

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### 954-3 - Hydraulic System

Sample No: LH0260220

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



#### SAMPLE INFORMATION

Sample Number	LH0260220	LH0242754	LH0234380	LH0224410
Sample Date	05 Jun 2023	19 Apr 2023	17 Mar 2023	30 Dec 2022
Machine Hours	0	0	0	0
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	N/A
Sample Status	ABNORMAL	ATTENTION	ATTENTION	ATTENTION

**Gerdau - Mandak Metal Processors Ltd.,**  
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#### OIL CONDITION

Visc @ 40°C	cSt	44.9	45.5	45.3	45.9



#### CONTAMINATION

Particles >4µm		78736	26969	37559	32358
Particles >6µm		5033	2653	8031	3926
Particles >14µm		142	195	1007	656
ISO 4406:1999 (c)		23/20/14	22/19/15	22/20/17	22/19/17
Silicon	ppm	<1	<1	<1	<1
Sodium	ppm	<1	<1	<1	<1
Potassium	ppm	<1	<1	0	1

#### Diagnosis

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



#### WEAR METALS

Iron	ppm	3	3	3	4
Copper	ppm	2	2	2	2
Lead	ppm	0	0	0	0
Tin	ppm	0	0	0	0
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	<1	1	2	2
Nickel	ppm	0	<1	0	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	0
Vanadium	ppm	0	0	0	0



#### ADDITIVES

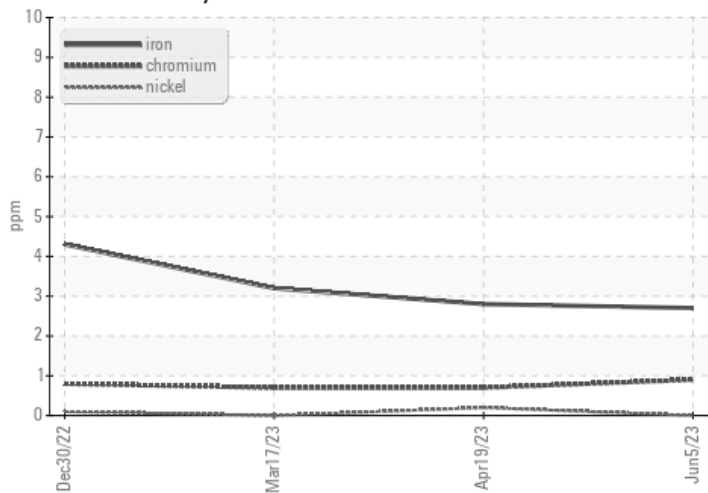
Calcium	ppm	97	111	128	133
Magnesium	ppm	36	40	42	37
Zinc	ppm	733	764	784	809
Phosphorus	ppm	602	637	671	702
Barium	ppm	0	0	0	0
Boron	ppm	3	3	2	3

Depot: MANSEL  
 Unique No: 5631897  
 Signed: Wes Davis  
 Report Date: 29 Aug 2023

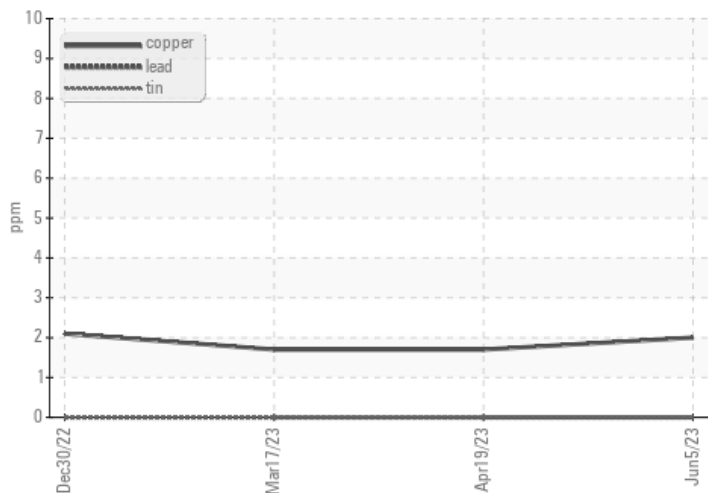


### GRAPHS

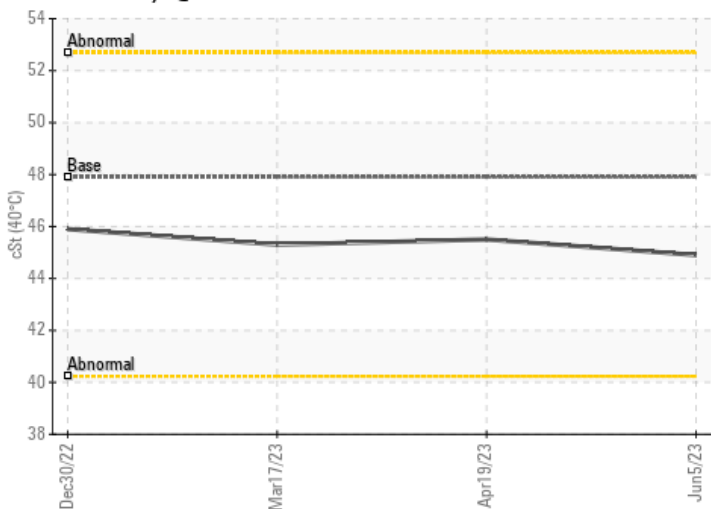
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

