



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RMR-Newport
Machine Id
1204-92010 LIEBHERR LH60M 1204-92010
Component
Hydraulic System
Fluid
MV 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0021915	DJJ0015787	DJJ0011460
Sample Date		Client Info		16 Apr 2024	18 Jan 2023	08 Mar 2022
Machine Age	hrs	Client Info		13703	0	10475
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	9	8	9
Chromium	ppm	ASTM D5185m	>40	2	2	2
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>5	<1	2	<1
Lead	ppm	ASTM D5185m	>5	<1	<1	<1
Copper	ppm	ASTM D5185m	>15	4	3	3
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

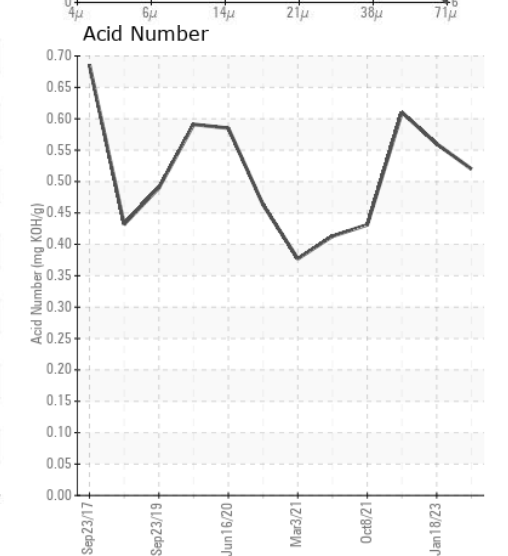
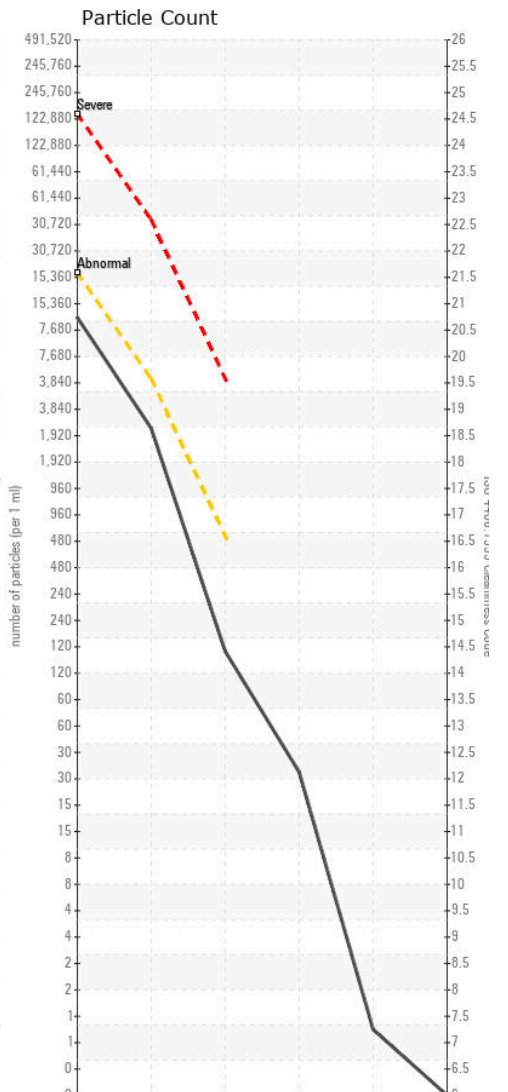
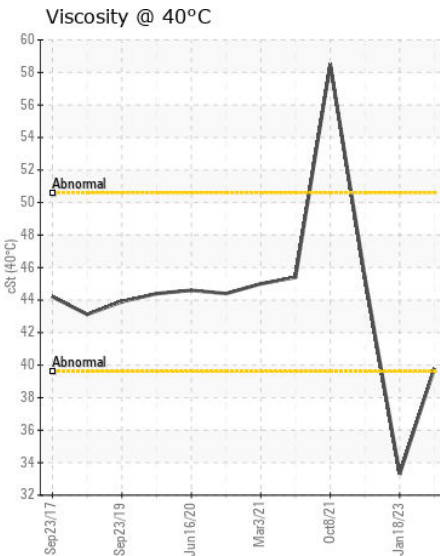
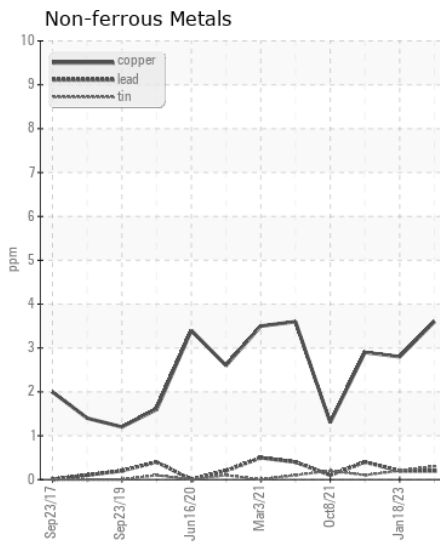
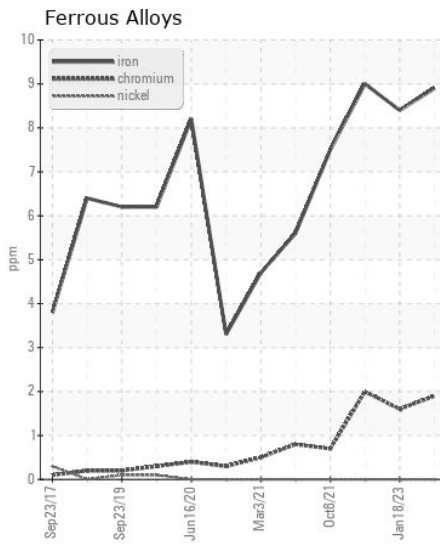
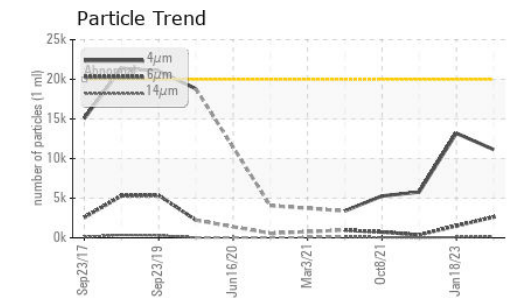
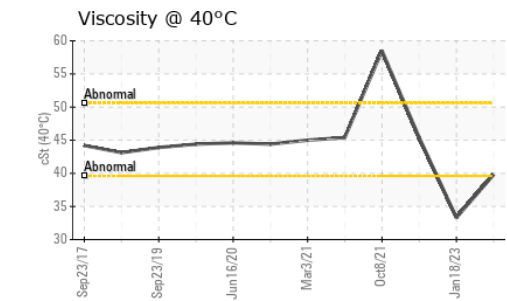
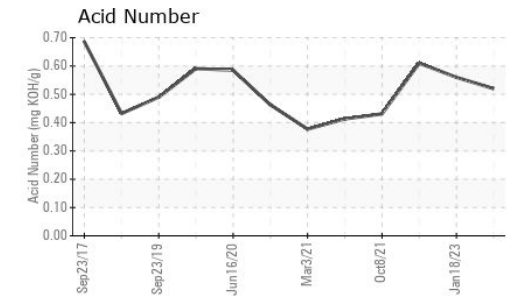
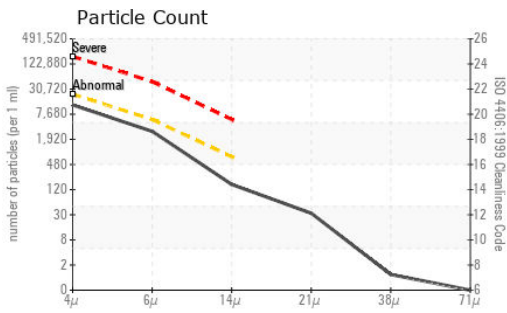
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>15	3	3	4
Potassium	ppm	ASTM D5185m	>20	3	2	5
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>20000	11138	13194	5777
Particles >6µm		ASTM D7647	>5000	2610	1505	371
Particles >14µm		ASTM D7647	>640	141	75	37
Particles >21µm		ASTM D7647	>160	29	14	15
Particles >38µm		ASTM D7647	>40	1	2	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/19/14	21/18/13	20/16/12
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		5	2	<1
Boron	ppm	ASTM D5185m		40	38	28
Barium	ppm	ASTM D5185m		0	1	0
Molybdenum	ppm	ASTM D5185m		21	17	13
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		130	144	125
Calcium	ppm	ASTM D5185m		416	512	381
Phosphorus	ppm	ASTM D5185m		423	448	427
Zinc	ppm	ASTM D5185m		441	484	472
Sulfur	ppm	ASTM D5185m		2188	2067	1712
Acid Number (AN)	mg KOH/g	ASTM D8045		0.52	0.56	0.61
Visc @ 40°C	cSt	ASTM D445		39.8	▲ 33.3	45.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0021915
Lab Number : 06154301
Unique Number : 10989724
Test Package : MOBCE

Received : 19 Apr 2024
Tested : 22 Apr 2024
Diagnosed : 22 Apr 2024 - Wes Davis

RIVER METALS RECYCLING - NEWPORT
P.O. BOX 72-220
NEWPORT, KY
US 41072
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: (859)291-0086