



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
LIEBHERR R944CHDSL 31224 (S/N 79125783)
Component
Swing Drive
Fluid
GEAR OIL SAE 80W90 (3 QTS)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

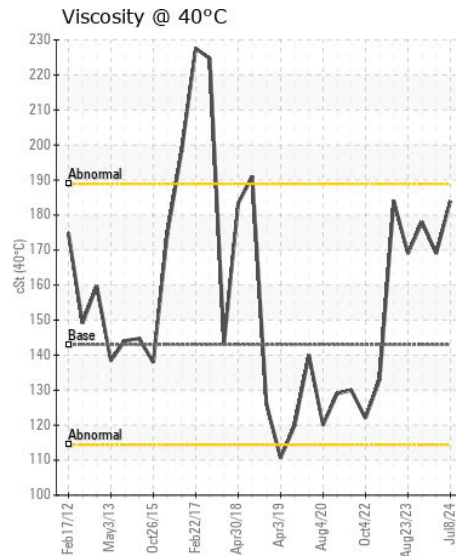
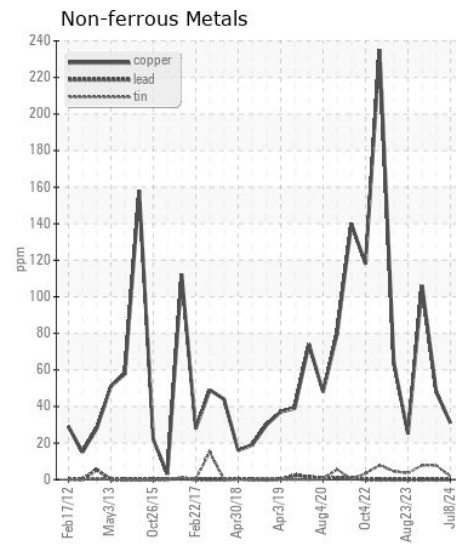
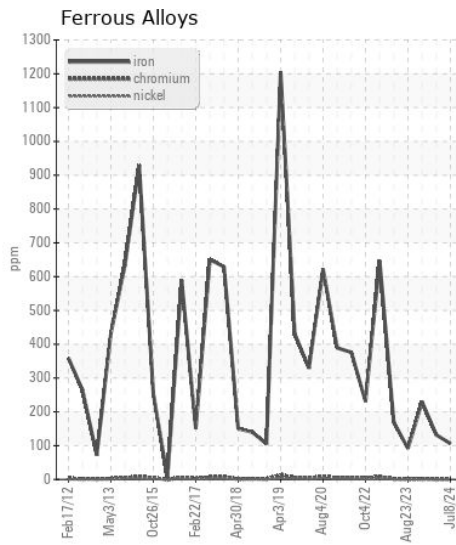
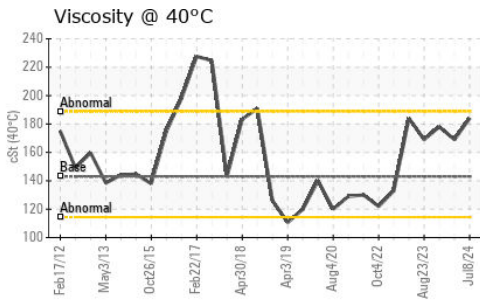
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0950512	WC0905400	WC0733322
Sample Date		Client Info		08 Jul 2024	08 Feb 2024	20 Dec 2023
Machine Age	hrs	Client Info		12892	12663	12505
Oil Age	hrs	Client Info		500	500	500
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>750	106	132	230
Chromium	ppm	ASTM D5185m	>10	<1	1	2
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	<1	2
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>250	31	48	106
Tin	ppm	ASTM D5185m	>10	2	8	8
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	>15	4	5	14
Potassium	ppm	ASTM D5185m	>20	0	0	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	LIGHT	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	>170	3	1	0
Boron	ppm	ASTM D5185m	400	0	15	9
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	0	0
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m	12	0	2	2
Calcium	ppm	ASTM D5185m	150	7	9	7
Phosphorus	ppm	ASTM D5185m	1650	2116	1890	1873
Zinc	ppm	ASTM D5185m	125	6	13	0
Sulfur	ppm	ASTM D5185m	22500	27347	23755	29133
Visc @ 40°C	cSt	ASTM D445	143	184	169	178



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0950512
Lab Number : 06233618
Unique Number : 11117111
Test Package : CONST

SULLIVAN EASTERN INC-LIEBHERR
 2860 C SLATER RD
 MORRISVILLE, NC
 US 27560
 Contact: CHRIS CALTON

Received : 11 Jul 2024
Tested : 12 Jul 2024
Diagnosed : 12 Jul 2024 - Wes Davis

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: (919)484-2136