MOB

LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR R926 1715-51969
Component
Diesel Engine
Fluid
MOBIL 1 5W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

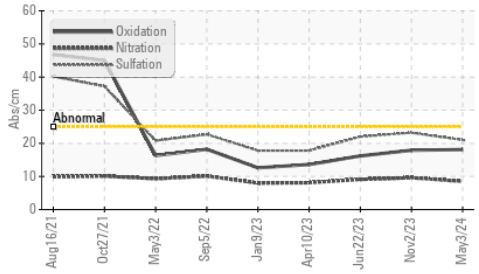
There is no indication of any contamination in the oil.

FLUID CONDITION

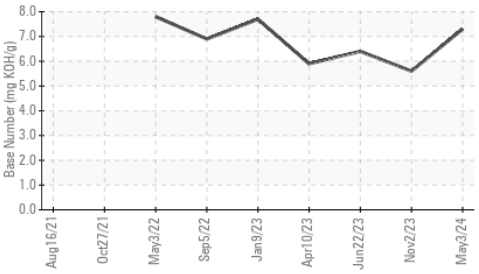
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0202122	LH0202116	LH0202115
Sample Date		Client Info		03 May 2024	02 Nov 2023	22 Jun 2023
Machine Age	hrs	Client Info		2247	2002	1750
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Changed	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				NORMAL	NORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>100	5	8	7
Chromium	ppm	ASTM D5185m	>5	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		9	69	▲ 69
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>15	4	2	2
Lead	ppm	ASTM D5185m	>30	<1	1	0
Copper	ppm	ASTM D5185m	>125	10	57	51
Tin	ppm	ASTM D5185m	>5	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>60	8	12	10
Potassium	ppm	ASTM D5185m	>20	3	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	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.5	9.6	9.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	23.2	22.0
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		0	4	2
Boron	ppm	ASTM D5185m	94	67	47	78
Barium	ppm	ASTM D5185m	0.0	0	2	<1
Molybdenum	ppm	ASTM D5185m	0.0	3	8	7
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1388	799	665	706
Calcium	ppm	ASTM D5185m	820	1224	1352	1368
Phosphorus	ppm	ASTM D5185m	720	677	899	918
Zinc	ppm	ASTM D5185m	780	829	1090	1158
Sulfur	ppm	ASTM D5185m	2240	2536	3131	3988
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	17.9	16.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.3	5.6	6.4
Visc @ 100°C	cSt	ASTM D445	11.3	10.1	11.6	11.9

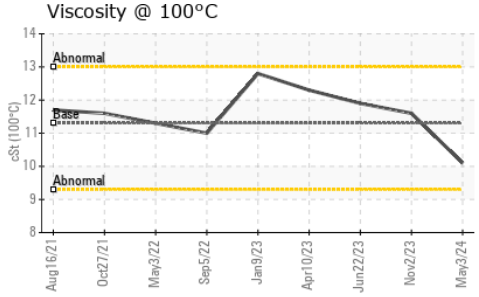
FT-IR (Direct Trend)



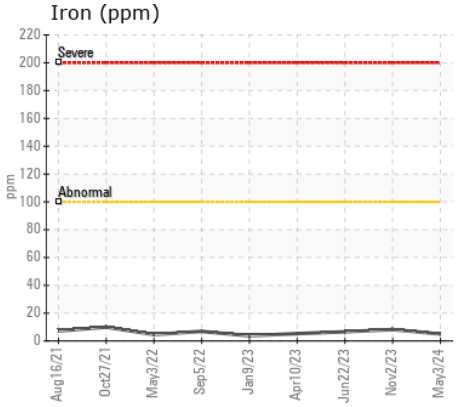
Base Number



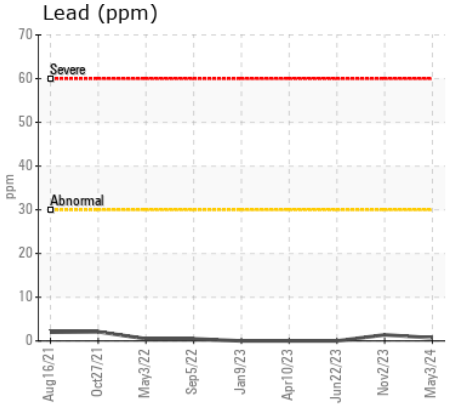
Viscosity @ 100°C



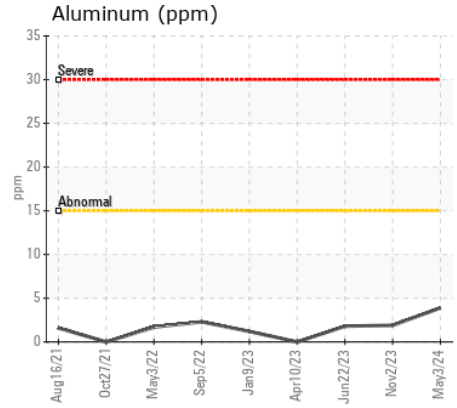
Iron (ppm)



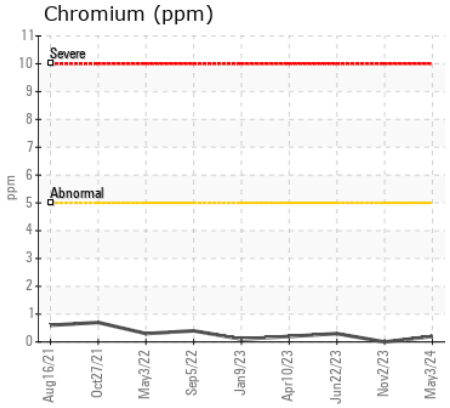
Lead (ppm)



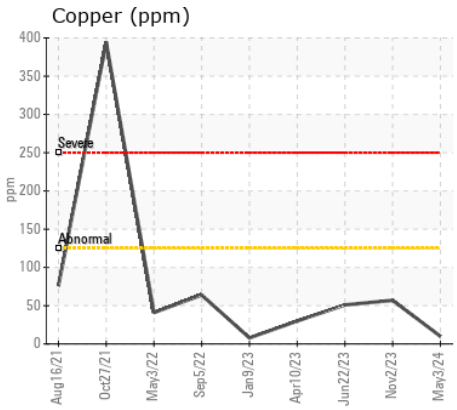
Aluminum (ppm)



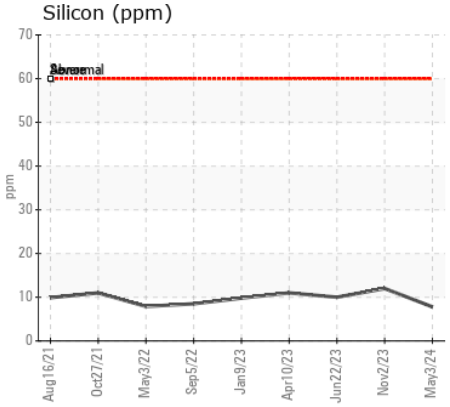
Chromium (ppm)



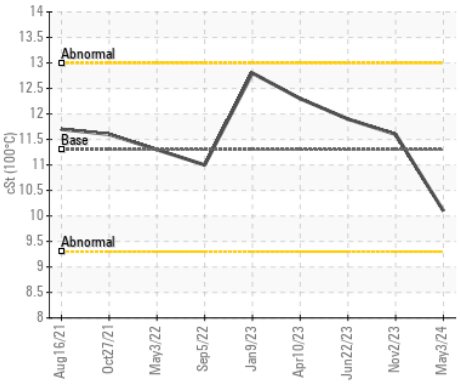
Copper (ppm)



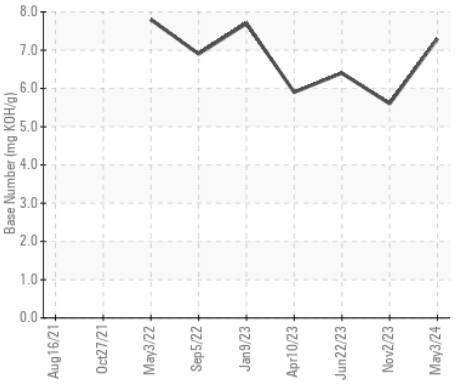
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0202122 **Received** : 13 May 2024
Lab Number : 06178109 **Tested** : 14 May 2024
Unique Number : 11029435 **Diagnosed** : 14 May 2024 - Wes Davis
Test Package : MOBCE (Additional Tests: TBN)

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)

DIEHL AND NUEMAIER
5466 NORWAY GROVE SCHOOL RD
DE FOREST, WI
US 53532
Contact: ELLIOT DIEHL
diehlneumaier@yahoo.com
T: (608)846-4824
F: (608)846-2077