



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
LIEBHERR 22558
 Component
Left Final Drive
 Fluid
AW HYDRAULIC OIL ISO 68 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

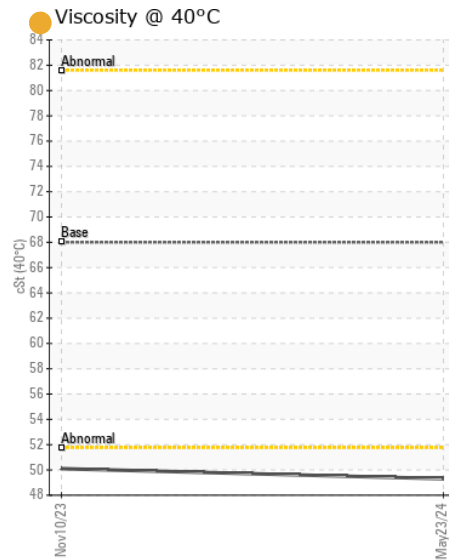
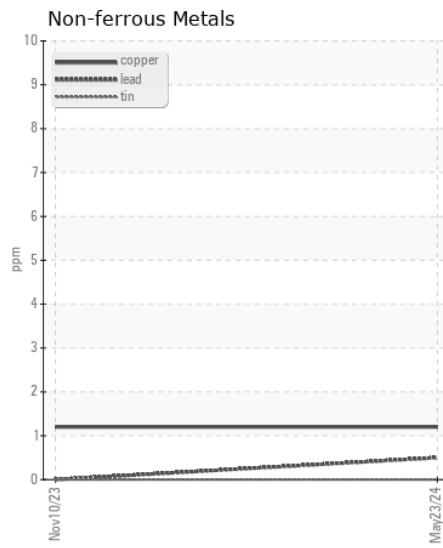
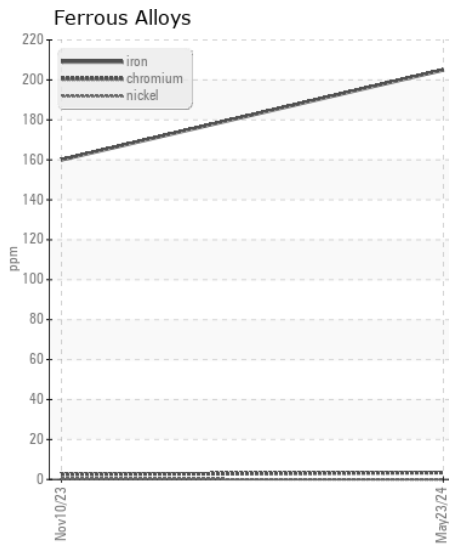
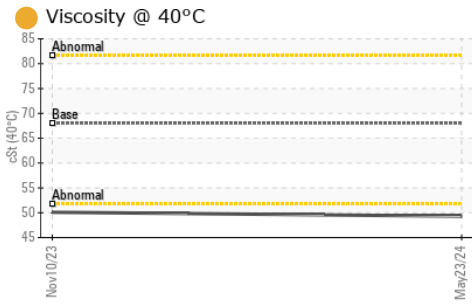
CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

The oil viscosity is lower than normal. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0924400	WC0810112	---
Sample Date		Client Info		23 May 2024	10 Nov 2023	---
Machine Age	hrs	Client Info		2111	1152	---
Oil Age	hrs	Client Info		2000	1000	---
Filter Age	hrs	Client Info		2000	0	---
Oil Changed		Client Info		Changed	Not Changd	---
Filter Changed		Client Info		Changed	N/A	---
Sample Status				ATTENTION	NORMAL	---
Iron	ppm	ASTM D5185m	>500	205	160	---
Chromium	ppm	ASTM D5185m	>10	3	2	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	11	4	---
Lead	ppm	ASTM D5185m	>25	<1	0	---
Copper	ppm	ASTM D5185m	>50	1	1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>75	36	25	---
Potassium	ppm	ASTM D5185m	>20	6	8	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	LIGHT	LIGHT	---
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	---
Sodium	ppm	ASTM D5185m		4	0	---
Boron	ppm	ASTM D5185m	5	<1	0	---
Barium	ppm	ASTM D5185m	5	0	5	---
Molybdenum	ppm	ASTM D5185m	5	2	2	---
Manganese	ppm	ASTM D5185m		4	3	---
Magnesium	ppm	ASTM D5185m	25	83	87	---
Calcium	ppm	ASTM D5185m	200	2755	2986	---
Phosphorus	ppm	ASTM D5185m	300	940	1023	---
Zinc	ppm	ASTM D5185m	370	1094	1167	---
Sulfur	ppm	ASTM D5185m	2500	3567	4313	---
Visc @ 40°C	cSt	ASTM D445	68	49.3	50.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0924400
Lab Number : 06196057
Unique Number : 11058180
Test Package : CONST

Received : 30 May 2024
Tested : 02 Jun 2024
Diagnosed : 02 Jun 2024 - Don Baldrige

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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