

LIEBHERR

CONSTRUCTION EQUIPMENT



[EARTH BORING [572403]] LIEBHERR LB28 115607 - Hydraulic

Sample No: LH0256993

Oil Type: PETRO CANADA HYDREX MV 46



SAMPLE INFORMATION

Sample Number	LH0256993	LH0230901	LH	LH
Sample Date	03 Aug 2023	05 Jul 2022	22 Oct 2021	08 Sep 2021
Machine Hours	9018	7685	6721	6478
Oil Hours	0	0	0	0
Oil Changed	N/A	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

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 Richmond, BC
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 T:
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OIL CONDITION

Visc @ 40°C	cSt	28.2	28.2	28.2	28.2
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CONTAMINATION

Particles >4µm		4977	4100	2554	5422
Particles >6µm		1268	972	542	1004
Particles >14µm		50	101	48	46
ISO 4406:1999 (c)		19/17/13	19/17/14	19/16/13	20/17/13
Silicon	ppm	2	2	2	2
Sodium	ppm	<1	<1	<1	<1
Potassium	ppm	<1	<1	1	<1

Diagnosis

Resample at the next service interval to monitor. 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. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. The condition of the oil is acceptable for the time in service.



WEAR METALS

Iron	ppm	5	3	3	3
Copper	ppm	10	8	8	8
Lead	ppm	2	2	2	2
Tin	ppm	0	0	<1	<1
Aluminum	ppm	<1	<1	<1	<1
Chromium	ppm	0	0	0	0
Molybdenum	ppm	1	<1	1	1
Nickel	ppm	<1	0	<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

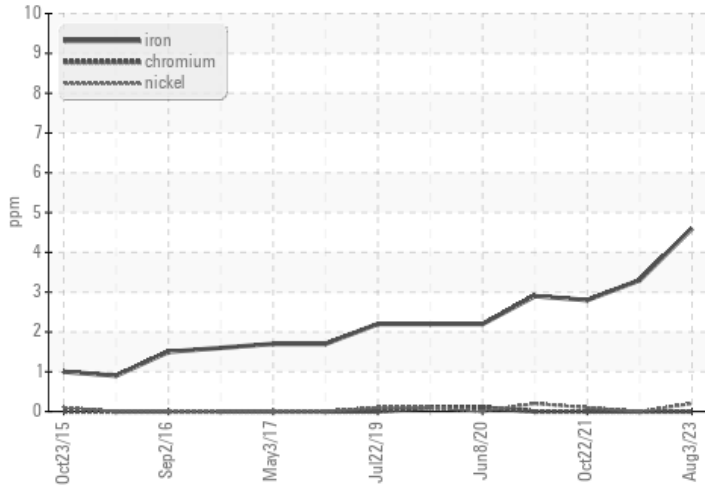
Calcium	ppm	55	52	48	51
Magnesium	ppm	2	2	2	1
Zinc	ppm	313	298	295	297
Phosphorus	ppm	281	254	262	262
Barium	ppm	0	0	0	0
Boron	ppm	1	<1	1	1

Depot: LIERIC
 Unique No: 5620440
 Signed: Kevin Marson
 Report Date: 14 Aug 2023

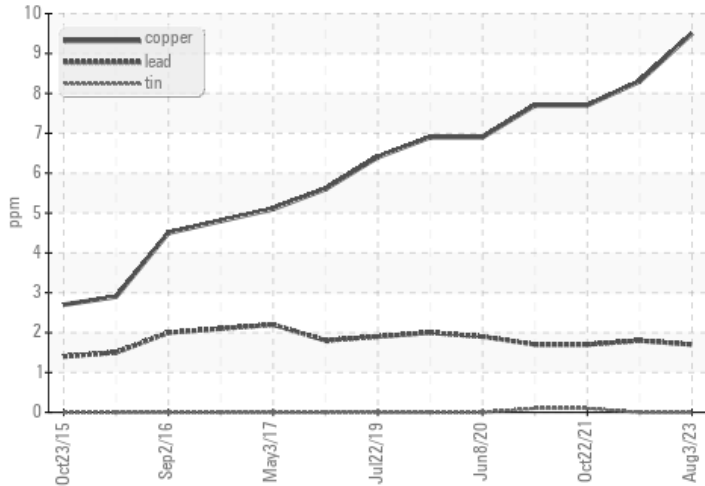


GRAPHS

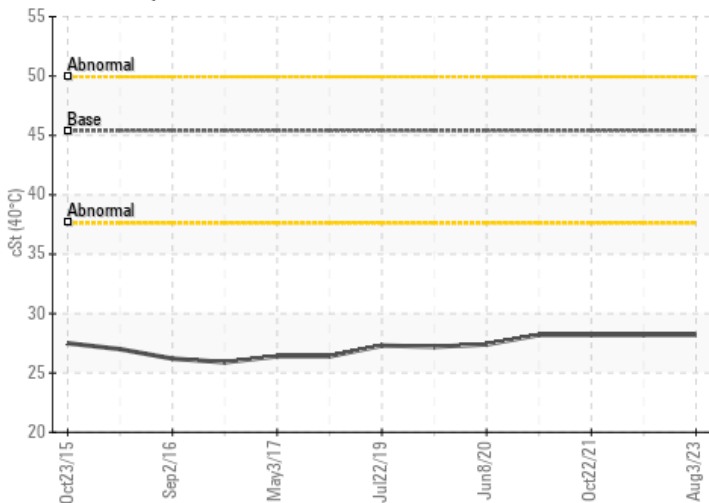
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Particle Count

