



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
LIEBHERR 31250
 Component
Splitter Box
 Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0924389	WC0846324	WC0529498
Sample Date		Client Info		17 May 2024	16 Nov 2023	31 Dec 2020
Machine Age	hrs	Client Info		4738	4230	1056
Oil Age	hrs	Client Info		2000	500	500
Filter Age	hrs	Client Info		2000	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR

Gear wear is indicated.

Iron	ppm	ASTM D5185m	>325	▲ 458	▲ 516	▲ 500
Chromium	ppm	ASTM D5185m	>5	4	▲ 5	4
Nickel	ppm	ASTM D5185m	>10	2	6	2
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>5	▲ 36	▲ 44	▲ 35
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m	>30	4	3	2
Tin	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

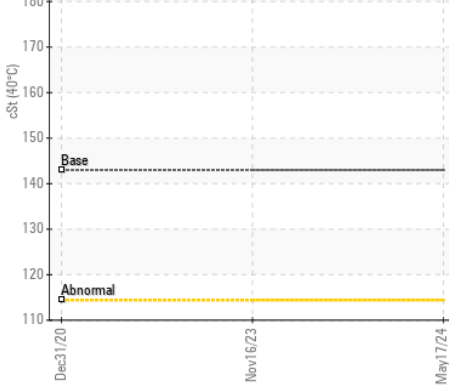
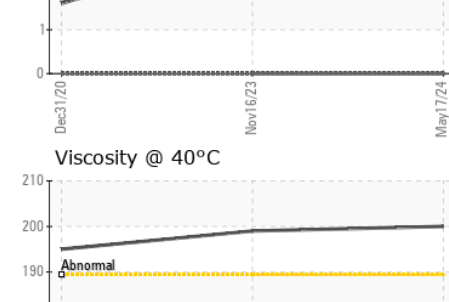
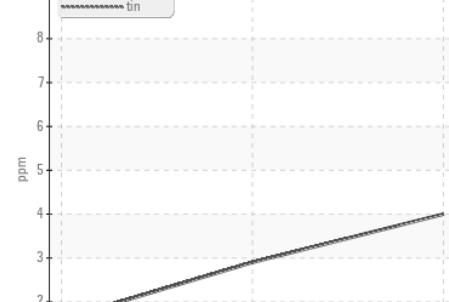
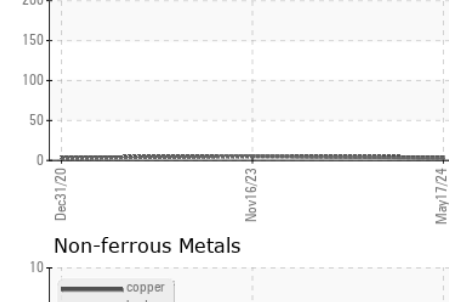
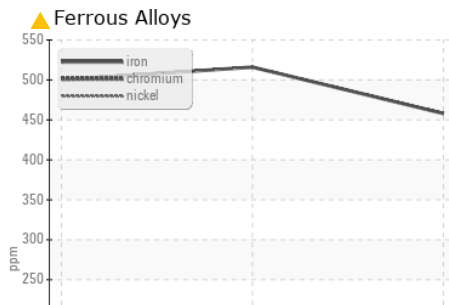
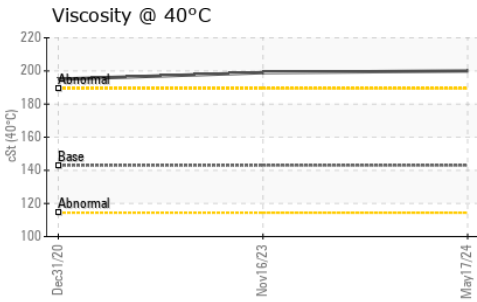
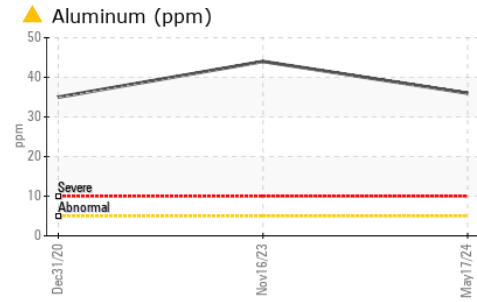
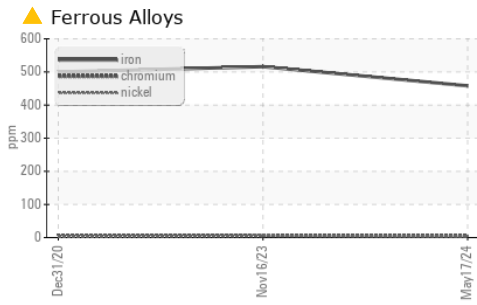
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	18	▲ 23	8
Potassium	ppm	ASTM D5185m	>20	27	37	9
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	▲ 0.2%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>170	2	0	0
Boron	ppm	ASTM D5185m	400	9	11	5
Barium	ppm	ASTM D5185m	200	0	0	<1
Molybdenum	ppm	ASTM D5185m	12	0	<1	0
Manganese	ppm	ASTM D5185m		3	4	5
Magnesium	ppm	ASTM D5185m	12	3	4	<1
Calcium	ppm	ASTM D5185m	150	56	24	7
Phosphorus	ppm	ASTM D5185m	1650	2244	2516	1727
Zinc	ppm	ASTM D5185m	125	100	104	143
Sulfur	ppm	ASTM D5185m	22500	30110	30398	19796
Visc @ 40°C	cSt	ASTM D445	143	200	199	195



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0924389
Lab Number : 06186581
Unique Number : 11043333
Test Package : CONST

Received : 21 May 2024
Tested : 22 May 2024
Diagnosed : 23 May 2024 - Sean Felton

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

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