

LIEBHERR

CONSTRUCTION EQUIPMENT



[[INGRAM BARGE]] LIEBHERR LH110CP 134678-1228 - Diesel E

Sample No: LH0243283

Oil Type: NOT GIVEN



SAMPLE INFORMATION

Sample Number	LH0243283	LH0244565	LH0243196	LH0190575
Sample Date	10 Jul 2023	16 Mar 2023	28 Dec 2022	31 May 2022
Machine Hours	3458	2952	2465	1001
Oil Hours	0	0	0	500
Oil Changed	Changed	Changed	N/A	N/A
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL

RECO EQUIPMENT INC.

1040 REED DRIVE
 MONROE, OH
 US 45050
 Contact: Eric Hansen
 ehansen@recoequip.com
 T: (513)539-5255
 F: (513)539-5256



OIL CONDITION

Visc @ 100°C	cSt	11.3	11.2	11.4	11.9
Base Number (BN)	mg KOH/g	14.1	14.9	11.4	12.5
Oxidation (PA)	%	52	51	51	76



CONTAMINATION

Soot %	%	0.1	0.2	0.1	0.1
Nitration (PA)	%	115	114	113	118
Sulfation (PA)	%	46	45	45	56
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	2.1	<1.0	<1.0	1.3
Silicon	ppm	7	8	8	9
Sodium	ppm	2	<1	2	3
Potassium	ppm	2	3	3	0



WEAR METALS

Iron	ppm	9	9	10	15
Copper	ppm	2	1	2	8
Lead	ppm	<1	0	<1	1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	3	4	4	3
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	1	<1	<1	9
Nickel	ppm	0	<1	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	4650	4316	4369	3845
Magnesium	ppm	30	22	28	156
Zinc	ppm	1281	1132	1225	1122
Phosphorus	ppm	1081	961	982	928
Barium	ppm	0	0	0	3
Boron	ppm	216	288	217	227

Diagnosis

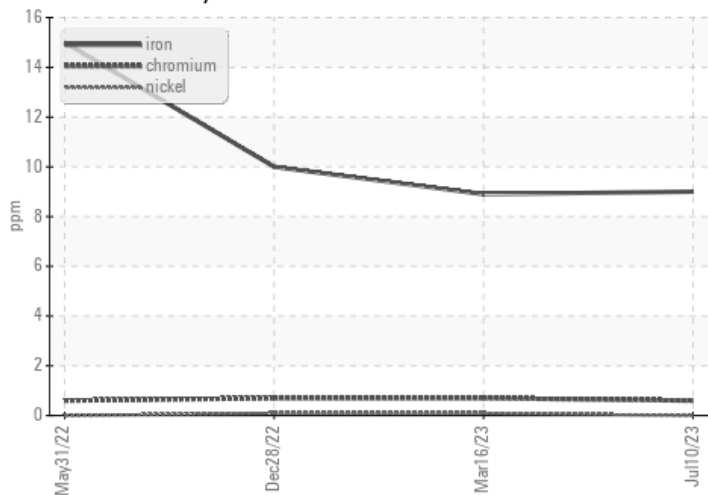
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

Depot: LEC0075
 Unique No: 10559759
 Signed: Wes Davis
 Report Date: 17 Jul 2023

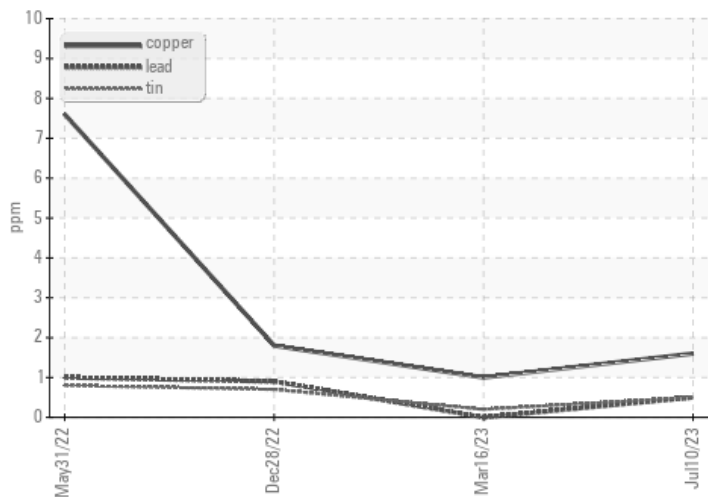


GRAPHS

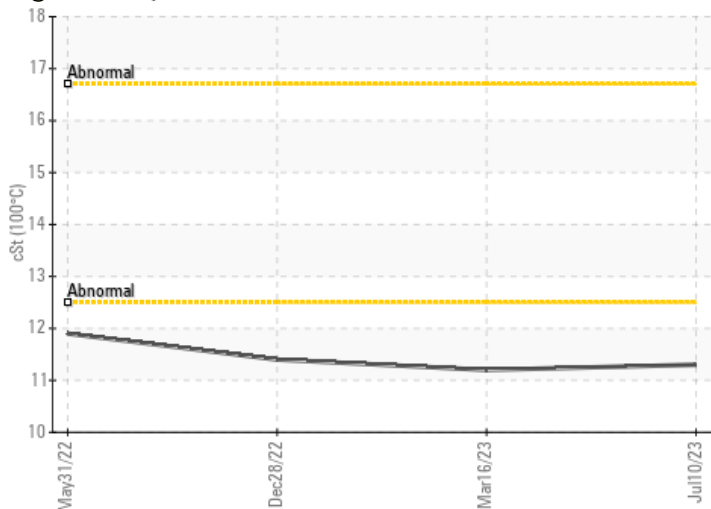
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

