LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR A344C 055585-1007
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 10W30 (8 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

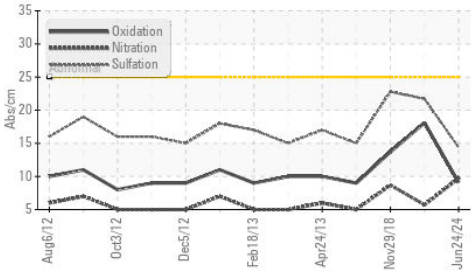
There is no indication of any contamination in the oil.

FLUID CONDITION

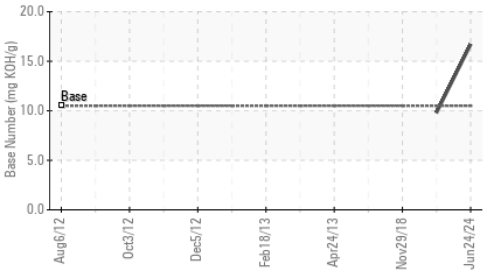
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LHMC133210	LH0264441	LHMC73555
Sample Date		Client Info		24 Jun 2024	16 May 2024	29 Nov 2018
Machine Age	hrs	Client Info		22431	14242	10955
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	9	5	15
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	6
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	1	2
Lead	ppm	ASTM D5185m	>30	<1	<1	2
Copper	ppm	ASTM D5185m	>125	0	0	2
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>60	9	9	17
Potassium	ppm	ASTM D5185m	>20	1	2	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.7	2.3
Nitration	Abs/cm	*ASTM D7624	>20	9.7	5.7	8.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.4	21.7	22.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		2	3	4
Boron	ppm	ASTM D5185m		228	71	24
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		3	42	7
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		71	524	390
Calcium	ppm	ASTM D5185m		4590	1696	1816
Phosphorus	ppm	ASTM D5185m		1140	788	998
Zinc	ppm	ASTM D5185m		1339	905	1119
Sulfur	ppm	ASTM D5185m		3737	2874	3664
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.1	18.1	13.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	16.7	9.8	---
Visc @ 100°C	cSt	ASTM D445	11.9	12.1	11.4	15.18

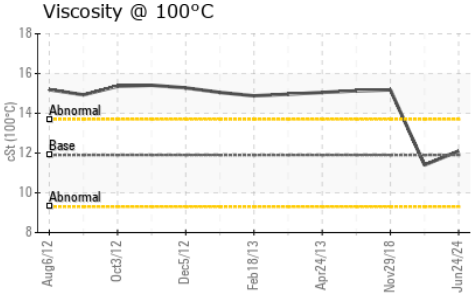
FT-IR (Direct Trend)



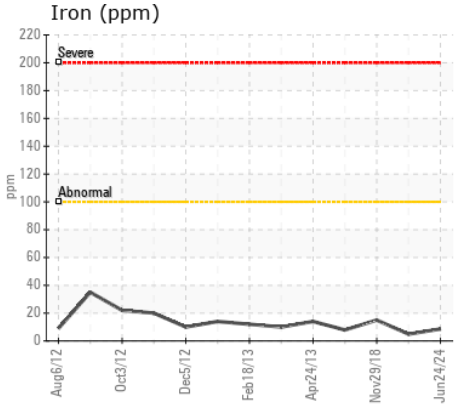
Base Number



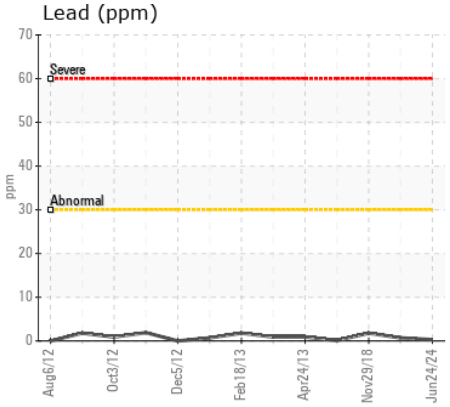
Viscosity @ 100°C



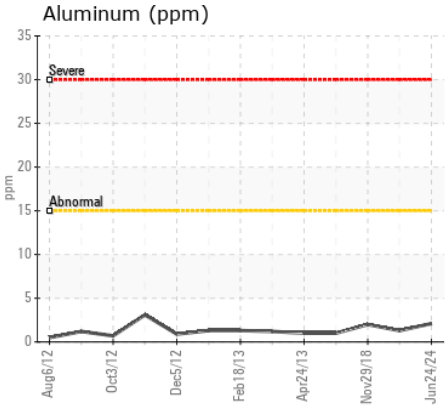
Iron (ppm)



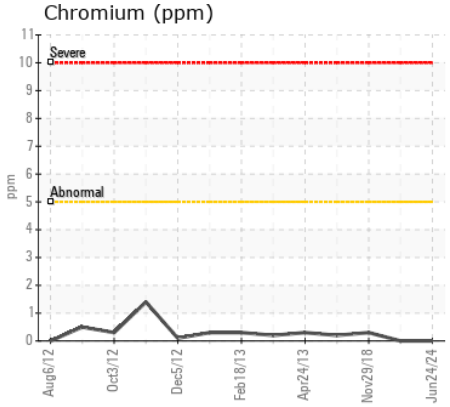
Lead (ppm)



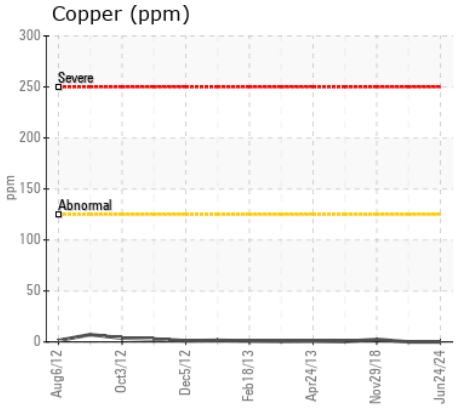
Aluminum (ppm)



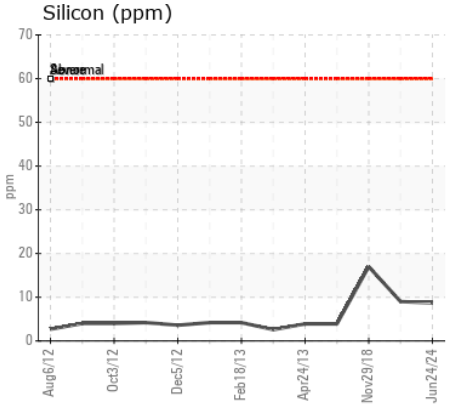
Chromium (ppm)



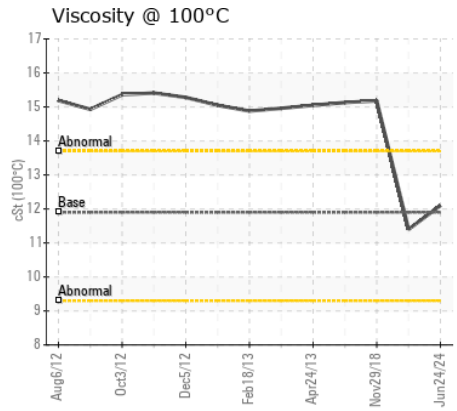
Copper (ppm)



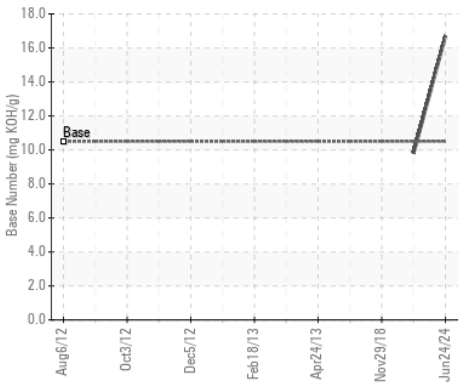
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: LHMC133210	**Received**	: 05 Jul 2024
Lab Number	: 06229366	**Tested**	: 09 Jul 2024
Unique Number	: 11112859	**Diagnosed**	: 09 Jul 2024 - Jonathan Hester
Test Package	: MOBCE (Additional Tests: TBN)		

BEHR IRON
2815 LIBERTY AVE.
CLINTON, IA
US 53732
Contact: SERVICE MANAGER

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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