

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### ASTEC FT4250 416898 - Diesel Engine

Sample No: LH0258846

Oil Type: DIESEL ENGINE OIL SAE 15W40



#### Sample Information

Sample Number	LH0258846	LH0235931	LH0217340	LHMC104981
Sample Date	29 Feb 2024	03 Oct 2022	20 May 2022	26 Feb 2021
Machine Hours	7106	5757	5172	3979
Oil Hours	500	500	0	500
Oil Changed	Changed	Changed	N/A	Changed
Sample Status	NORMAL	NORMAL	SEVERE	NORMAL

#### MIDDLE RIVER MARINE

1771 SOUTH TORRENCE AVE  
CHICAGO, IL

US 60617

Contact: Scott Molitor

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#### Oil Condition

Visc @ 100°C	cSt	12.9	12.8	12.6	12.7
Base Number (BN)	mg KOH/g	5.5	5.4	6.5	---
Oxidation (PA)	%	69	116	93	89



#### Contamination

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.4	0.6	0.4	0.6
Nitration (PA)	%	86	116	109	98
Sulfation (PA)	%	59	82	71	69
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	6	16	106	6
Sodium	ppm	4	4	6	2
Potassium	ppm	1	2	7	9



#### Wear Metals

Iron	ppm	20	39	110	22
Copper	ppm	3	7	17	4
Lead	ppm	<1	2	4	0
Tin	ppm	<1	1	3	0
Aluminum	ppm	5	6	27	3
Chromium	ppm	1	2	8	<1
Molybdenum	ppm	72	62	79	80
Nickel	ppm	0	0	1	0
Titanium	ppm	<1	<1	2	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	3	<1
Vanadium	ppm	0	0	<1	0



#### Additives

Calcium	ppm	1951	1893	2103	1768
Magnesium	ppm	333	355	402	514
Zinc	ppm	1121	1037	1026	1056
Phosphorus	ppm	902	813	816	836
Barium	ppm	0	0	3	0
Boron	ppm	37	28	43	67

#### Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. 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: MIDCHIL

Unique No: 11003133

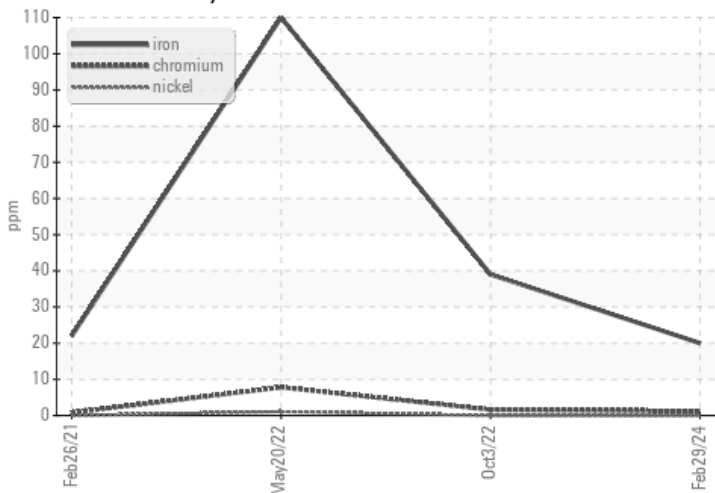
Signed: Wes Davis

Report Date: 29 Apr 2024

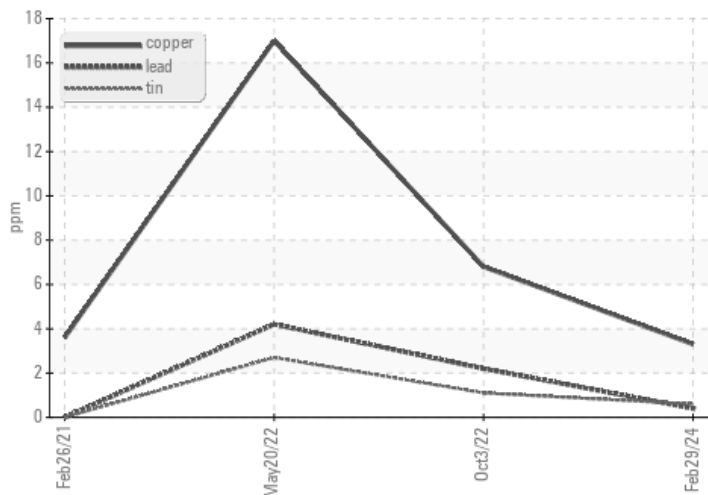


### Graphs

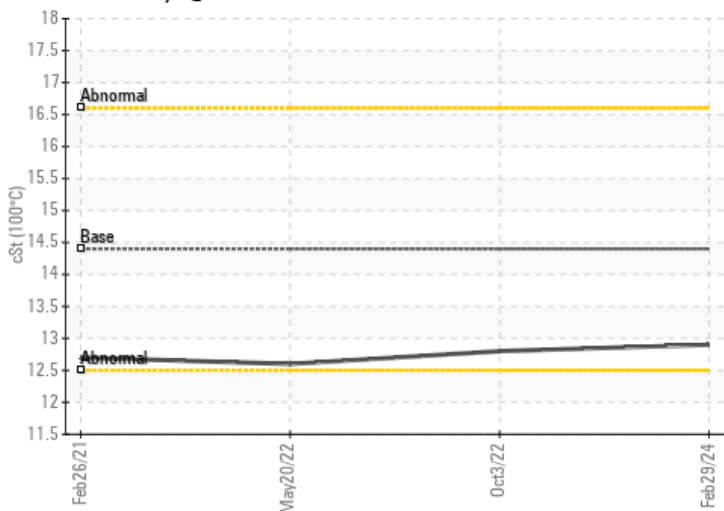
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

