

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR PR766 021682-1421 - Diesel Engine

Sample No: LH0254162

Oil Type: DIESEL ENGINE OIL SAE 5W30



SAMPLE INFORMATION

Sample Number	LH0254162	LH0254161	---	---
Sample Date	28 Dec 2023	28 Nov 2023	---	---
Machine Hours	11118	10573	---	---
Oil Hours	250	250	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

INTERNATIONAL PAPER

601 COUNTY RD 78
SELMA, AL
US 36703
Contact: JERRY BROWN



OIL CONDITION

Visc @ 100°C	cSt	12.4	11.2	---	---
Base Number (BN)	mg KOH/g	10.6	9.9	---	---
Oxidation (PA)	%	46	50	---	---

T: (334)418-5599
F: (334)418-5582

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 acceptable for the time in service.



CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	0	0.1	---	---
Nitration (PA)	%	59	79	---	---
Sulfation (PA)	%	46	47	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	15	8	---	---
Sodium	ppm	5	0	---	---
Potassium	ppm	4	4	---	---



WEAR METALS

Iron	ppm	6	8	---	---
Copper	ppm	9	200	---	---
Lead	ppm	1	<1	---	---
Tin	ppm	<1	<1	---	---
Aluminum	ppm	2	2	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	<1	<1	---	---
Nickel	ppm	<1	<1	---	---
Titanium	ppm	<1	<1	---	---
Silver	ppm	0	<1	---	---
Manganese	ppm	2	1	---	---
Vanadium	ppm	0	0	---	---



ADDITIVES

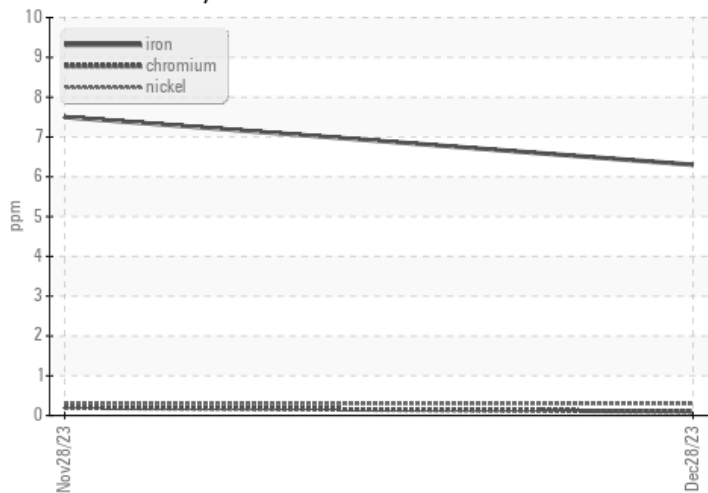
Calcium	ppm	2207	2379	---	---
Magnesium	ppm	602	474	---	---
Zinc	ppm	997	950	---	---
Phosphorus	ppm	858	806	---	---
Barium	ppm	34	19	---	---
Boron	ppm	161	149	---	---

Depot: INTSELLH
Unique No: 10819389
Signed: Don Baldrige
Report Date: 09 Jan 2024

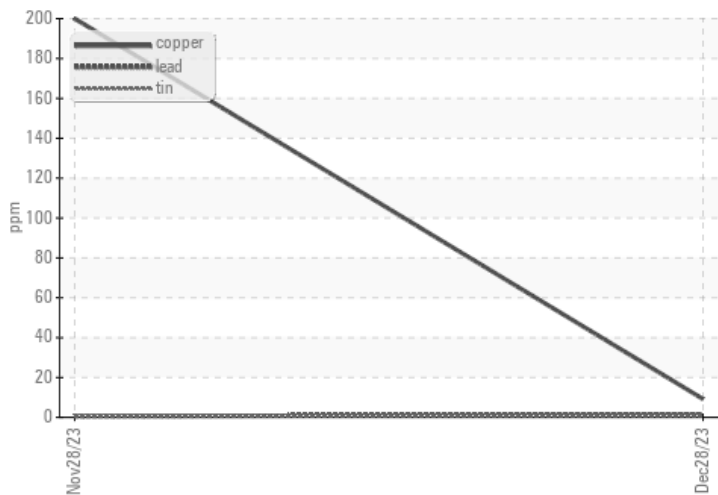


GRAPHS

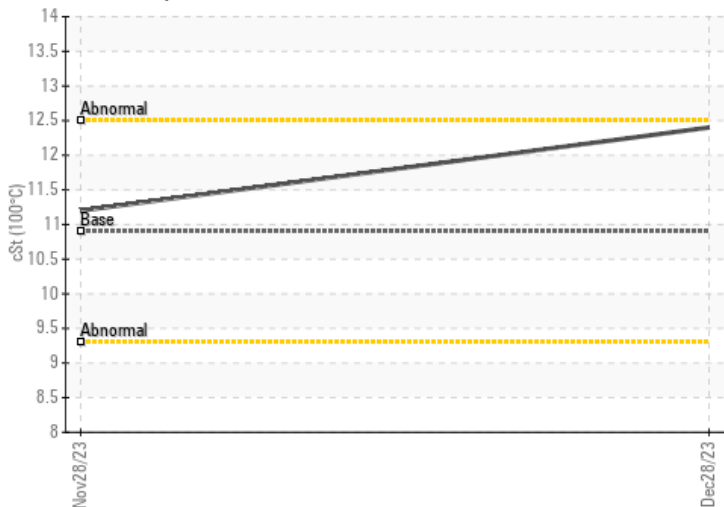
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

