



# OIL ANALYSIS REPORT

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



Area  
**AMR-12th Street**  
 Machine Id  
**339324 LIEBHERR LH60 1204-86896**  
 Component  
**Gearbox**  
 Fluid  
**LIEBHERR GEAR BASIC 90 LS (3 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DJJ0013946</b>	DJJ0010801	DJJ0003369
Sample Date		Client Info		<b>11 Jun 2024</b>	30 Dec 2021	18 Mar 2021
Machine Age	hrs	Client Info		<b>15501</b>	12001	10506
Oil Age	hrs	Client Info		<b>250</b>	250	250
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	<b>3</b>	11	21
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	2
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	<1	2
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

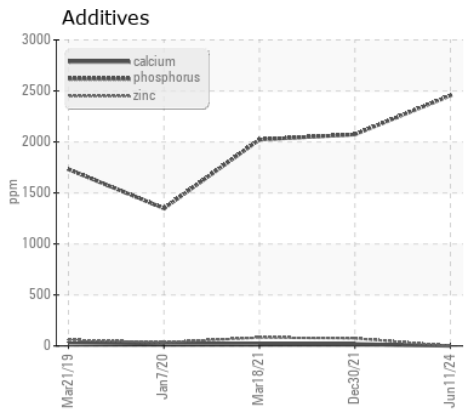
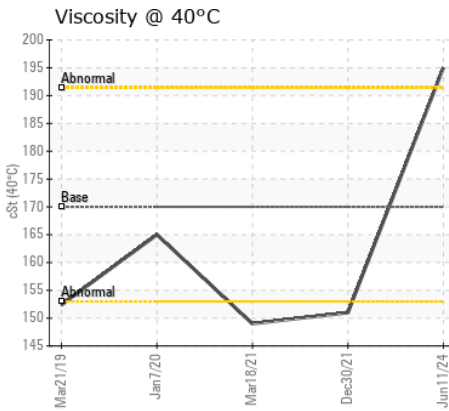
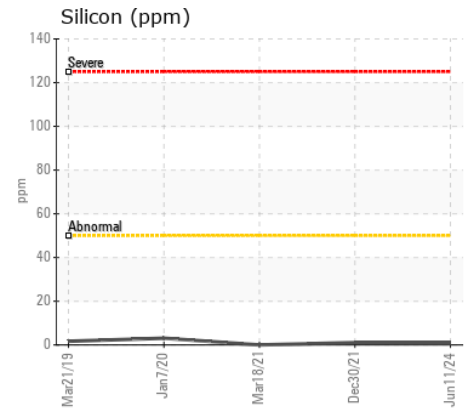
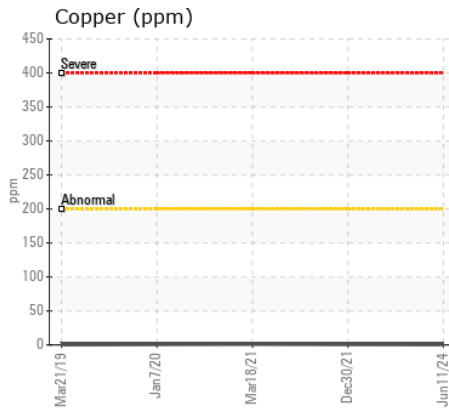
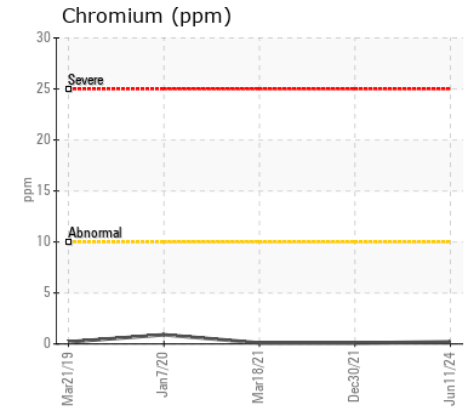
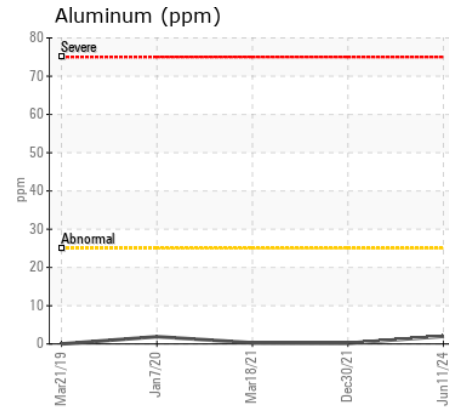
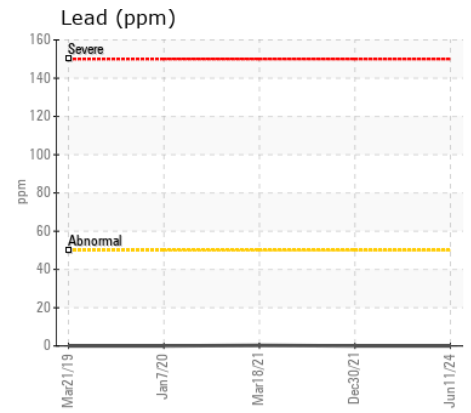
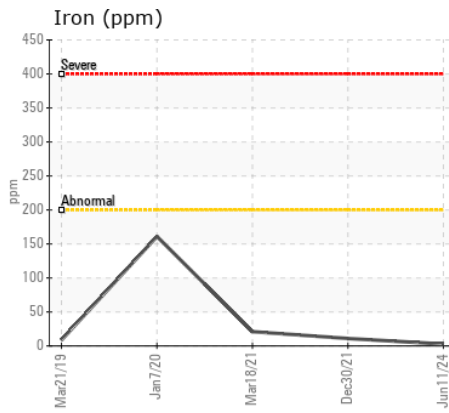
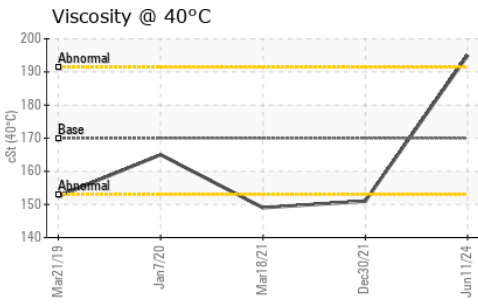
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>&lt;1</b>	1	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	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>	2	3
Boron	ppm	ASTM D5185m	0	<b>1</b>	28	15
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<1	<b>1</b>	<1	1
Calcium	ppm	ASTM D5185m	<1	<b>0</b>	20	25
Phosphorus	ppm	ASTM D5185m	2143	<b>2455</b>	2073	2023
Zinc	ppm	ASTM D5185m	<1	<b>0</b>	75	82
Sulfur	ppm	ASTM D5185m	23468	<b>26105</b>	25056	20722
Visc @ 40°C	cSt	ASTM D445	170	<b>195</b>	151	149



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : DJJ0013946

**Lab Number** : 06216156

**Unique Number** : 11089020

**Test Package** : MOBCE

**Received** : 20 Jun 2024

**Tested** : 21 Jun 2024

**Diagnosed** : 23 Jun 2024 - Don Baldrige

**ADVANTAGE METALS RECYCLING - 12 STREET**

1153 S. 12TH STREET

KANSAS CITY, KS

US 66105

Contact: JOHN PEEK

john.peek@advantagerecycling.com

T: (660)424-9134

F: (913)621-2766

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)