



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**LIEBHERR A944C-LI C-44 (S/N 028924-194)**  
Component  
**Front Left Planetary**  
Fluid  
**PHILLIPS EP-5 80W90 (3 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0899815</b>	WC0828390	WC0760438
Sample Date		Client Info		<b>08 Feb 2024</b>	18 Oct 2023	14 Dec 2022
Machine Age	hrs	Client Info		<b>4742</b>	4106	23629
Oil Age	hrs	Client Info		<b>910</b>	274	423
Filter Age	hrs	Client Info		<b>0</b>	274	0
Oil Changed		Client Info		<b>Changed</b>	N/A	Changed
Filter Changed		Client Info		<b>Changed</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>360	<b>250</b>	81	69
Chromium	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>21</b>	17	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	1
Aluminum	ppm	ASTM D5185m	>12	<b>10</b>	4	4
Lead	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>70	<b>8</b>	3	2
Tin	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	NONE

## CONTAMINATION

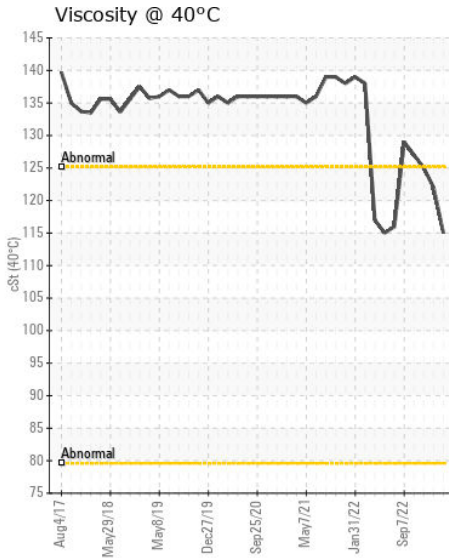
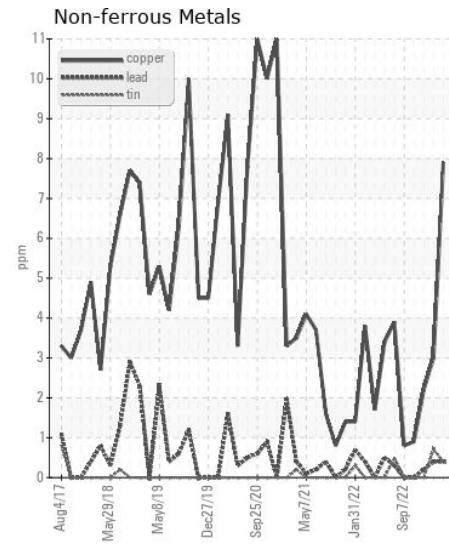
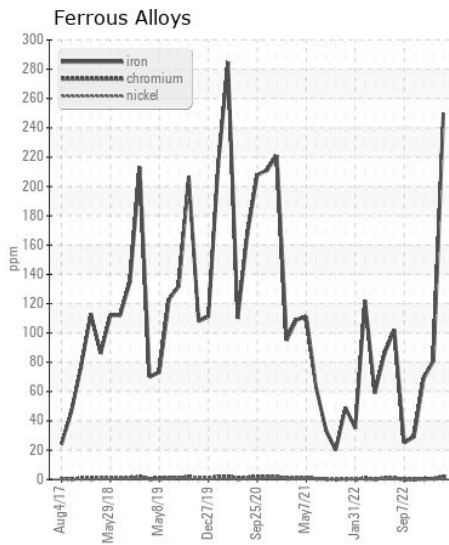
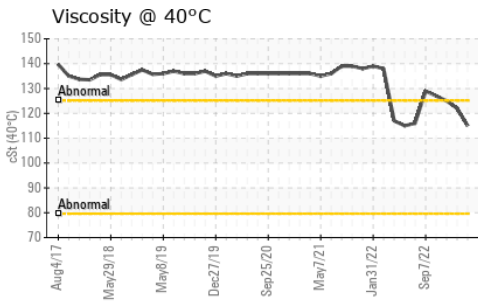
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>56	<b>47</b>	17	10
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	2	1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>0</b>	<1	0
Boron	ppm	ASTM D5185m		<b>62</b>	54	36
Barium	ppm	ASTM D5185m		<b>13</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>1</b>	0	2
Manganese	ppm	ASTM D5185m		<b>2</b>	1	<1
Magnesium	ppm	ASTM D5185m		<b>111</b>	91	6
Calcium	ppm	ASTM D5185m		<b>515</b>	419	35
Phosphorus	ppm	ASTM D5185m		<b>860</b>	685	416
Zinc	ppm	ASTM D5185m		<b>296</b>	286	12
Sulfur	ppm	ASTM D5185m		<b>14899</b>	11302	22008
Visc @ 40°C	cSt	ASTM D445		<b>115</b>	122	125



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0899815  
**Lab Number** : 06089161  
**Unique Number** : 10876606  
**Test Package** : CONST  
**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 16 Feb 2024 - Jonathan Hester

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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)