

LIEBHERR

CONSTRUCTION EQUIPMENT



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

Sample No: LH0269655

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



SAMPLE INFORMATION

Sample Number	LH0269655	LH0269536	LH0234516	LH0238543
Sample Date	19 Jan 2024	28 Aug 2023	17 Jan 2023	20 Aug 2022
Machine Hours	8083	7038	5327	4090
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	N/A	Not Changd
Sample Status	SEVERE	ABNORMAL	SEVERE	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	43.1	43.0	42.1	42.6



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		52525	18900	35776	32534
Particles >6µm		2135	1935	845	1648
Particles >14µm		79	128	34	52
ISO 4406:1999 (c)		23/18/13	21/18/14	22/17/12	22/18/13
Silicon	ppm	41	31	35	25
Sodium	ppm	2	2	3	3
Potassium	ppm	5	4	3	2



WEAR METALS

PQ		0	---	0	---
Iron	ppm	60	48	57	42
Copper	ppm	5	5	7	6
Lead	ppm	9	9	13	12
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	21	16	18	13
Chromium	ppm	6	5	5	3
Molybdenum	ppm	0	0	0	0
Nickel	ppm	<1	0	<1	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	623	651	1245	1209
Magnesium	ppm	19	14	17	13
Zinc	ppm	520	532	707	698
Phosphorus	ppm	435	468	632	593
Barium	ppm	0	<1	0	0
Boron	ppm	<1	<1	<1	<1

Diagnosis

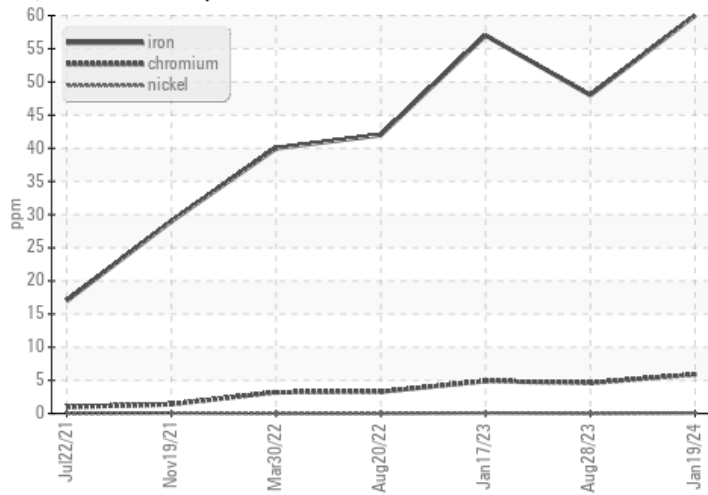
We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Chromium and iron ppm levels are abnormal. Aluminum ppm levels are noted. Ring wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion. There is a moderate 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. High amount of ingressed dirt has caused abrasive wear to the component. Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot: MODSTI
 Unique No: 5720224
 Signed: Kevin Marson
 Report Date: 26 Jan 2024

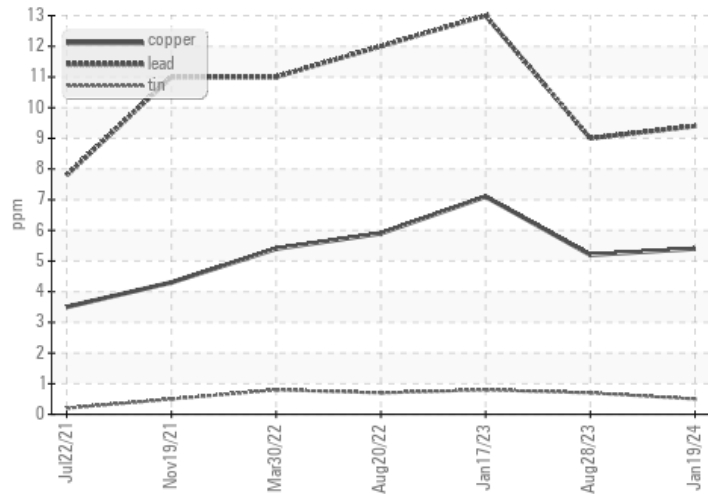


GRAPHS

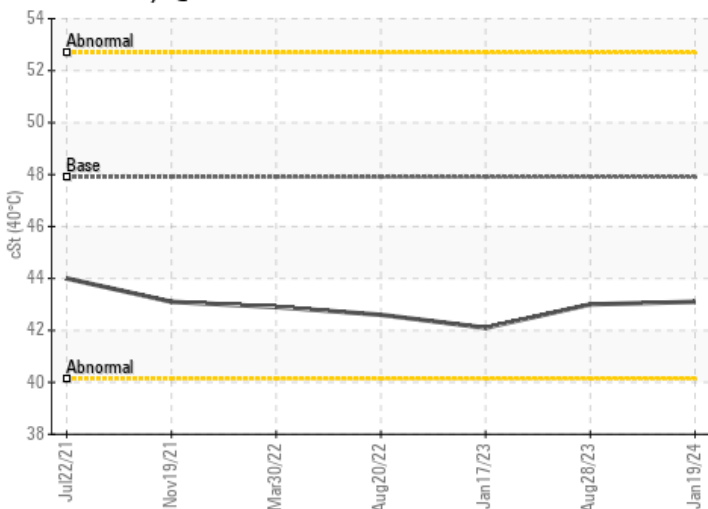
● Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



● Particle Count

