ppm    |    | <b></b> <1 | <br> |
| Titanium   | ppm    | 0  | <1         | <br> |
| Silver     | ppm    | 0  | 0          | <br> |
| Manganese  | ppm    | 2  | 3          | <br> |
| Vanadium   | ppm    | 0  | <1         | <br> |

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| Calcium ppm    | <b>1590</b>  | 1824 |      |
|----------------|--------------|------|------|
|                |              |      | <br> |
| Magnesium ppm  | 822          | 476  | <br> |
| Zinc ppm       | <b>1408</b>  | 1266 | <br> |
| Phosphorus ppm | <b>1134</b>  | 1006 | <br> |
| Barium ppm     | n 🔲 <b>O</b> | 4    | <br> |
| Boron ppm      | n 🔲 <b>O</b> | 42   | <br> |



## ALTA CONSTRUCTION EQUIPMENT LLC

G-3283 S. DORT HIGHWAY BURTON, MI US 48529 Contact: BURTON SERVICE BURTON.SERVICE@ALTAEQUIPMENT.COM T: F:

## Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. 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.

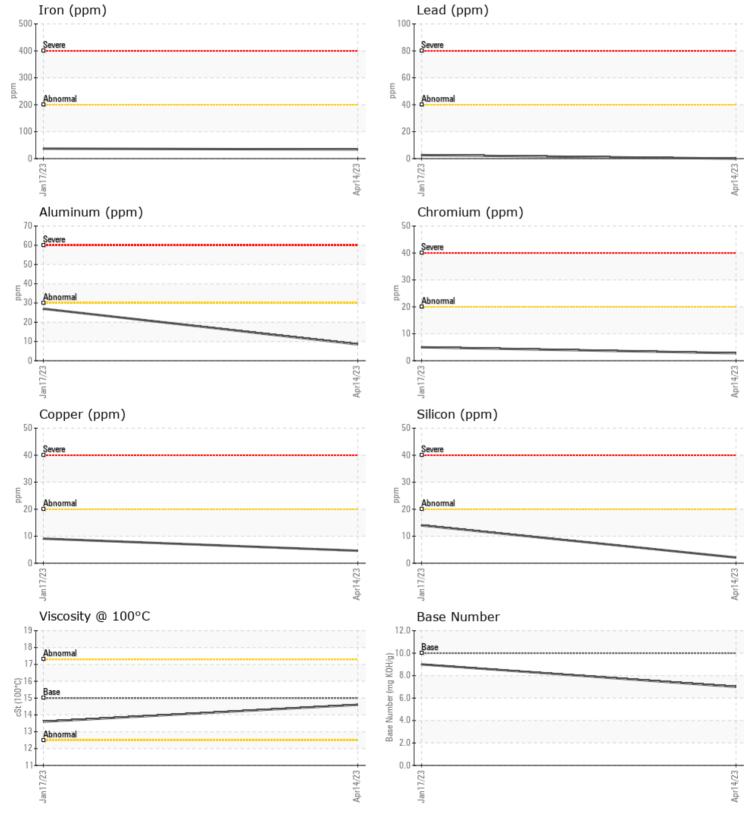
Depot: VOLVO5023 Unique No: 10444409 Signed: Wes Davis Report Date: 27 Apr 2023

## **CONSTRUCTION EQUIPMENT**



GRAPHS

VOLVO



Report Id: VOLVO5023 [WUSCAR] 05830916 (Generated: 06/30/2023 12:53:20) Rev: 1

Contact/Location: BURTON SERVICE - VOLVO5023