

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L586 048608-1334 - Hydraulic System

Sample No: LH

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



SAMPLE INFORMATION

| Sample Number | LH | LH0249895 | LH0246547 | LH0246551 |
|---------------|-------------|-------------|-------------|-------------|
| Sample Date | 04 Dec 2023 | 12 Jul 2023 | 11 May 2023 | 30 Apr 2023 |
| Machine Hours | 20000 | 18105 | 17103 | 15000 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Not Changd | Not Changd | Changed |
| Sample Status | SEVERE | SEVERE | ABNORMAL | SEVERE |

NEXOLIA, CHAPAIS ENERGIE SEC
 140 RUE DE LA CONGENERATION
 CHAPAIS, QC
 CA G0W 1H0
 Contact: Carl Adams



OIL CONDITION

| Visc @ 40°C | cSt | 42.9 | 43.4 | 42.9 | 43.7 |
|-------------|-----|------|------|------|------|
| | | | | | |

T: (418)745-2521
 F: (418)745-3680



CONTAMINATION

| Water | % | NEG | NEG | NEG | NEG |
|-------------------|-----|----------|----------|----------|----------|
| Particles >4µm | | 33730 | 63701 | 45557 | 38800 |
| Particles >6µm | | 1222 | 2513 | 5590 | 1831 |
| Particles >14µm | | 198 | 22 | 245 | 22 |
| ISO 4406:1999 (c) | | 22/17/15 | 23/19/12 | 23/20/15 | 22/18/12 |
| Silicon | ppm | 4 | 2 | 2 | 3 |
| Sodium | ppm | <1 | <1 | <1 | <1 |
| Potassium | ppm | 1 | 2 | 1 | 1 |

Diagnosis

Nous avons pris note que l'huile a été vidangée et le filtre remplacé au moment de l'échantillonnage. Confirm the source of the lubricant being utilized for top-up/fill. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion. Il y a une légère quantité de limon (particules de 4 à 14 microns) dans l'huile. Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.



WEAR METALS

| | | | | | |
|------------|-----|-----|----|-----|-----|
| PQ | | 42 | 26 | --- | 4 |
| Iron | ppm | 147 | 91 | 34 | 111 |
| Copper | ppm | 4 | 3 | 2 | 2 |
| Lead | ppm | 2 | 3 | <1 | <1 |
| Tin | ppm | 0 | 0 | 0 | <1 |
| Aluminum | ppm | 2 | <1 | <1 | <1 |
| Chromium | ppm | 3 | 2 | 2 | 7 |
| Molybdenum | ppm | 0 | 0 | 0 | 0 |
| Nickel | ppm | <1 | 0 | 0 | 0 |
| Titanium | ppm | 0 | 0 | 0 | 0 |
| Silver | ppm | <1 | 0 | 0 | 0 |
| Manganese | ppm | 2 | 2 | <1 | 2 |
| Vanadium | ppm | 0 | 0 | 0 | <1 |



ADDITIVES

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Calcium | ppm | 147 | 87 | 244 | 99 |
| Magnesium | ppm | 1 | 2 | 4 | <1 |
| Zinc | ppm | 89 | 107 | 224 | 46 |
| Phosphorus | ppm | 181 | 205 | 307 | 179 |
| Barium | ppm | <1 | 0 | 0 | 0 |
| Boron | ppm | 2 | <1 | 4 | <1 |

Depot: CHA140CHA
 Unique No: 5694971
 Signed: Kevin Marson
 Report Date: 11 Dec 2023

LIEBHERR

CONSTRUCTION EQUIPMENT



GRAPHS

