

LIEBHERR

CONSTRUCTION EQUIPMENT



108395-1185 - Hydraulic System

Sample No: LH0277274

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



GFL Environmental - 756 - Quebec Lavoisier MRF
2244 rue Lavoisier
Quebec, QC
CA G1N 4H2
Contact: Service Manager



SAMPLE INFORMATION

| | | | | |
|---------------|-------------|-------------|-------------|-------------|
| Sample Number | LH0277274 | LH | LH0242900 | LH0192453 |
| Sample Date | 04 Jan 2024 | 20 Jun 2023 | 21 Dec 2022 | 16 Mar 2022 |
| Machine Hours | 0 | 5938 | 5183 | 3923 |
| Oil Hours | 0 | 0 | 0 | 0 |
| Oil Changed | Changed | Changed | Changed | Not Changd |
| Sample Status | NORMAL | NORMAL | ABNORMAL | ABNORMAL |



OIL CONDITION

| | | | | | |
|-------------|-----|------|------|------|------|
| Visc @ 40°C | cSt | 52.0 | 51.1 | 74.0 | 64.4 |
|-------------|-----|------|------|------|------|



CONTAMINATION

| | | | | | |
|-------------------|-----|----------|----------|----------|----------|
| Water | % | NEG | 0.016 | NEG | NEG |
| Particles >4µm | | 2350 | 4966 | 42550 | 63647 |
| Particles >6µm | | 209 | 1481 | 1450 | 1586 |
| Particles >14µm | | 15 | 110 | 36 | 29 |
| ISO 4406:1999 (c) | | 18/15/11 | 19/18/14 | 23/18/12 | 23/18/12 |
| Silicon | ppm | 1 | 2 | 4 | 4 |
| Sodium | ppm | 1 | <1 | 2 | 3 |
| Potassium | ppm | <1 | <1 | 1 | 2 |



WEAR METALS

| | | | | | |
|------------|-----|----|----|----|----|
| Iron | ppm | 3 | 3 | 7 | 11 |
| Copper | ppm | <1 | <1 | <1 | 2 |
| Lead | ppm | 0 | 0 | <1 | <1 |
| Tin | ppm | 0 | 0 | 0 | <1 |
| Aluminum | ppm | <1 | <1 | 2 | 1 |
| Chromium | ppm | <1 | <1 | <1 | 1 |
| Molybdenum | ppm | 17 | 20 | 54 | 37 |
| Nickel | ppm | 0 | <1 | <1 | <1 |
| Titanium | ppm | 0 | 0 | <1 | 0 |
| Silver | ppm | 0 | 0 | 0 | 0 |
| Manganese | ppm | 0 | 0 | <1 | <1 |
| Vanadium | ppm | 0 | 0 | 0 | 0 |



ADDITIVES

| | | | | | |
|------------|-----|-----|-----|------|------|
| Calcium | ppm | 459 | 432 | 1255 | 1310 |
| Magnesium | ppm | 326 | 347 | 928 | 695 |
| Zinc | ppm | 421 | 545 | 1049 | 919 |
| Phosphorus | ppm | 677 | 832 | 1001 | 871 |
| Barium | ppm | 0 | 0 | 0 | 0 |
| Boron | ppm | 32 | 13 | 55 | 63 |

T:
F:

Diagnosis

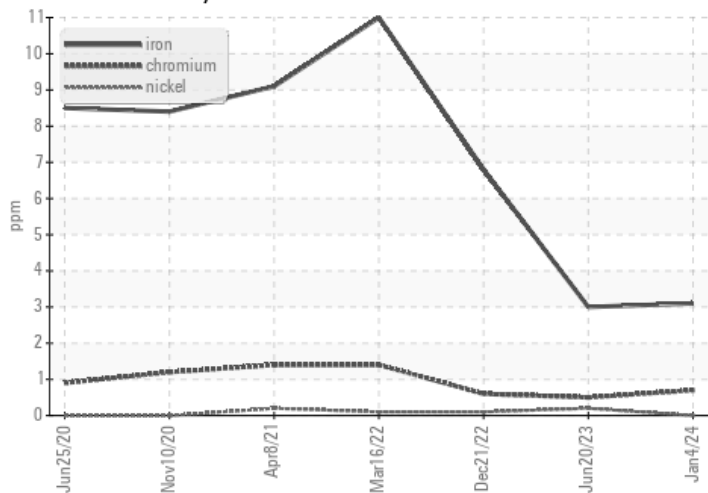
Confirm the source of the lubricant being utilized for top-up/fill. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Les taux d'usure de tous les composants sont normaux. La propreté du système est acceptable pour votre objectif de propreté ISO 4406. La propreté du système et du fluide est acceptable. 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: GFL756
Unique No: 5707886
Signed: Kevin Marson
Report Date: 08 Jan 2024

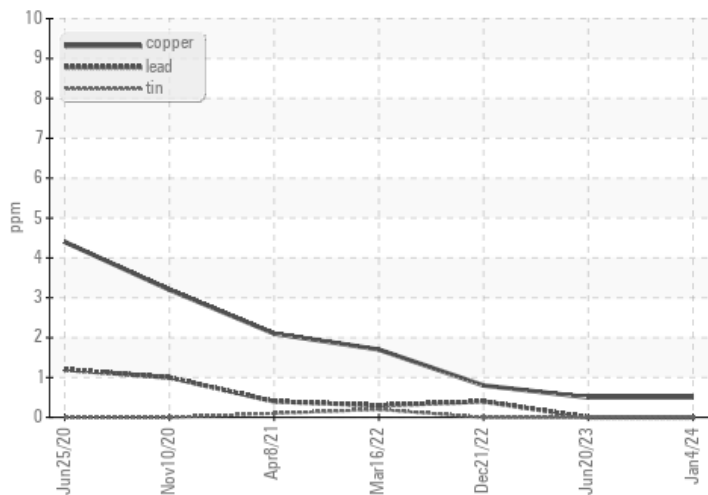


GRAPHS

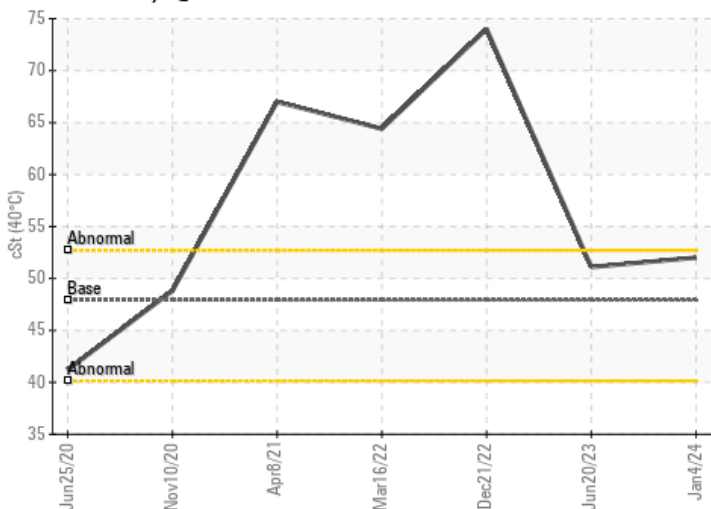
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

