

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### [(347076)] LIEBHERR L586 062518-1761 - Hydraulic System

Sample No: LH0269536

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



#### SAMPLE INFORMATION

Sample Number	LH0269536	LH0234516	LH0238543	LH0224201
Sample Date	28 Aug 2023	17 Jan 2023	20 Aug 2022	30 Mar 2022
Machine Hours	7038	5327	4090	2924
Oil Hours	0	0	0	0
Oil Changed	Changed	N/A	Not Changd	Not Changd
Sample Status	ABNORMAL	SEVERE	ABNORMAL	ABNORMAL

**MODERN CONSTRUCTION (1983) LTD.**  
 364 BRIGGS CROSS ROAD  
 STILESVILLE, NB  
 CA E1G 3G3  
 Contact: Blaine Cail  
 blaine.cail@moderngroup.ca  
 T:  
 F:



#### OIL CONDITION

Visc @ 40°C	cSt	43.0	42.1	42.6	42.9



#### CONTAMINATION

Particles >4µm		18900	35776	32534	51113
Particles >6µm		1935	845	1648	1842
Particles >14µm		128	34	52	13
ISO 4406:1999 (c)		21/18/14	22/17/12	22/18/13	23/18/11
Silicon	ppm	31	35	25	20
Sodium	ppm	2	3	3	2
Potassium	ppm	4	3	2	2



#### WEAR METALS

PQ		---	0	---	---
Iron	ppm	48	57	42	40
Copper	ppm	5	7	6	5
Lead	ppm	9	13	12	11
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	16	18	13	10
Chromium	ppm	5	5	3	3
Molybdenum	ppm	0	0	0	0
Nickel	ppm	0	<1	0	0
Titanium	ppm	<1	1	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	1	<1	<1
Vanadium	ppm	0	0	0	0



#### ADDITIVES

Calcium	ppm	651	1245	1209	1277
Magnesium	ppm	14	17	13	11
Zinc	ppm	532	707	698	683
Phosphorus	ppm	468	632	593	623
Barium	ppm	<1	0	0	<1
Boron	ppm	<1	<1	<1	2

#### Diagnosis

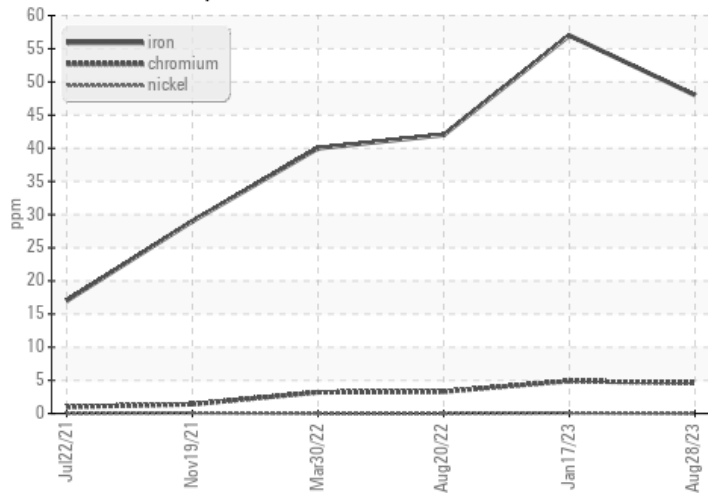
We advise that you check all areas where dirt can enter the system. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Aluminum ppm levels are noted. All other component wear rates are normal. There is a light amount of silt (particulates < 14 microns in size) present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

Depot: MODSTI  
 Unique No: 5632820  
 Signed: Kevin Marson  
 Report Date: 01 Sep 2023

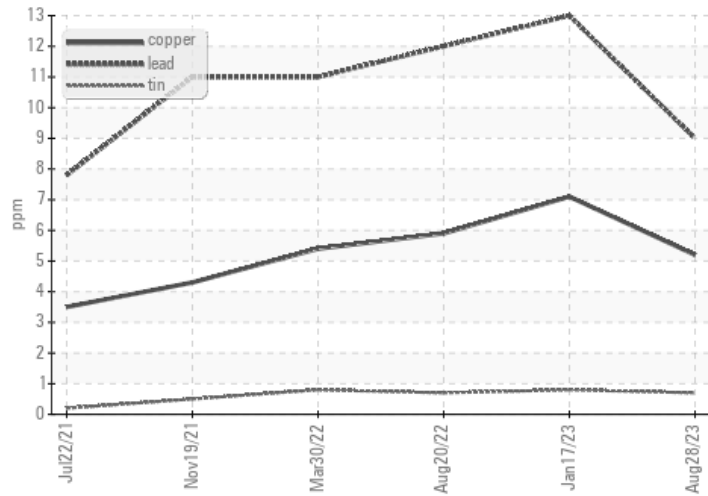


### GRAPHS

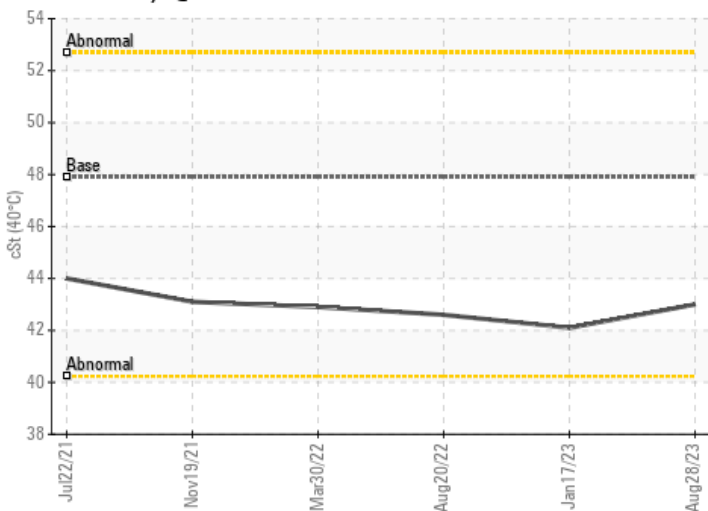
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 40°C



#### Particle Count

