

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L586 033192 - Front Differential

Sample No: LH0277523

Oil Type: GEAR OIL SAE 75W90



Sample Information

| Sample Number | LH0277523 | LH0261553 | LH0234633 | LH0222560 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 20 Nov 2023 | 12 Jun 2023 | 30 Sep 2022 | 20 Apr 2022 |
| Machine Hours | 19190 | 18072 | 16970 | 15948 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | NORMAL | NORMAL |

WATERFORD SAND & GRAVEL
 10546 ON-3
 WAINFLEET, ON
 CA L0S 1V0
 Contact: Service Manager



Oil Condition

| Visc @ 40°C | cSt | 95.7 | 95.4 | 98.6 | 91.8 |
|-------------|-----|------|------|------|------|
| | | | | | |

T:
F:



Contamination

| Water | % | NEG | NEG | NEG | NEG |
|-----------|-----|-----|-----|-----|-----|
| Silicon | ppm | 4 | 2 | 2 | 3 |
| Sodium | ppm | <1 | <1 | <1 | <1 |
| Potassium | ppm | 0 | <1 | <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 | 84 | 85 | 114 | 204 |
| Copper | ppm | 3 | 4 | 4 | 4 |
| Lead | ppm | <1 | <1 | <1 | 2 |
| Tin | ppm | 0 | <1 | 0 | <1 |
| Aluminum | ppm | <1 | <1 | <1 | 1 |
| Chromium | ppm | 0 | 0 | 0 | <1 |
| Molybdenum | ppm | 0 | 0 | 0 | <1 |
| Nickel | ppm | 0 | 0 | 0 | <1 |
| Titanium | ppm | 0 | <1 | 0 | 0 |
| Silver | ppm | <1 | 0 | 0 | 0 |
| Manganese | ppm | <1 | 1 | 1 | 3 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



Additives

| | | | | | |
|------------|-----|------|------|------|------|
| Calcium | ppm | 12 | 11 | 13 | 9 |
| Magnesium | ppm | 2 | 2 | 2 | 2 |
| Zinc | ppm | 11 | 11 | 12 | 10 |
| Phosphorus | ppm | 2278 | 2097 | 2283 | 3531 |
| Barium | ppm | <1 | 0 | 0 | 0 |
| Boron | ppm | 291 | 317 | 302 | 261 |

Depot: WATWAI
 Unique No: 5683031
 Signed: Wes Davis
 Report Date: 21 Nov 2023



Graphs

