

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR L586 032994-461 - Diesel Engine

Sample No: LH0268486

Oil Type: LIEBHERR MOTOROIL 10W-40 LOW ASH



SAMPLE INFORMATION

Sample Number	LH0268486	LH0264101	LH0220135	LH0229348
Sample Date	26 Dec 2023	06 Jul 2023	28 Feb 2023	12 Jul 2022
Machine Hours	11060	10350	9819	8606
Oil Hours	710	500	1000	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL

TT & E IRON

1529 WEST GARNER RD
GARNER, NC
US 27529
Contact: MICHAEL STANCIL
culaterprowler@aol.com
T: (919)524-4326
F:



OIL CONDITION

Visc @ 100°C	cSt	14.0	14.4	14.2	14.3
Base Number (BN)	mg KOH/g	7.4	7.8	6.1	8.4
Oxidation (PA)	%	77	78	87	78



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	1.3	1.4	2.3	1.4
Nitration (PA)	%	81	83	93	84
Sulfation (PA)	%	58	59	68	58
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	10	8	6
Sodium	ppm	19	5	7	6
Potassium	ppm	3	4	3	2



WEAR METALS

Iron	ppm	10	19	26	12
Copper	ppm	<1	2	2	<1
Lead	ppm	1	1	2	1
Tin	ppm	<1	<1	<1	<1
Aluminum	ppm	2	3	3	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	<1	4	4	5
Nickel	ppm	0	<1	0	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	<1
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	<1	0



ADDITIVES

Calcium	ppm	1307	1545	1467	1476
Magnesium	ppm	827	901	863	803
Zinc	ppm	999	1069	920	863
Phosphorus	ppm	865	960	774	735
Barium	ppm	0	0	0	0
Boron	ppm	62	99	49	76

Diagnosis

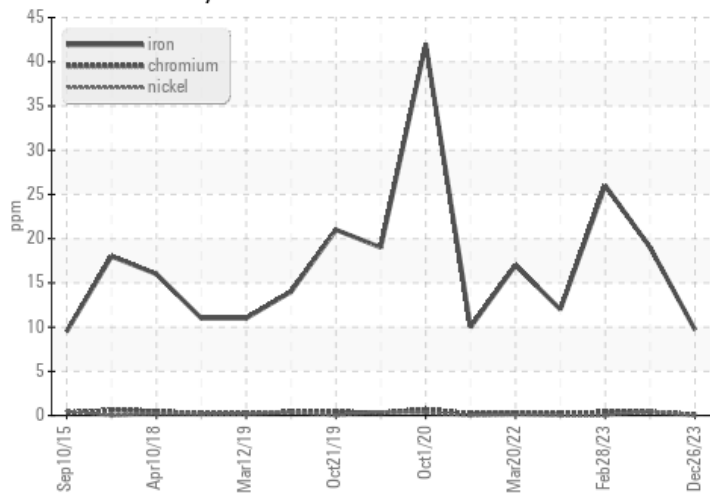
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: TTENEW
Unique No: 10816681
Signed: Wes Davis
Report Date: 04 Jan 2024

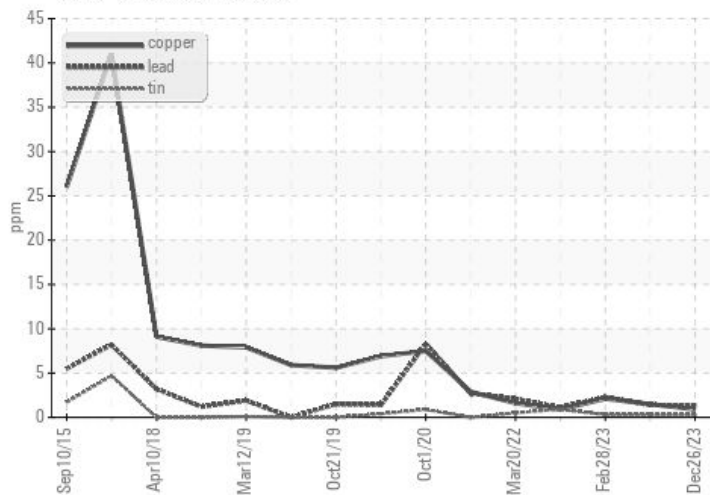


GRAPHS

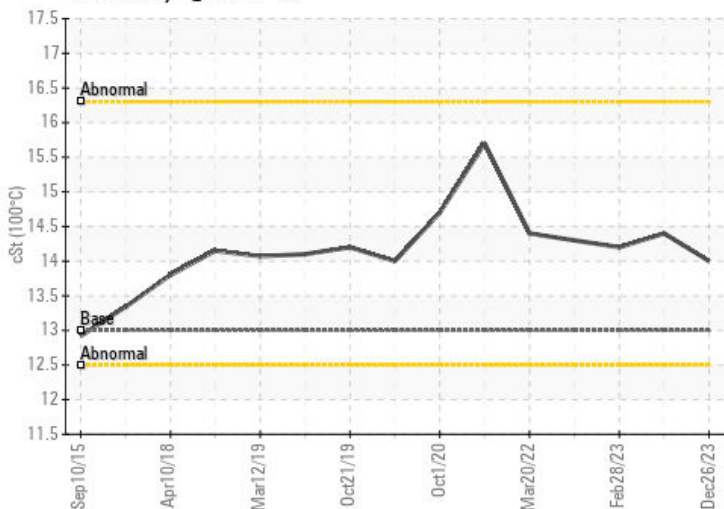
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

