



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
LIEBHERR
 Machine Id
1528-113529 LIEBHERR LH60C 1528-113529
 Component
Hydraulic System
 Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0023781	DJJ0010988	LHMC130343
Sample Date		Client Info		13 Jun 2024	03 Feb 2023	10 Jan 2022
Machine Age	hrs	Client Info		7502	5541	3496
Oil Age	hrs	Client Info		0	5441	0
Filter Age	hrs	Client Info		0	2000	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	33	37	18
Chromium	ppm	ASTM D5185m	>15	1	2	1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>8	2	<1	<1
Lead	ppm	ASTM D5185m	>5	1	<1	1
Copper	ppm	ASTM D5185m	>15	3	3	3
Tin	ppm	ASTM D5185m	>5	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

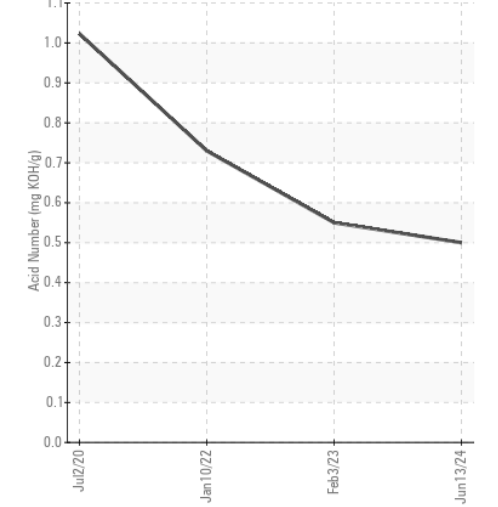
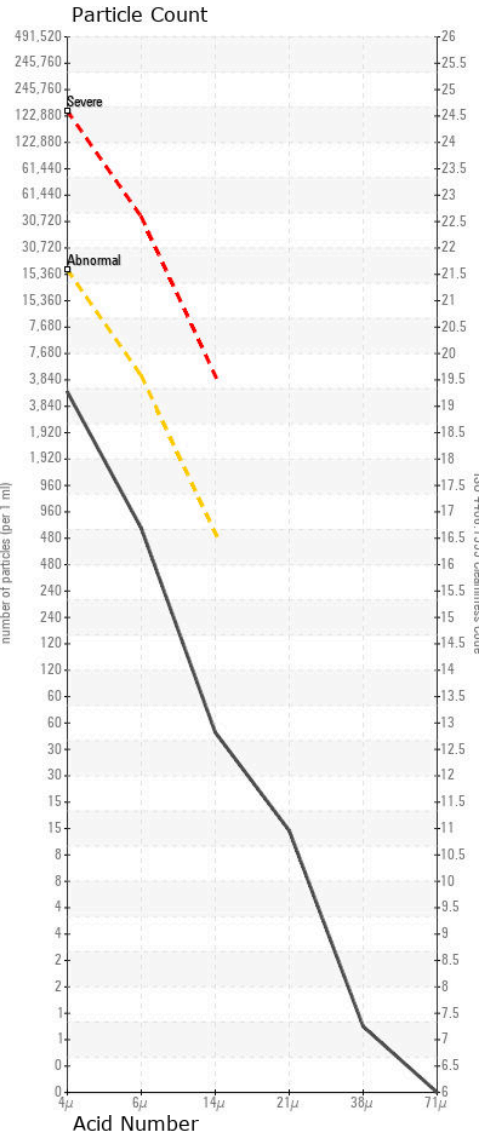
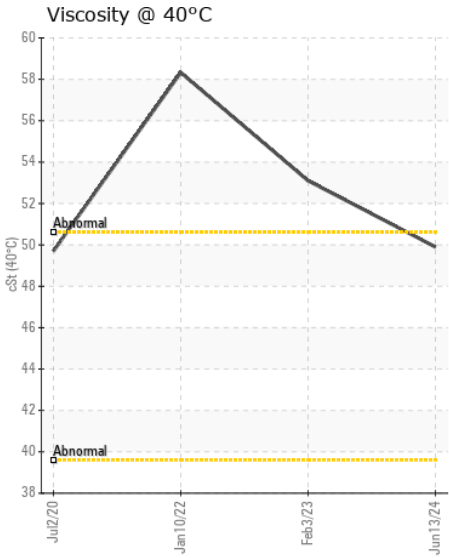
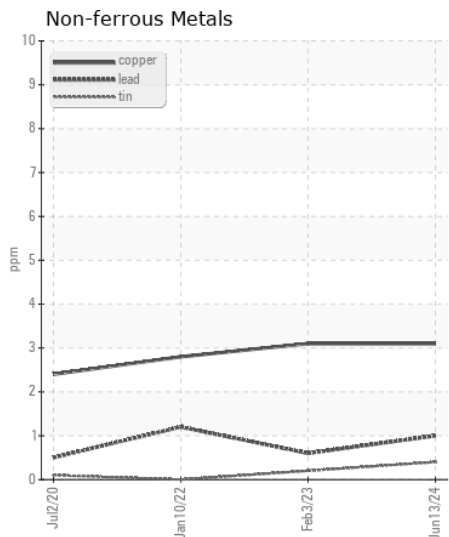
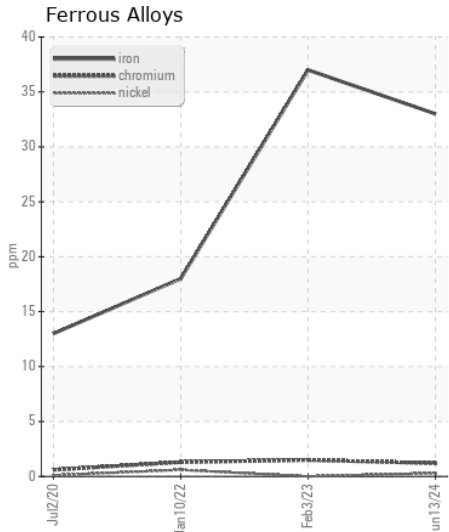
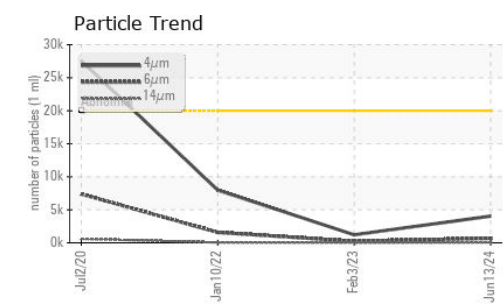
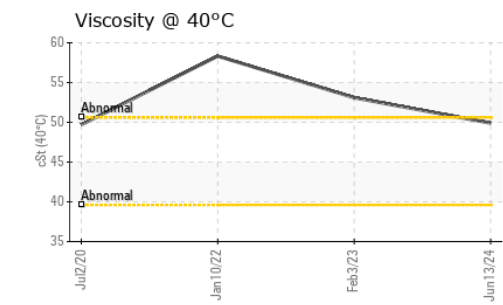
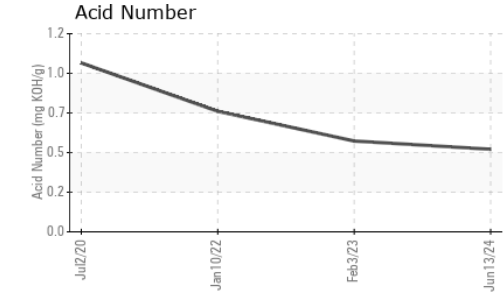
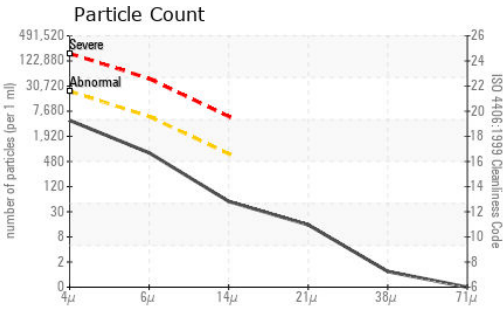
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>25	5	3	3
Potassium	ppm	ASTM D5185m	>20	19	16	17
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	4046	1213	7978
Particles >6µm		ASTM D7647	>5000	679	241	1581
Particles >14µm		ASTM D7647	>640	47	13	44
Particles >21µm		ASTM D7647	>160	13	4	7
Particles >38µm		ASTM D7647	>40	1	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/17/13	17/15/11	20/18/13
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	7	7
Boron	ppm	ASTM D5185m		36	43	42
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		22	26	26
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		62	65	74
Calcium	ppm	ASTM D5185m		586	803	1044
Phosphorus	ppm	ASTM D5185m		341	386	442
Zinc	ppm	ASTM D5185m		414	420	486
Sulfur	ppm	ASTM D5185m		2450	3507	3341
Acid Number (AN)	mg KOH/g	ASTM D8045		0.50	0.55	0.730
Visc @ 40°C	cSt	ASTM D445		49.9	53.1	58.33



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0023781
Lab Number : 06213393
Unique Number : 11086257
Test Package : CONST

Received : 18 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Wes Davis

METAL RECYCLING SERVICES - GASTONIA
 5401 S YORK HWY
 GASTONIA, NC
 US 28052
 Contact: RYAN BOWDEN

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)

T:
 F: (704)864-9863