CONST

LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR LH50M 1216-98638
Component
Transmission
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

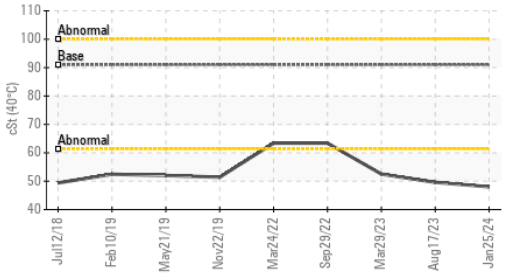
There is no indication of any contamination in the oil.

FLUID CONDITION

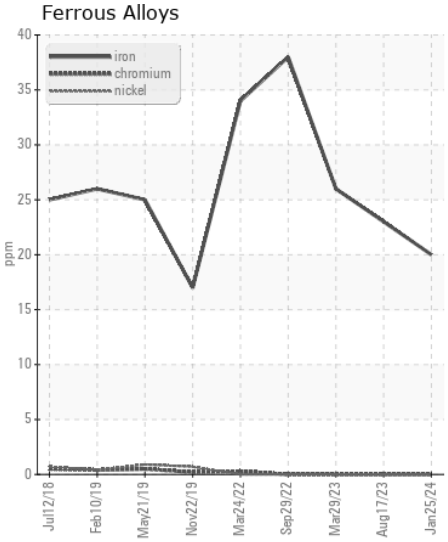
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**LH0268261**	LH0263934	LH0245046
Sample Date		Client Info		**25 Jan 2024**	17 Aug 2023	29 Mar 2023
Machine Age	hrs	Client Info		**13406**	12191	11277
Oil Age	hrs	Client Info		**1000**	0	0
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	N/A
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	**20**	23	26
Chromium	ppm	ASTM D5185m	>5	**0**	0	0
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m		**72**	63	57
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**2**	2	3
Lead	ppm	ASTM D5185m	>150	**<1**	<1	0
Copper	ppm	ASTM D5185m	>250	**12**	25	37
Tin	ppm	ASTM D5185m	>5	**0**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>15	**6**	6	5
Potassium	ppm	ASTM D5185m	>20	**2**	3	0
Water		WC Method	>0.1	**NEG**	NEG	NEG
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	>0.1	**NEG**	NEG	NEG
Sodium	ppm	ASTM D5185m	>44	**3**	0	3
Boron	ppm	ASTM D5185m	250	**134**	134	129
Barium	ppm	ASTM D5185m	10	**0**	0	0
Molybdenum	ppm	ASTM D5185m	100	**6**	11	2
Manganese	ppm	ASTM D5185m		**3**	5	6
Magnesium	ppm	ASTM D5185m	450	**621**	581	457
Calcium	ppm	ASTM D5185m	3000	**1320**	1566	1840
Phosphorus	ppm	ASTM D5185m	1150	**961**	1016	979
Zinc	ppm	ASTM D5185m	1350	**1085**	1107	1091
Sulfur	ppm	ASTM D5185m	4250	**3521**	3791	4149
Visc @ 40°C	cSt	ASTM D445	91	**48.0**	49.6	52.5

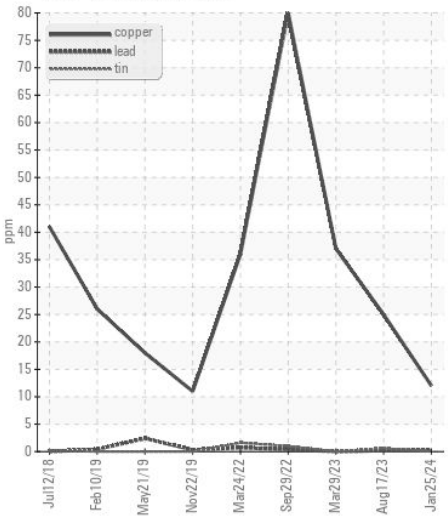
Viscosity @ 40°C



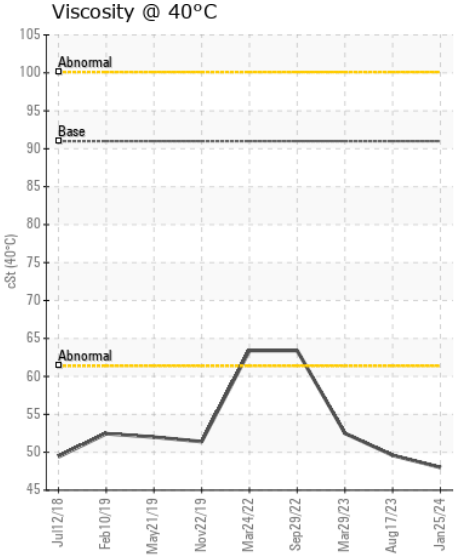
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory	: WearCheck USA - 501 Madison Ave., Cary, NC 27513		
Sample No.	: LH0268261	**Recieved**	: 30 Jan 2024
Lab Number	: 06075228	**Diagnosed**	: 01 Feb 2024
Unique Number	: 10857319	**Diagnostician**	: Don Baldridge
Test Package	: CONST		

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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