

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH22M 112532-1250 - Diesel Engine

Sample No: LH0153190

Oil Type: PETRO CANADA DURON UHP 5W30



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LH0153190 | LH0246550 | LH0234216 | LH0222097 |
| Sample Date | 05 Jul 2023 | 28 Apr 2023 | 23 Sep 2022 | 03 May 2022 |
| Machine Hours | 9750 | 6500 | 5700 | 5131 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Changed |
| Sample Status | NORMAL | NORMAL | ABNORMAL | NORMAL |

CENTREM
1125 DES PINS O.
ALMA, QC
CA G8B 7V7
Contact: Service Manager



OIL CONDITION

| | | | | | |
|----------------|-----|------|------|------|------|
| Visc @ 100°C | cSt | 12.0 | 12.4 | 11.5 | 12.3 |
| Oxidation (PA) | % | 77 | 81 | 70 | 38 |

T:
F:



CONTAMINATION

| | | | | | |
|----------------|-----|-----|------|-----|------|
| Soot % | % | 0 | 0 | 0 | 0 |
| Nitration (PA) | % | 78 | 86 | 64 | 43 |
| Sulfation (PA) | % | 58 | 61 | 55 | 46 |
| Glycol | % | NEG | NEG | NEG | NEG |
| Fuel | % | 0.6 | <1.0 | 0.5 | <1.0 |
| Silicon | ppm | 5 | 6 | 5 | 9 |
| Sodium | ppm | 5 | 6 | 5 | 4 |
| Potassium | ppm | <1 | 0 | 0 | 1 |

Diagnosis

Aucune mesure corrective n'est recommandée pour l'instant.
Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Les taux d'usure de tous les composants sont normaux. La teneur en carburant est négligeable. Il n'y a aucun indice de contamination dans l'huile. L'état de l'huile est acceptable pour la durée de service.



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 11 | 21 | 8 | 11 |
| Copper | ppm | 2 | 2 | <1 | 1 |
| Lead | ppm | <1 | <1 | 0 | 0 |
| Tin | ppm | 0 | 0 | 0 | 0 |
| Aluminum | ppm | 2 | 3 | 1 | 1 |
| Chromium | ppm | <1 | 1 | 0 | <1 |
| Molybdenum | ppm | 63 | 53 | 55 | 55 |
| Nickel | ppm | <1 | <1 | 0 | <1 |
| Titanium | ppm | 0 | <1 | <1 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | <1 | <1 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|------|------|------|------|
| Calcium | ppm | 924 | 1193 | 837 | 986 |
| Magnesium | ppm | 1049 | 986 | 1096 | 1101 |
| Zinc | ppm | 1190 | 1223 | 1190 | 1278 |
| Phosphorus | ppm | 1050 | 1103 | 1078 | 1115 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 34 | 32 | 40 | 44 |

Depot: CENALM
Unique No: 5605702
Signed: Wes Davis
Report Date: 11 Jul 2023



GRAPHS

