

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR756 1312-17193 - Diesel Engine

Sample No: LH0243297

Oil Type: LIEBHERR MOTOROIL 5W30



CITY OF RIVERVIEW
20863 GRANGE ROAD
RIVERVIEW, MI
US 48193
Contact: Service Manager

T:
F:

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.



SAMPLE INFORMATION

Sample Number	LH0243297	LHMC131879	LHMC112738	LHMC140843
Sample Date	07 Jul 2023	07 Oct 2021	11 Jun 2021	01 Feb 2021
Machine Hours	9943	7024	6490	6009
Oil Hours	983	1015	481	1870
Oil Changed	Changed	Not Changd	Not Changd	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL



OIL CONDITION

Visc @ 100°C	cSt	11.8	11.9	12.0	12.1
Base Number (BN)	mg KOH/g	11.3	---	---	---
Oxidation (PA)	%	70	77	64	76



CONTAMINATION

Water	%	---	0.114	0.101	---
Soot %	%	0.2	0.2	0.1	0.2
Nitration (PA)	%	136	157	138	144
Sulfation (PA)	%	60	63	55	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	11	12	10	7
Sodium	ppm	2	4	3	4
Potassium	ppm	<1	8	4	7



WEAR METALS

Iron	ppm	22	26	16	20
Copper	ppm	3	5	3	3
Lead	ppm	<1	3	<1	<1
Tin	ppm	1	1	<1	<1
Aluminum	ppm	6	7	4	4
Chromium	ppm	2	2	1	2
Molybdenum	ppm	1	<1	<1	<1
Nickel	ppm	0	0	0	<1
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	<1	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	<1	0	0



ADDITIVES

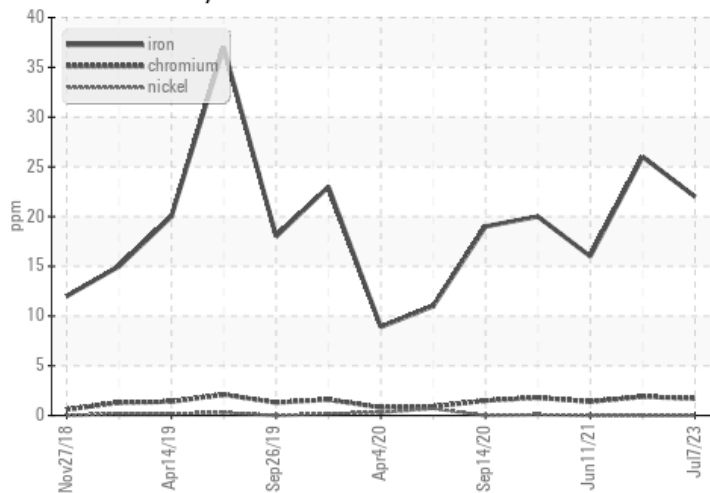
Calcium	ppm	4692	4957	4974	4461
Magnesium	ppm	31	31	35	24
Zinc	ppm	1268	1293	1300	1260
Phosphorus	ppm	1082	1040	1157	1066
Barium	ppm	0	0	0	0
Boron	ppm	242	229	261	190

Depot: CITRIVMI
Unique No: 10551714
Signed: Wes Davis
Report Date: 12 Jul 2023

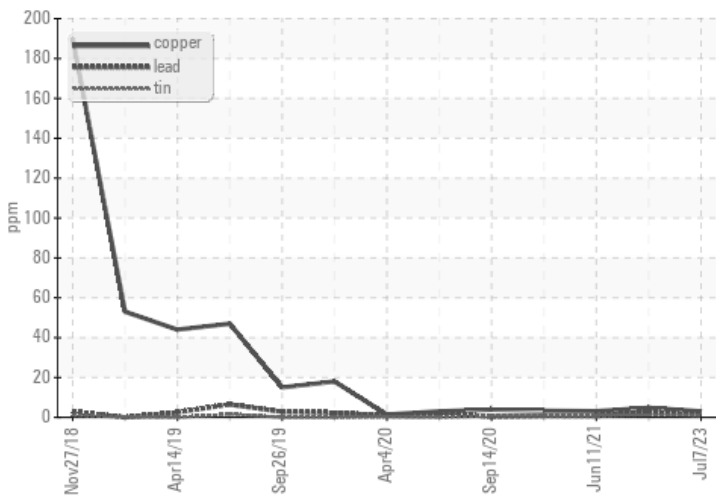


GRAPHS

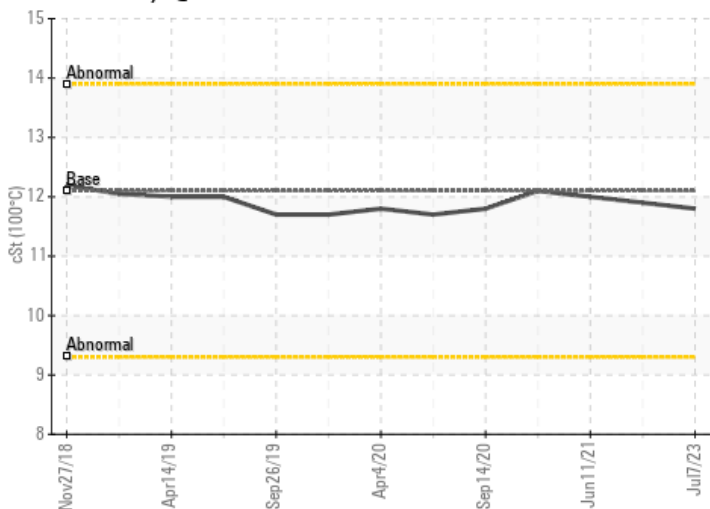
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

