

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR LH80M 122402-1218 - Swing Drive

Sample No: LH0279323

Oil Type: CHEVRON DELO SYNTHETIC GEAR 75W90



ARCELORMITTAL LONG PRODUITS CANADA  
3185 ROUTE MARIE-VICTORIN  
CONTRECOEUR, QC  
CA J0L 1C0  
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#### SAMPLE INFORMATION

|               |             |             |             |             |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LH0279323   | LH0279419   | LH0274205   | LH0269937   |
| Sample Date   | 12 Jan 2024 | 23 Dec 2023 | 21 Oct 2023 | 19 Aug 2023 |
| Machine Hours | 16208       | 9463        | 8989        | 8585        |
| Oil Hours     | 0           | 0           | 0           | 0           |
| Oil Changed   | Changed     | Changed     | Changed     | Changed     |
| Sample Status | NORMAL      | ABNORMAL    | ABNORMAL    | ABNORMAL    |



#### OIL CONDITION

|             |     |     |     |     |     |
|-------------|-----|-----|-----|-----|-----|
| Visc @ 40°C | cSt | 106 | 105 | 104 | 105 |
|-------------|-----|-----|-----|-----|-----|



#### CONTAMINATION

|           |     |     |       |     |     |
|-----------|-----|-----|-------|-----|-----|
| Water     | %   | NEG | 0.463 | NEG | NEG |
| Silicon   | ppm | 3   | 3     | 5   | 5   |
| Sodium    | ppm | 0   | 2     | 1   | <1  |
| Potassium | ppm | <1  | 2     | 0   | <1  |



#### WEAR METALS

|            |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|
| PQ         |     | --- | --- | 0   | 0   |
| Iron       | ppm | 319 | 274 | 679 | 361 |
| Copper     | ppm | 47  | 46  | 119 | 66  |
| Lead       | ppm | <1  | 1   | 4   | 3   |
| Tin        | ppm | 2   | <1  | <1  | <1  |
| Aluminum   | ppm | <1  | <1  | <1  | <1  |
| Chromium   | ppm | 3   | 3   | 5   | 3   |
| Molybdenum | ppm | 0   | 0   | 0   | <1  |
| Nickel     | ppm | <1  | <1  | 1   | <1  |
| Titanium   | ppm | 0   | 0   | 0   | 0   |
| Silver     | ppm | 0   | 0   | <1  | 0   |
| Manganese  | ppm | 2   | 1   | 4   | 2   |
| Vanadium   | ppm | 0   | 0   | 0   | 0   |



#### ADDITIVES

|            |     |      |      |      |      |
|------------|-----|------|------|------|------|
| Calcium    | ppm | 10   | 12   | 27   | 24   |
| Magnesium  | ppm | 1    | 1    | 2    | 3    |
| Zinc       | ppm | 16   | 12   | 27   | 24   |
| Phosphorus | ppm | 1357 | 1349 | 1370 | 1453 |
| Barium     | ppm | 0    | 0    | 0    | 0    |
| Boron      | ppm | 218  | 236  | 229  | 259  |

#### Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. 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. Il n'y a aucun indice de contamination dans l'huile. Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'état de l'huile est acceptable pour la durée de service.

Depot: MITCON  
Unique No: 5710173  
Signed: Wes Davis  
Report Date: 16 Jan 2024



### GRAPHS

