

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L556 046708-1332 - Hydraulic System

Sample No: LH0268187

Oil Type: CHEVRON RANDO HD 46



SAMPLE INFORMATION

Sample Number	LH0268187	LH0245006	LH0207737	LH0185335
Sample Date	09 Feb 2024	09 Feb 2023	23 Nov 2021	11 Jun 2021
Machine Hours	10214	9080	7922	7167
Oil Hours	0	0	0	0
Oil Changed	Not Changd	Not Changd	Not Changd	N/A
Sample Status	ABNORMAL	NORMAL	ABNORMAL	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	43.4	43.2	41.5	41.3
Acid Number (AN)	mg KOH/g	0.44	0.51	0.558	0.603



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		---	14685	53568	159767
Particles >6µm		---	620	18629	48689
Particles >14µm		---	9	1869	238
ISO 4406:1999 (c)		---	21/16/10	23/21/18	24/23/15
Silicon	ppm	2	<1	0	1
Sodium	ppm	<1	0	<1	<1
Potassium	ppm	<1	<1	0	0

Diagnosis

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	3	2	1	16
Copper	ppm	0	<1	<1	3
Lead	ppm	0	0	0	3
Tin	ppm	0	0	0	<1
Aluminum	ppm	<1	0	0	<1
Chromium	ppm	<1	<1	<1	6
Molybdenum	ppm	4	5	2	4
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	0	0	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

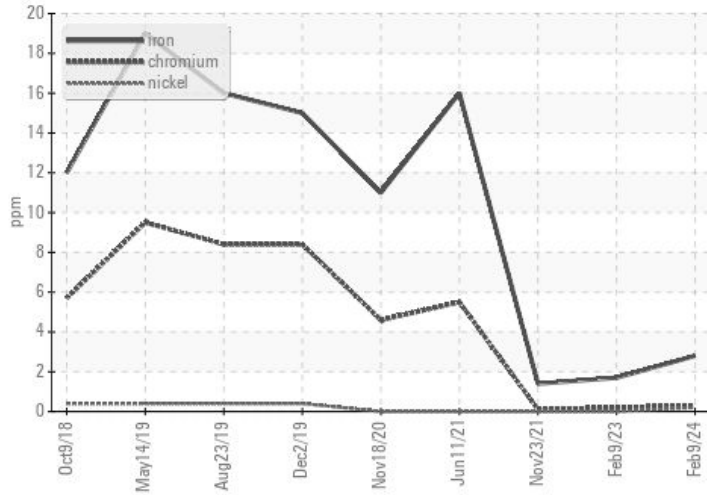
Calcium	ppm	132	137	109	301
Magnesium	ppm	42	42	17	20
Zinc	ppm	501	458	417	423
Phosphorus	ppm	380	349	374	336
Barium	ppm	0	2	0	0
Boron	ppm	11	9	3	11

Depot: LEC007
 Unique No: 10876151
 Signed: Jonathan Hester
 Report Date: 15 Feb 2024

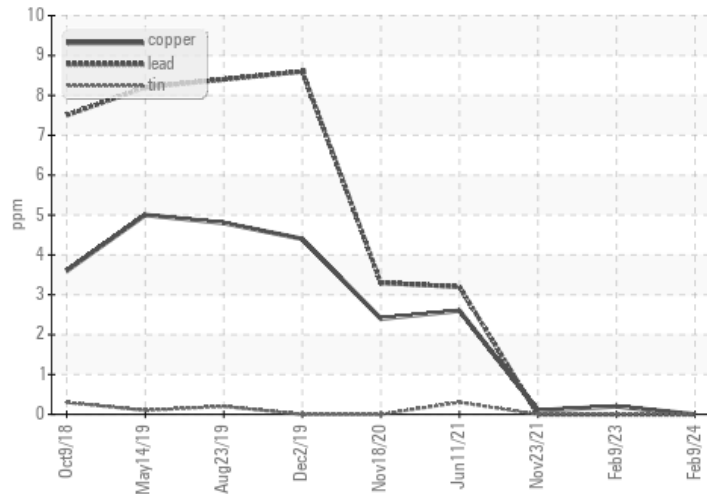


GRAPHS

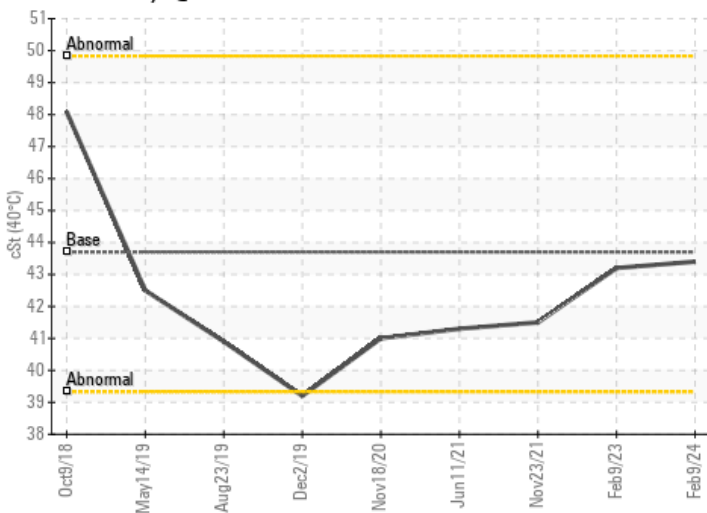
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

