LIEBHERR
CONSTRUCTION EQUIPMENT

[[ARRP]] SAKAI SW770HF 10211 - Diesel Engine

Sample No: LH0258855

Oil Type: DIESEL ENGINE OIL SAE 15W40

FINKBINER EQUIPMENT CO.
15 W 400 N FRONTAGE RD
BURR RIDGE, IL
US 60527
Contact: TROY MILLER
tmiller@finkbiner.com
T: (630)654-3700
F: (630)654-3792

SAMPLE INFORMATION

Sample Number		**LH0258855**	---	---	---
Sample Date		**19 Feb 2024**	---	---	---
Machine Hours		**747**	---	---	---
Oil Hours		**500**	---	---	---
Oil Changed		**Changed**	---	---	---
Sample Status		**NORMAL**	---	---	---

OIL CONDITION

Visc @ 100°C	cSt	**12.3**	---	---	---
Base Number (BN)	mg KOH/g	**8.5**	---	---	---
Oxidation (PA)	%	**49**	---	---	---

CONTAMINATION

Water	%	**NEG**	---	---	---
Soot %	%	**0.1**	---	---	---
Nitration (PA)	%	**55**	---	---	---
Sulfation (PA)	%	**48**	---	---	---
Glycol	%	**NEG**	---	---	---
Fuel	%	**0.3**	---	---	---
Silicon	ppm	**10**	---	---	---
Sodium	ppm	**1**	---	---	---
Potassium	ppm	**<1**	---	---	---

WEAR METALS

Iron	ppm	**11**	---	---	---
Copper	ppm	**11**	---	---	---
Lead	ppm	**<1**	---	---	---
Tin	ppm	**0**	---	---	---
Aluminum	ppm	**6**	---	---	---
Chromium	ppm	**0**	---	---	---
Molybdenum	ppm	**58**	---	---	---
Nickel	ppm	**0**	---	---	---
Titanium	ppm	**0**	---	---	---
Silver	ppm	**0**	---	---	---
Manganese	ppm	**<1**	---	---	---
Vanadium	ppm	**0**	---	---	---

ADDITIVES

Calcium	ppm	**2020**	---	---	---
Magnesium	ppm	**181**	---	---	---
Zinc	ppm	**1080**	---	---	---
Phosphorus	ppm	**927**	---	---	---
Barium	ppm	**0**	---	---	---
Boron	ppm	**153**	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.Metal levels are typical for a new component breaking in. Fuel content negligible. 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: LEC0033
Unique No: 10926522
Signed: Wes Davis
Report Date: 15 Mar 2024

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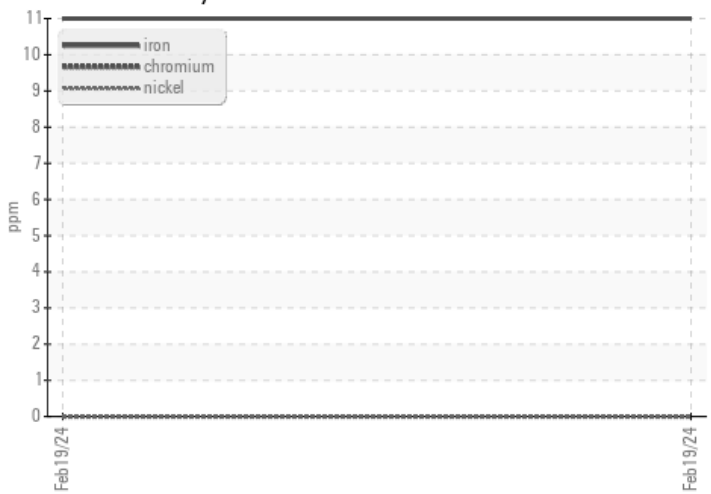
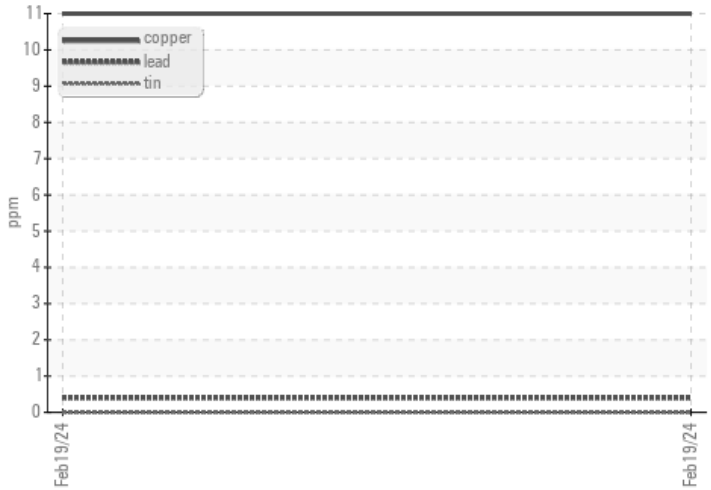
GRAPHS

Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C

Base Number