

LIEBHERR

CONSTRUCTION EQUIPMENT



[[AZCON]] LIEBHERR A934C 038332-1006 - Diesel Engine

Sample No: LH0253875

Oil Type: DIESEL ENGINE OIL SAE 15W40



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SAMPLE INFORMATION

Sample Number	LH0253875	VCE213332	DJJ009686	DJJ006869
Sample Date	11 Aug 2023	01 May 2019	23 Jan 2013	15 Aug 2012
Machine Hours	13950	13156	7377	6839
Oil Hours	0	0	250	250
Oil Changed	Not Changd	N/A	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL



OIL CONDITION

Visc @ 100°C	cSt	13.7	14.0	12.3	19.56
Base Number (BN)	mg KOH/g	8.9	---	---	---
Oxidation (PA)	%	58	60	28	48



CONTAMINATION

Water	%	---	0.118	---	---
Soot %	%	0.2	1.5	0.6	2.9
Nitration (PA)	%	48	69	33	58
Sulfation (PA)	%	50	58	39	61
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	<1.0
Silicon	ppm	8	8	3	3
Sodium	ppm	2	7	5	4
Potassium	ppm	0	12	4	5



WEAR METALS

Iron	ppm	11	14	18	21
Copper	ppm	0	<1	6	6
Lead	ppm	<1	1	2	2
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	1	2	<1	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	26	61	5	1
Nickel	ppm	0	1	<1	<1
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	1683	2070	1567	2228
Magnesium	ppm	453	341	15	14
Zinc	ppm	1092	1255	887	1074
Phosphorus	ppm	936	1133	767	900
Barium	ppm	0	0	<1	0
Boron	ppm	95	65	20	18

Diagnosis

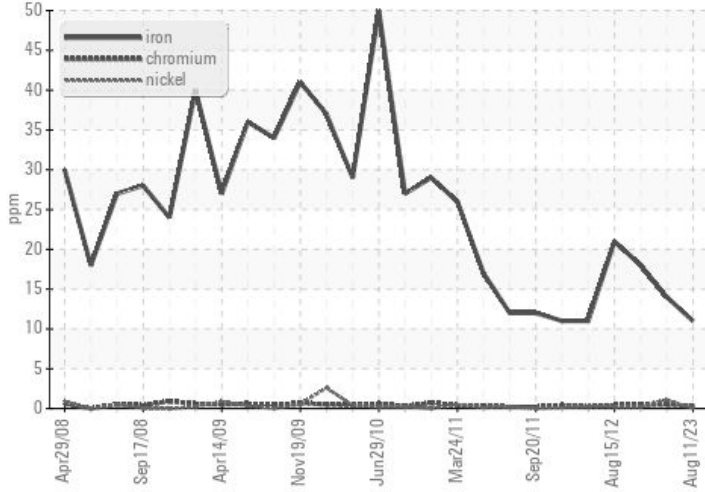
Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: LEC0008
 Unique No: 10635020
 Signed: Wes Davis
 Report Date: 08 Sep 2023

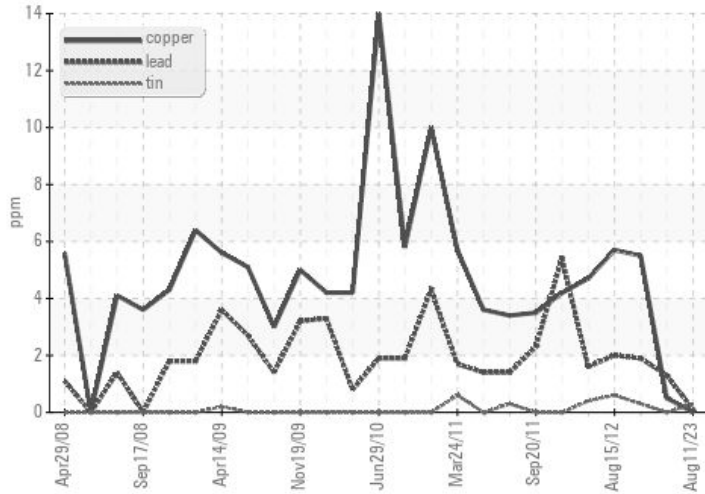


GRAPHS

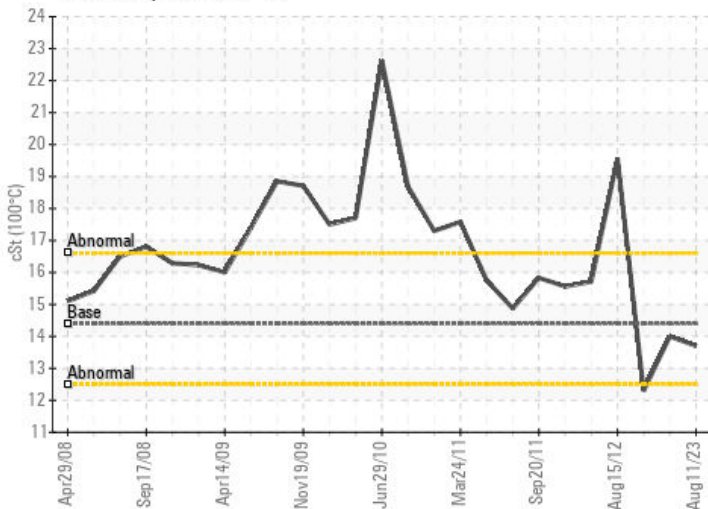
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

