

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR 111447 - Hydraulic System

Sample No: LH0250439

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



#### SAMPLE INFORMATION

Sample Number	LH0250439	---	---	---
Sample Date	05 Dec 2023	---	---	---
Machine Hours	873	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

**KELLER FOUNDATION LTD**  
 ZONE 3, ACHESON INDUSTRIAL AREA, 2-53016 HWY 60  
 ACHESON, AB  
 CA T7X 5A7  
 Contact:



#### OIL CONDITION

Visc @ 40°C	cSt	36.6	---	---	---
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T:  
F:



#### CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		4203	---	---	---
Particles >6µm		1127	---	---	---
Particles >14µm		69	---	---	---
ISO 4406:1999 (c)		19/17/13	---	---	---
Silicon	ppm	0	---	---	---
Sodium	ppm	<1	---	---	---
Potassium	ppm	<1	---	---	---

#### Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL, however, a fluid match indicates that this fluid is ISO 32 AW Hydraulic Oil. Please confirm the oil type and grade on your next sample. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The oil viscosity is lower than typical, possibly indicating the addition of lighter grade oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.



#### WEAR METALS

Iron	ppm	<1	---	---	---
Copper	ppm	8	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	0	---	---	---
Chromium	ppm	0	---	---	---
Molybdenum	ppm	0	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



#### ADDITIVES

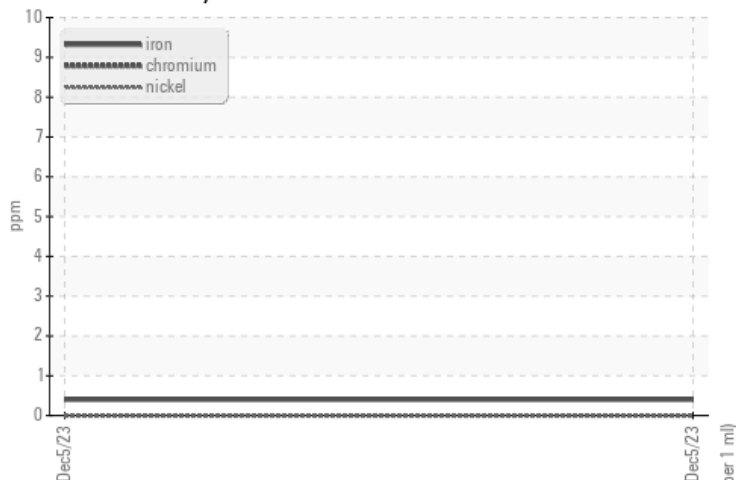
Calcium	ppm	58	---	---	---
Magnesium	ppm	<1	---	---	---
Zinc	ppm	249	---	---	---
Phosphorus	ppm	233	---	---	---
Barium	ppm	<1	---	---	---
Boron	ppm	<1	---	---	---

Depot: KEL253ACH  
 Unique No: 5750846  
 Signed: Kevin Marson  
 Report Date: 02 Apr 2024

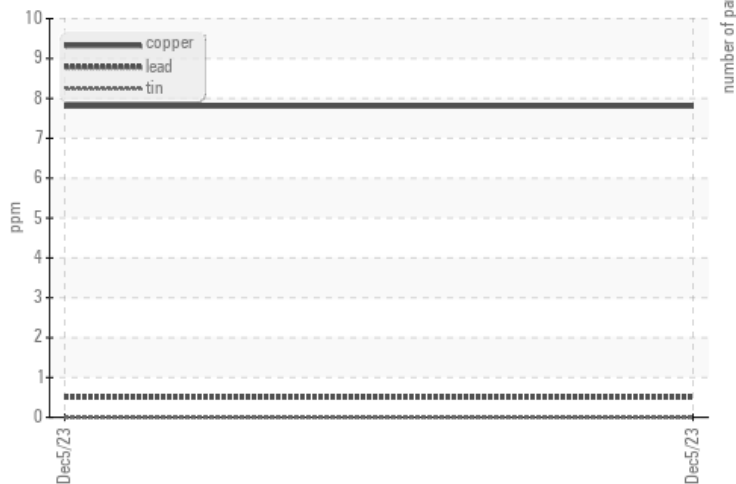


### GRAPHS

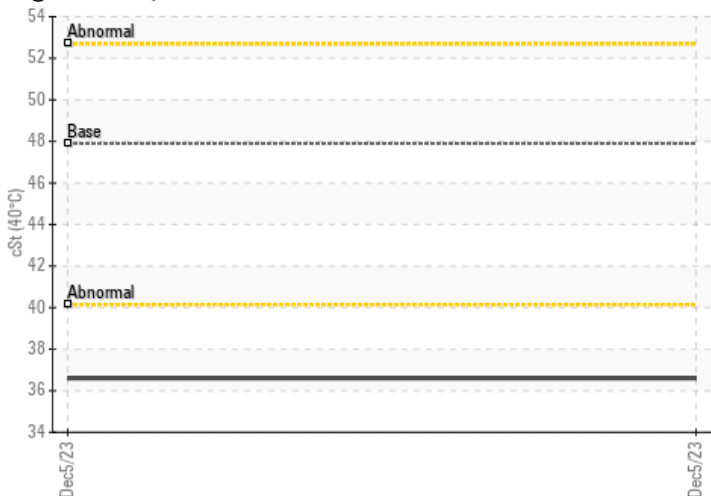
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

