

LIEBHERR

CONSTRUCTION EQUIPMENT



[FRPD] NO UNIT LH0218489 - Diesel Engine

Sample No: LH0218489

Oil Type: CHEVRON 15W40



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-----|-----|-----|
| Sample Number | LH0218489 | --- | --- | --- |
| Sample Date | 29 Sep 2023 | --- | --- | --- |
| Machine Hours | 35436 | --- | --- | --- |
| Oil Hours | 0 | --- | --- | --- |
| Oil Changed | Changed | --- | --- | --- |
| Sample Status | NORMAL | --- | --- | --- |

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OIL CONDITION

| | | | | | |
|----------------|-----|--------|-----|-----|-----|
| Visc @ 100°C | cSt | ● 12.9 | --- | --- | --- |
| Oxidation (PA) | % | 52 | --- | --- | --- |



CONTAMINATION

| | | | | | |
|----------------|-----|------|-----|-----|-----|
| Soot % | % | ● 0 | --- | --- | --- |
| Nitration (PA) | % | 64 | --- | --- | --- |
| Sulfation (PA) | % | 51 | --- | --- | --- |
| Glycol | % | NEG | --- | --- | --- |
| Fuel | % | <1.0 | --- | --- | --- |
| Silicon | ppm | ● 4 | --- | --- | --- |
| Sodium | ppm | ● 3 | --- | --- | --- |
| Potassium | ppm | ● 2 | --- | --- | --- |

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 | ● 6 | --- | --- | --- |
| Copper | ppm | ● 1 | --- | --- | --- |
| Lead | ppm | ● 0 | --- | --- | --- |
| Tin | ppm | ● 0 | --- | --- | --- |
| Aluminum | ppm | ● 1 | --- | --- | --- |
| Chromium | ppm | ● <1 | --- | --- | --- |
| Molybdenum | ppm | ● 2 | --- | --- | --- |
| Nickel | ppm | ● 1 | --- | --- | --- |
| Titanium | ppm | 0 | --- | --- | --- |
| Silver | ppm | ● <1 | --- | --- | --- |
| Manganese | ppm | ● 0 | --- | --- | --- |
| Vanadium | ppm | 0 | --- | --- | --- |



ADDITIVES

| | | | | | |
|------------|-----|--------|-----|-----|-----|
| Calcium | ppm | ● 1369 | --- | --- | --- |
| Magnesium | ppm | ● 746 | --- | --- | --- |
| Zinc | ppm | ● 804 | --- | --- | --- |
| Phosphorus | ppm | ● 712 | --- | --- | --- |
| Barium | ppm | ● <1 | --- | --- | --- |
| Boron | ppm | ● 86 | --- | --- | --- |

Depot: LIEMIS
 Unique No: 5658577
 Signed: Wes Davis
 Report Date: 17 Oct 2023



GRAPHS

