

LIEBHERR

CONSTRUCTION EQUIPMENT



046221-1465 - Hydraulic System

Sample No: LH0242938

Oil Type: PETRO CANADA HYDREX XV ALL SEASON HYDRAULIC OIL



SAMPLE INFORMATION

Sample Number	LH0242938	LH0222480	LH	LH
Sample Date	24 Jul 2023	27 Jan 2022	12 May 2021	08 Apr 2021
Machine Hours	3000	2280	1849	1785
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Changed	Not Changd
Sample Status	ABNORMAL	ABNORMAL	SEVERE	ABNORMAL

Delsan - American Iron and Metal
 2187 Montee Masson
 Laval, QC
 CA H7B 0A6
 Contact: MANNY MARQUES
 mmarques@delsan-aim.com
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	44.9	45.6	42.0	41.7
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CONTAMINATION

Particles >4µm		70677	52205	122379	51443
Particles >6µm		15748	8516	40004	4657
Particles >14µm		497	412	1083	44
ISO 4406:1999 (c)		23/21/16	23/20/16	24/23/17	23/19/13
Silicon	ppm	3	1	7	8
Sodium	ppm	2	<1	2	2
Potassium	ppm	1	1	1	1



WEAR METALS

Iron	ppm	27	7	14	12
Copper	ppm	2	1	5	3
Lead	ppm	<1	1	<1	<1
Tin	ppm	<1	<1	0	<1
Aluminum	ppm	1	1	1	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	0	0	1	1
Nickel	ppm	0	<1	<1	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	31	41	602	610
Magnesium	ppm	2	3	28	29
Zinc	ppm	54	76	428	429
Phosphorus	ppm	290	248	513	510
Barium	ppm	0	0	<1	<1
Boron	ppm	<1	1	1	<1

Diagnosis

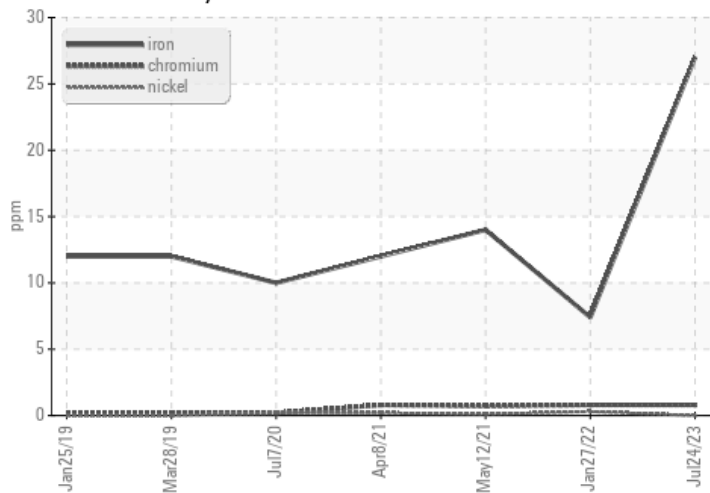
We recommend you service the filters on this component. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. Additive levels indicate the addition of a different brand, or type of oil. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Depot: DEL782MON
 Unique No: 5617441
 Signed: Kevin Marson
 Report Date: 27 Jul 2023

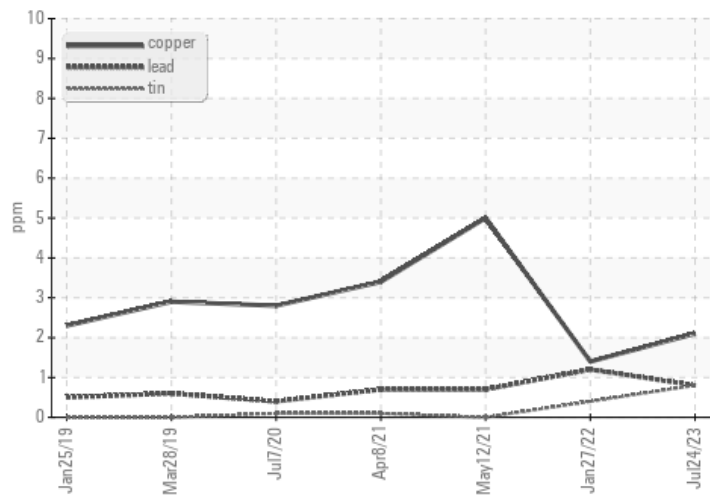


GRAPHS

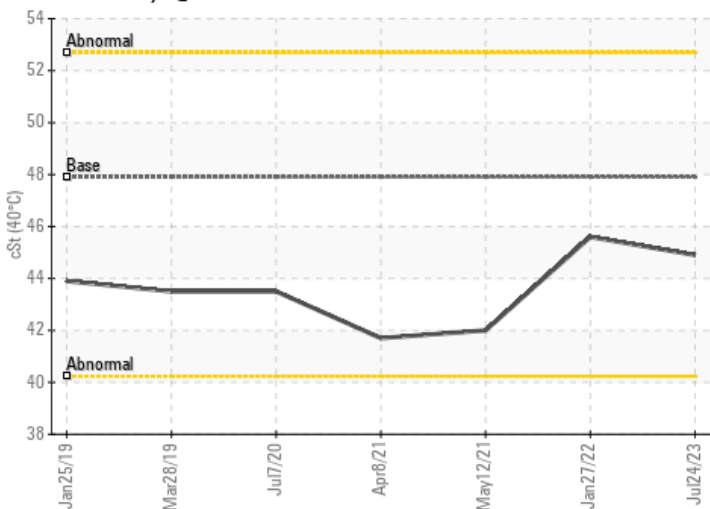
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

