

LIEBHERR

CONSTRUCTION EQUIPMENT



[[IMPALA TERMINALS]] LIEBHERR PR776 022561-1296 - Diese

Sample No: LH0254056

Oil Type: LIEBHERR



SAMPLE INFORMATION

Sample Number	LH0254056	LH0264696	LH0254059	LH0254060
Sample Date	07 Nov 2023	19 Sep 2023	22 Apr 2023	21 Apr 2023
Machine Hours	2177	1896	1162	1162
Oil Hours	0	0	0	0
Oil Changed	N/A	N/A	Changed	Changed
Sample Status	NORMAL	NORMAL	ABNORMAL	ABNORMAL

STATE MACHINERY
 160 WEST AIRLINE DR
 KENNER, LA
 US 70062
 Contact: MICHELLE SIMMONS
 MSIMMONS@STATEMACHINERY.COM
 T: x:
 F: x:



OIL CONDITION

Visc @ 100°C	cSt	12.4	12.5	11.2	11.3
Base Number (BN)	mg KOH/g	10.5	13.8	6.5	6.3
Oxidation (PA)	%	57	53	80	81



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	105	103	79	78
Sulfation (PA)	%	51	50	63	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	0.6	0.6
Silicon	ppm	8	6	6	6
Sodium	ppm	30	6	2	2
Potassium	ppm	11	4	<1	<1



WEAR METALS

Iron	ppm	15	10	10	10
Copper	ppm	46	39	217	214
Lead	ppm	1	<1	2	2
Tin	ppm	<1	<1	1	1
Aluminum	ppm	3	3	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	9	1	8	8
Nickel	ppm	1	0	0	0
Titanium	ppm	<1	<1	1	1
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	1	1
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	3934	3766	1428	1406
Magnesium	ppm	188	149	757	747
Zinc	ppm	1168	1065	835	820
Phosphorus	ppm	1043	883	690	676
Barium	ppm	10	<1	0	0
Boron	ppm	205	170	54	54

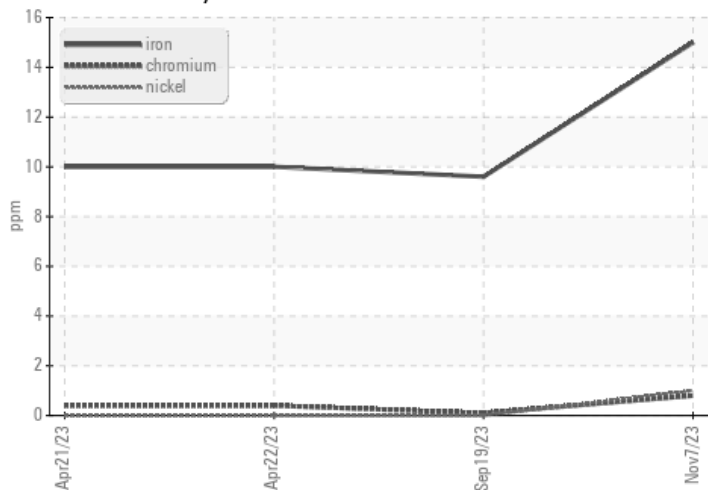
Diagnosis
 Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: STAKEN
Unique No: 10752349
Signed: Jonathan Hester
Report Date: 21 Nov 2023

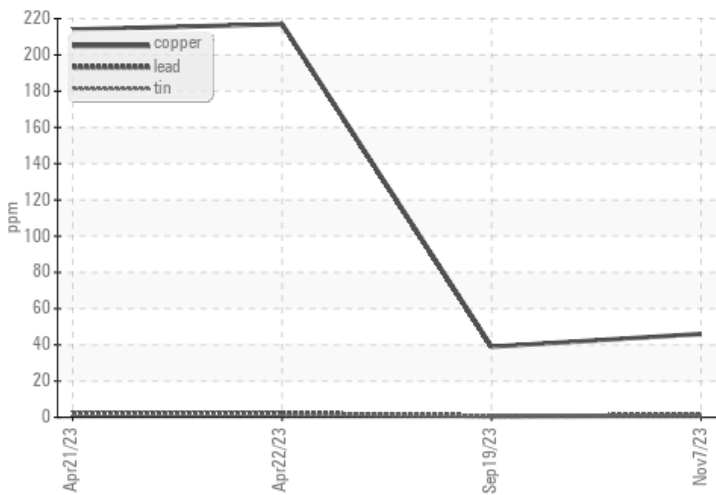


GRAPHS

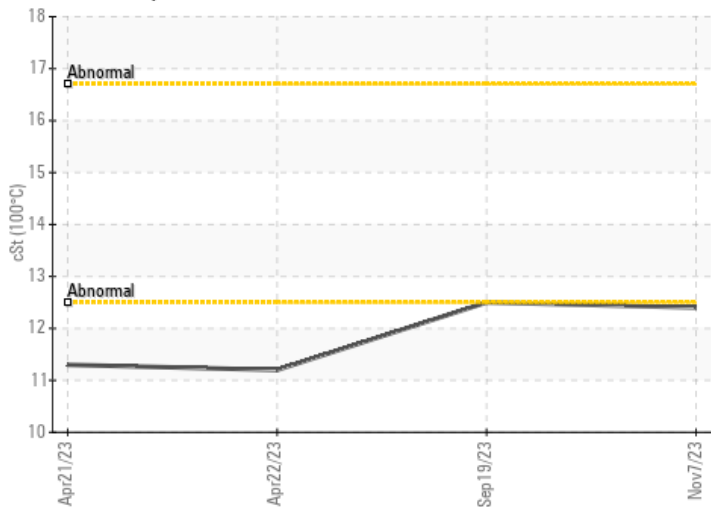
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

