



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR R934 025778-918
Component
Right Final Drive
Fluid
GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

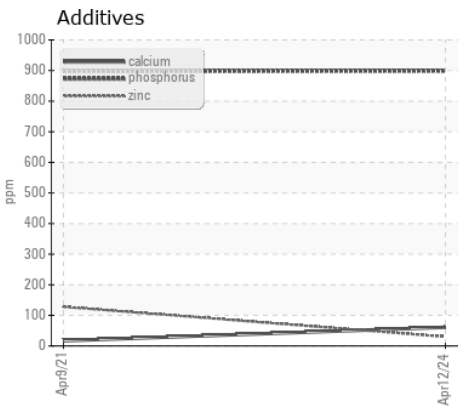
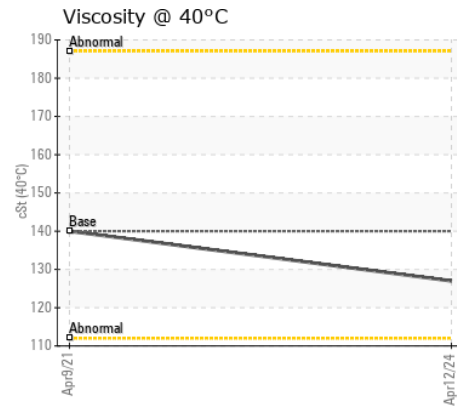
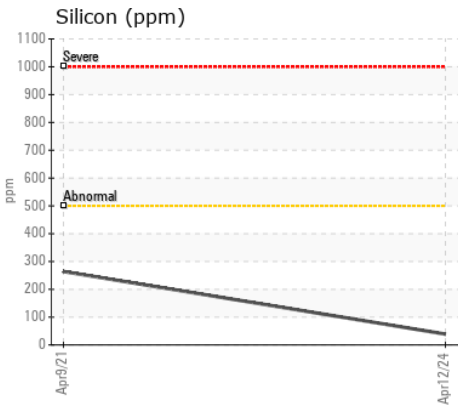
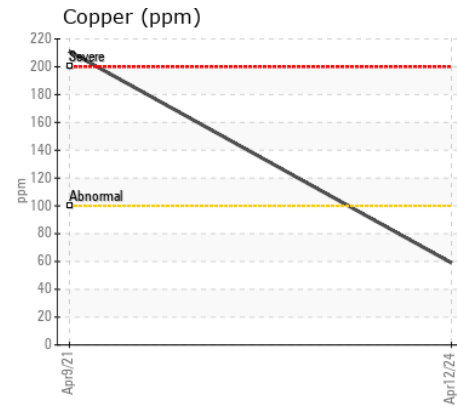
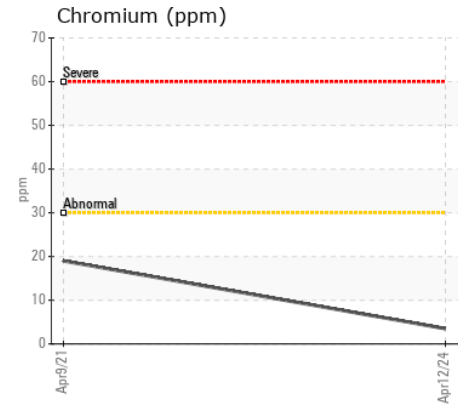
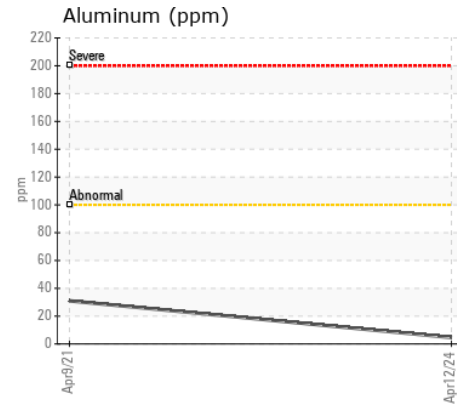
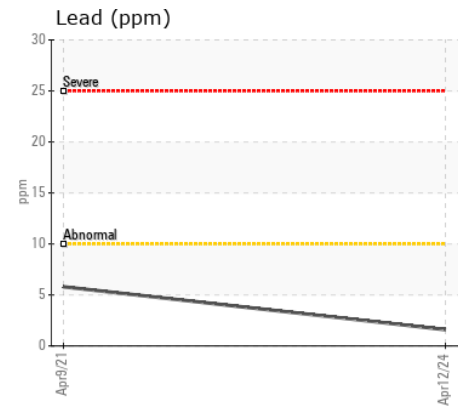
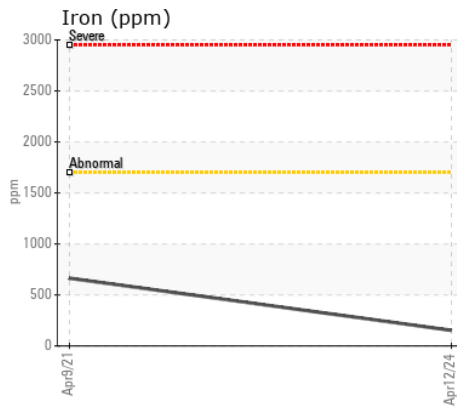
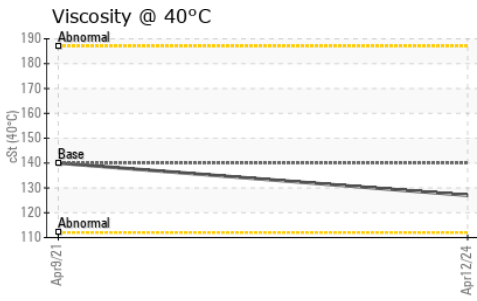
CONTAMINATION

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		LH0204145	LH0190481	---
Sample Date		Client Info		12 Apr 2024	09 Apr 2021	---
Machine Age	hrs	Client Info		4594	3853	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	Changed	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---
<hr/>						
Iron	ppm	ASTM D5185m	>1700	153	664	---
Chromium	ppm	ASTM D5185m	>30	4	19	---
Nickel	ppm	ASTM D5185m	>8	<1	4	---
Titanium	ppm	ASTM D5185m	>10	<1	2	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>100	5	31	---
Lead	ppm	ASTM D5185m	>10	2	6	---
Copper	ppm	ASTM D5185m	>100	59	▲ 211	---
Tin	ppm	ASTM D5185m	>8	3	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
<hr/>						
Silicon	ppm	ASTM D5185m	>500	39	264	---
Potassium	ppm	ASTM D5185m	>20	4	10	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
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Sodium	ppm	ASTM D5185m		2	9	---
Boron	ppm	ASTM D5185m	150	55	36	---
Barium	ppm	ASTM D5185m		0	2	---
Molybdenum	ppm	ASTM D5185m		2	0	---
Manganese	ppm	ASTM D5185m		2	11	---
Magnesium	ppm	ASTM D5185m	10	20	3	---
Calcium	ppm	ASTM D5185m	70	61	17	---
Phosphorus	ppm	ASTM D5185m	2000	899	898	---
Zinc	ppm	ASTM D5185m	50	30	128	---
Sulfur	ppm	ASTM D5185m	20000	22860	19718	---
Visc @ 40°C	cSt	ASTM D445	140	127	140	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0204145
Lab Number : 06153846
Unique Number : 10989269
Test Package : MOBCE

Received : 18 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Wes Davis

AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
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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)