

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L550 040916-1287 - Diesel Engine

Sample No: LH0104280

Oil Type: PETRO CANADA 10W40



SAMPLE INFORMATION

| Sample Number | LH0104280 | LH0104287 | LH0256716 | LH0162339 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 23 Feb 2024 | 29 Sep 2023 | 20 Mar 2023 | 13 Dec 2022 |
| Machine Hours | 11750 | 11118 | 10626 | 10041 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

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OIL CONDITION

| Visc @ 100°C | cSt | 14.1 | 14.1 | 13.9 | 14.2 |
|----------------|-----|------|------|------|------|
| Oxidation (PA) | % | 60 | 57 | 51 | 59 |



CONTAMINATION

| Water | % | NEG | NEG | NEG | NEG |
|----------------|-----|------|------|------|------|
| Soot % | % | 0.3 | 0.2 | 0.2 | 0.2 |
| Nitration (PA) | % | 63 | 58 | 56 | 61 |
| Sulfation (PA) | % | 53 | 52 | 57 | 56 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | <1.0 | <1.0 | <1.0 | <1.0 |
| Silicon | ppm | 5 | 6 | 5 | 5 |
| Sodium | ppm | 3 | 4 | 3 | 3 |
| Potassium | ppm | <1 | 0 | <1 | <1 |

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



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 7 | 6 | 8 | 6 |
| Copper | ppm | 1 | 2 | 1 | 2 |
| Lead | ppm | 1 | <1 | 1 | 1 |
| Tin | ppm | 0 | 0 | <1 | <1 |
| Aluminum | ppm | 4 | 4 | 4 | 4 |
| Chromium | ppm | <1 | 0 | <1 | 0 |
| Molybdenum | ppm | 60 | 62 | 60 | 58 |
| Nickel | ppm | <1 | 0 | 0 | <1 |
| Titanium | ppm | 0 | 0 | 1 | <1 |
| Silver | ppm | 0 | <1 | 0 | 0 |
| Manganese | ppm | 0 | 0 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------|------|------|------|
| Calcium | ppm | 1094 | 1090 | 1120 | 1138 |
| Magnesium | ppm | 983 | 996 | 982 | 972 |
| Zinc | ppm | 1219 | 1235 | 1217 | 1206 |
| Phosphorus | ppm | 1034 | 1053 | 1105 | 1089 |
| Barium | ppm | 0 | <1 | 0 | 0 |
| Boron | ppm | <1 | 2 | 2 | <1 |

Depot: RIDOTT
 Unique No: 5735360
 Signed: Wes Davis
 Report Date: 27 Feb 2024



GRAPHS

