

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LH110 1227-155752 - Front Right Wheel Hub

Sample No: LH0267544

Oil Type: GEAR OIL SAE 80W90



KINDER MORGAN
4301 IVERSON
TRINITY, AL
US 35601
Contact: CHIP OAKES

T: (256)350-0006
F: (256)355-5250



Sample Information

Sample Number	LH0267544	LH0280588	LH0280588	LH0280577
Sample Date	20 May 2024	18 Apr 2024	19 Mar 2024	20 Feb 2024
Machine Hours	2578	1980	1544	1022
Oil Hours	547	0	0	0
Oil Changed	Not Changd	Changed	Not Changd	Changed
Sample Status	ATTENTION	NORMAL	ABNORMAL	NORMAL



Oil Condition

Visc @ 40°C	cSt	97.3	116	122	173



Contamination

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	5	7	4	10
Sodium	ppm	5	0	0	3
Potassium	ppm	2	0	2	0



Wear Metals

Iron	ppm	31	40	23	46
Copper	ppm	3	0	<1	0
Lead	ppm	0	0	<1	0
Tin	ppm	0	0	1	0
Aluminum	ppm	2	<1	1	<1
Chromium	ppm	<1	<1	<1	0
Molybdenum	ppm	5	2	2	0
Nickel	ppm	<1	0	<1	0
Titanium	ppm	<1	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	<1	<1	1
Vanadium	ppm	<1	0	<1	<1



Additives

Calcium	ppm	217	166	187	132
Magnesium	ppm	40	0	6	0
Zinc	ppm	153	83	96	13
Phosphorus	ppm	340	450	427	1448
Barium	ppm	0	0	0	0
Boron	ppm	8	1	1	4

Diagnosis

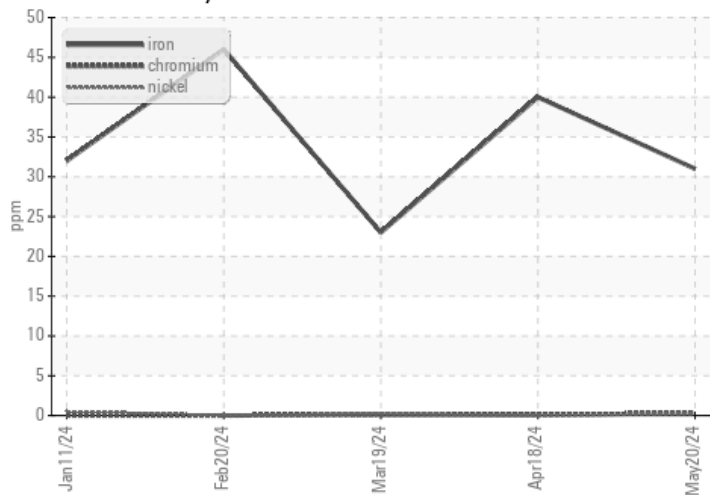
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. Confirm oil type.

Depot: KINTRI
Unique No: 11049357
Signed: Don Baldrige
Report Date: 30 May 2024

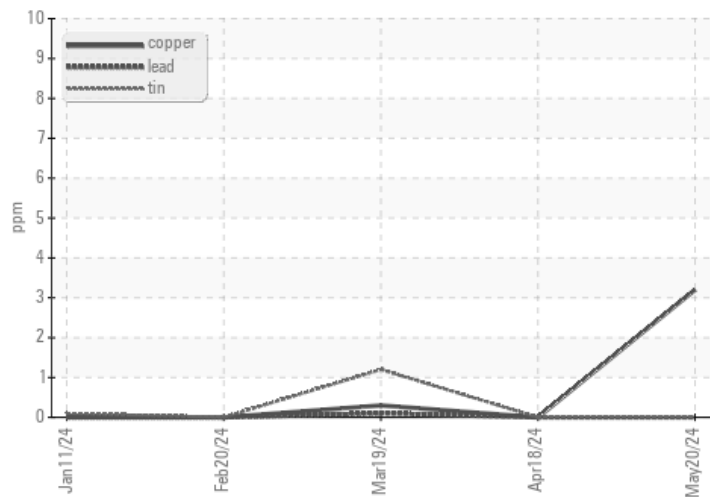


Graphs

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C

