

### **OIL ANALYSIS REPORT**

Sample Rating Trend

# WATER

Machine Id

# LIEBHERR 1300 CR-3317 (S/N 138-408)

Component Right Planetary Fluid

GEAR OIL ISO 220 (--- GAL)

#### DIAGNOSIS

#### A Recommendation

No corrective action is recommended at this time. Oil and filter 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 a light concentration of water present in the oil.

#### Fluid Condition

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

SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0922186	WC0810384 -	
Sample Date		Client Info		08 Apr 2024	13 Jun 2023 -	
Machine Age	hrs	Client Info		10234	9021 -	
Oil Age	hrs	Client Info		1213	0 -	
Oil Changed		Client Info		Changed	Changed -	
Sample Status				ABNORMAL	NORMAL -	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	103	61	
Chromium	ppm	ASTM D5185m	>10	0	<1	
Nickel	ppm	ASTM D5185m	>10	0	<1	
Titanium	ppm	ASTM D5185m		0	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	0	<1	
Lead	ppm	ASTM D5185m	>25	0	<1	
Copper	ppm	ASTM D5185m	>75	1	3	
Tin	ppm	ASTM D5185m	>10	0	0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	0	9	
Barium	ppm	ASTM D5185m	15	0	2	
Molybdenum	ppm	ASTM D5185m	15	0	<1	
Manganese	ppm	ASTM D5185m		2	2	
Magnesium	ppm	ASTM D5185m	50	0	2	
Calcium	ppm	ASTM D5185m	50	0	8	
Phosphorus	ppm	ASTM D5185m	350	492	473	
Zinc	ppm	ASTM D5185m	100	19	15	
Sulfur	ppm	ASTM D5185m	12500	7601	5249	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	4	23	
Sodium	ppm	ASTM D5185m		0	<1	
Potassium	ppm	ASTM D5185m	>20	1	<1	
Water	%	ASTM D6304	>0.2	<b>A</b> 0.225		
ppm Water	ppm	ASTM D6304	>2000	<b>A</b> 2250		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
Precipitate	scalar	*Visual	NONE	NONE	NONE	
Silt	scalar	*Visual	NONE	NONE	NONE	
Siit				NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONL	
Debris	scalar scalar	*Visual *Visual	NONE	NONE	NONE	
Debris Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Debris Sand/Dirt Appearance	scalar scalar	*Visual *Visual	NONE NORML	NONE NORML	NONE NORML	



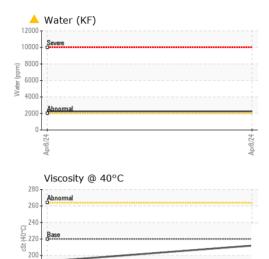
180 Abnormal

160

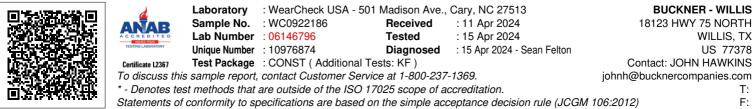
Junl

## **OIL ANALYSIS REPORT**

FLUID PROPERTIES method limit/base



				current	nistory I	nistory2
Visc @ 40°C	cSt	ASTM D445		212	193	
SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Color				no image	no image	no image
Bottom				no image	no image	no image
GRAPHS						
Ferrous Alloys						
iron iron iron iron		/				
30 - nickel						
60						
50 +						
80						
0						
Jun13/23			Apr8/24			
			Ag			
Non-ferrous Meta	ais					
9 - copper 8 - copper lead						
7-						
6						
4						
2						
Jun13/23			Apr8/24			
특 Viscosity @ 40°C			A			
	•					
60						
40						
30 - Base 20 - Base 10 -						
90 -						
<sup>80</sup> - Abnormal						
70 L+			Apr8/24			
Jun13/23			Apr			
WearCheck USA - 5 WC0922186	01 Madis	on Ave., Cary eived : 11	v, NC 27513 I Apr 2024			<b>(NER - WILLI</b> WY 75 NORTI



Contact/Location: JOHN HAWKINS - BUCWILTX

history2

history1

current