



CONSTRUCTION EQUIPMENT

TRIPLE M METAL LP 390111 VOLVO L220H 2464 - DIESEL ENGINE



Sample No: VCP392129
Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3
Job No: 390111



SAMPLE INFORMATION

| | | | | |
|---------------|--------------------|-------------|-------------|-------------|
| Sample Number | VCP392129 | VCP380157 | VCP333655 | VCP297979 |
| Sample Date | 03 Jan 2024 | 28 Aug 2023 | 26 Jul 2022 | 28 Sep 2021 |
| Machine Hours | 23638 | 22993 | 20846 | 19180 |
| Oil Hours | 0 | 500 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

STRONGCO EQUIPMENT (CE)

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OIL CONDITION

| | | | | | |
|----------------|-----|-------------|------|------|------|
| Visc @ 100°C | cSt | 12.7 | 13.3 | 12.8 | 12.9 |
| Oxidation (PA) | % | 83 | 53 | 33 | 82 |



CONTAMINATION

| | | | | | |
|----------------|-----|------------|------|------|------|
| Water | % | NEG | NEG | NEG | NEG |
| Soot % | % | 0 | 0 | 0 | 0 |
| Nitration (PA) | % | 61 | 67 | 31 | 65 |
| Sulfation (PA) | % | 62 | 59 | 41 | 62 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | 1.1 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 3 | 4 | 3 | 4 |
| Sodium | ppm | 2 | 3 | 3 | 3 |
| Potassium | ppm | 0 | 2 | <1 | <1 |

Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The condition of the oil is acceptable for the time in service.



WEAR METALS

| | | | | | |
|------------|-----|--------------|----|----|----|
| Iron | ppm | 6 | 8 | 5 | 8 |
| Copper | ppm | <1 | <1 | <1 | <1 |
| Lead | ppm | <1 | <1 | <1 | <1 |
| Tin | ppm | 0 | 0 | <1 | <1 |
| Aluminum | ppm | 2 | 2 | 3 | 2 |
| Chromium | ppm | 0 | 0 | 0 | <1 |
| Molybdenum | ppm | 36 | 6 | 44 | 40 |
| Nickel | ppm | <1 | 0 | <1 | <1 |
| Titanium | ppm | 0 | 2 | <1 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 | <1 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-------------|------|------|------|
| Calcium | ppm | 1691 | 1405 | 1715 | 1609 |
| Magnesium | ppm | 508 | 695 | 554 | 530 |
| Zinc | ppm | 1065 | 1183 | 1126 | 1110 |
| Phosphorus | ppm | 913 | 1100 | 960 | 983 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 34 | 45 | 35 | 25 |

Depot: VOLVO0252
Unique No: 5707540
Signed: Wes Davis
Report Date: 05 Jan 2024



CONSTRUCTION EQUIPMENT



GRAPHS

