



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
[YORKTOWN MATERIALS]
Machine Id
LIEBHERR R926LC 045780-1488
Component
Swing Drive
Fluid
GEAR OIL SAE 90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0258234	LH0220159	LH0173593
Sample Date		Client Info		27 Oct 2023	26 Sep 2022	16 Apr 2021
Machine Age	hrs	Client Info		3999	1000	2000
Oil Age	hrs	Client Info		2000	0	0
Filter Age	hrs	Client Info		2000	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>750	4	▲ 1036	266
Chromium	ppm	ASTM D5185m	>10	0	9	4
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	2	0
Lead	ppm	ASTM D5185m	>5	0	<1	0
Copper	ppm	ASTM D5185m	>250	0	▲ 154	6
Tin	ppm	ASTM D5185m	>10	0	9	2
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

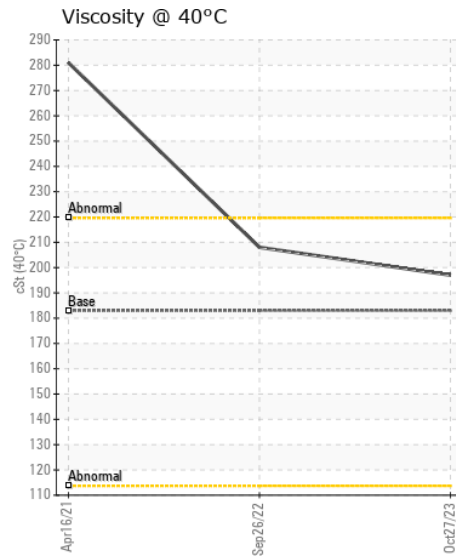
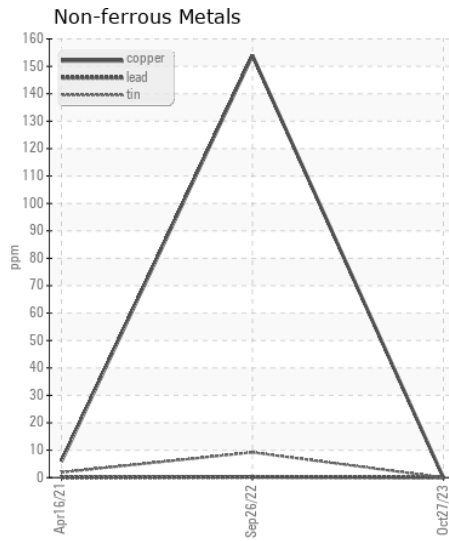
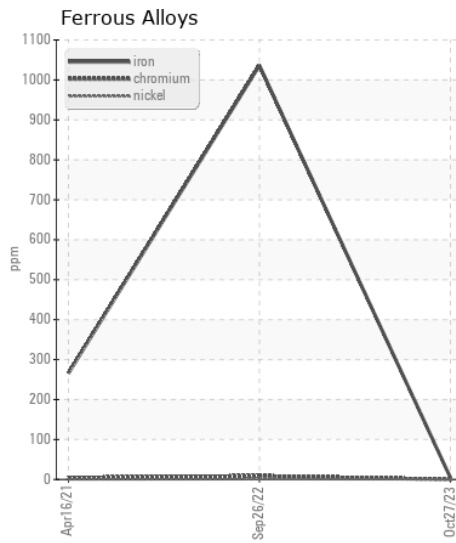
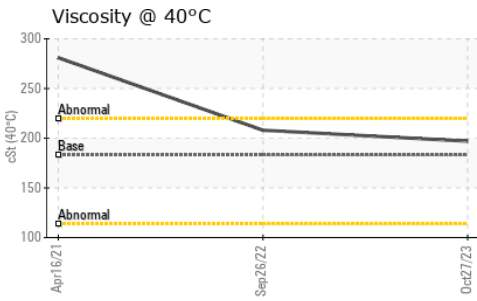
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>15	1	5	<1
Potassium	ppm	ASTM D5185m	>20	0	0	<1
Water		WC Method	>0.2	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		1	2	1
Boron	ppm	ASTM D5185m	400	<1	1	4
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	<1	<1
Manganese	ppm	ASTM D5185m		0	8	2
Magnesium	ppm	ASTM D5185m	12	0	3	1
Calcium	ppm	ASTM D5185m	150	3	18	7
Phosphorus	ppm	ASTM D5185m	1650	2448	2128	1475
Zinc	ppm	ASTM D5185m	125	<1	147	1
Sulfur	ppm	ASTM D5185m	22500	28100	30053	20612
Visc @ 40°C	cSt	ASTM D445	183	197	208	281



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LH0258234
Lab Number : 06088378
Unique Number : 10875823
Test Package : CONST

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Wes Davis

LIEBHERR EQUIPMENT SOURCE
 4100 CHESTNUT AVENUE
 NEWPORT NEWS, VA
 US 23607
 Contact: LUKE APPLEBY
 Lucas.Appleby@liebherr.com

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)

T:
 F: (757)298-8700