



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
LIEBHERR 31241
Component
Splitter Box
Fluid
AW HYDRAULIC OIL ISO 68 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0882636	WC0671616	WC0639486
Sample Date		Client Info		11 Jan 2024	27 Apr 2022	11 Nov 2021
Machine Age	hrs	Client Info		6311	4211	3629
Oil Age	hrs	Client Info		2000	582	533
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				ATTENTION	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>325	142	57	78
Chromium	ppm	ASTM D5185m	>5	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>5	3	2	3
Lead	ppm	ASTM D5185m		0	0	<1
Copper	ppm	ASTM D5185m	>30	1	<1	3
Tin	ppm	ASTM D5185m		0	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

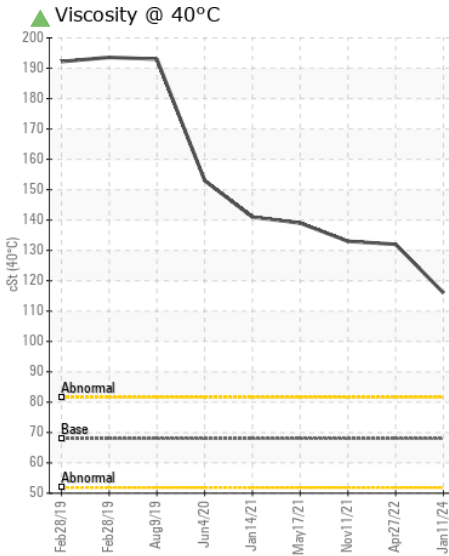
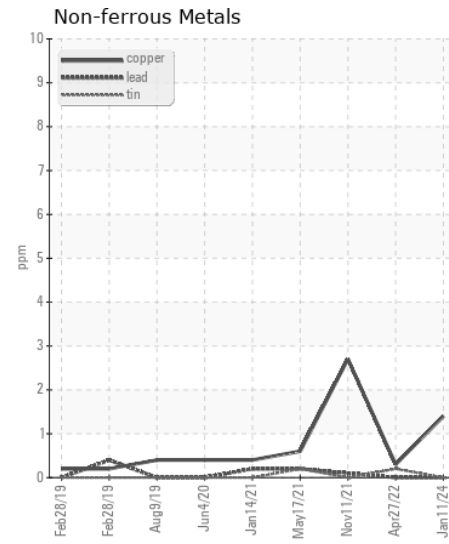
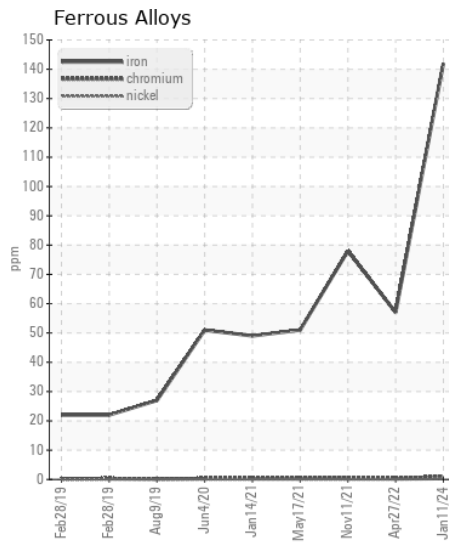
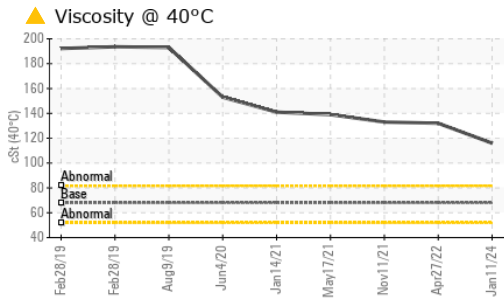
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	8	4	4
Potassium	ppm	ASTM D5185m	>20	2	0	0
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 oil viscosity is higher than normal. Confirm oil type.

Sodium	ppm	ASTM D5185m		<1	1	0
Boron	ppm	ASTM D5185m	5	160	167	101
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	5	4	3
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	25	17	11	0
Calcium	ppm	ASTM D5185m	200	64	60	0
Phosphorus	ppm	ASTM D5185m	300	2260	1694	1942
Zinc	ppm	ASTM D5185m	370	103	40	0
Sulfur	ppm	ASTM D5185m	2500	20401	15716	17651
Visc @ 40°C	cSt	ASTM D445	68	▲ 116	132	133



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0882636 **Received** : 16 Jan 2024
Lab Number : 06061533 **Diagnosed** : 17 Jan 2024
Unique Number : 10832915 **Diagnostician** : Don Baldrige
Test Package : CONST

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)

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