



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
120556-1216 LIEBHERR LH50M 120556-1216
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 46 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DJJ0022472	DJJ0022507	DJJ0022516
Sample Date		Client Info		24 May 2024	08 Mar 2024	03 Jan 2024
Machine Age	hrs	Client Info		9944	9578	9096
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	Changed	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>60	9	11	10
Chromium	ppm	ASTM D5185m	>40	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>5	<1	0	0
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>15	1	2	1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

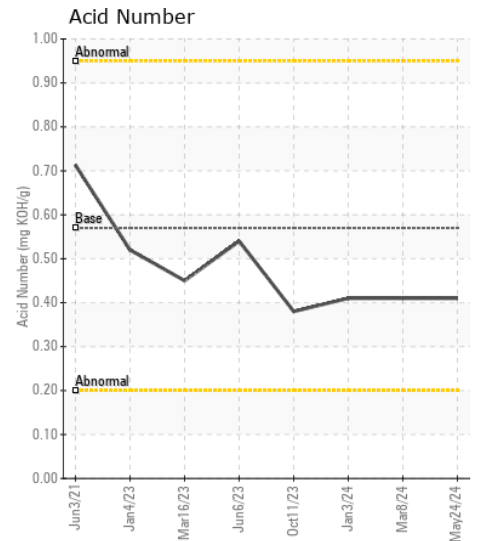
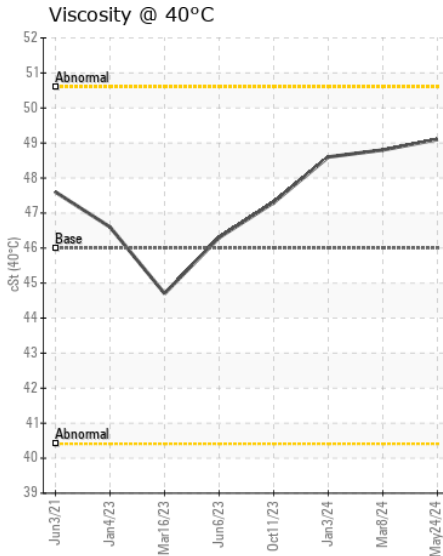
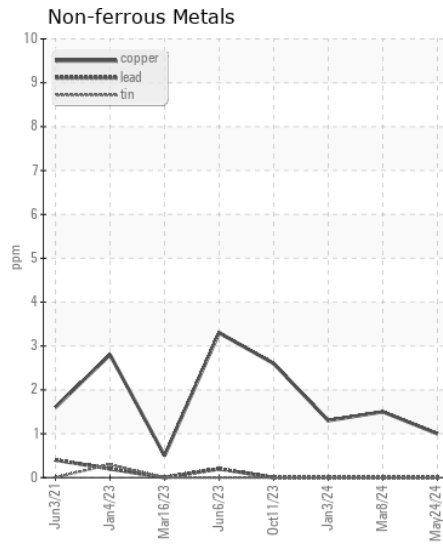
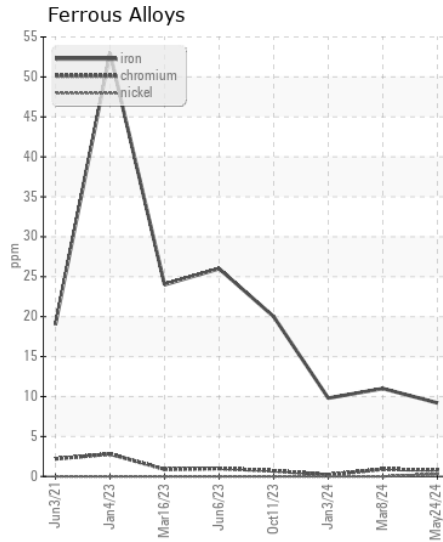
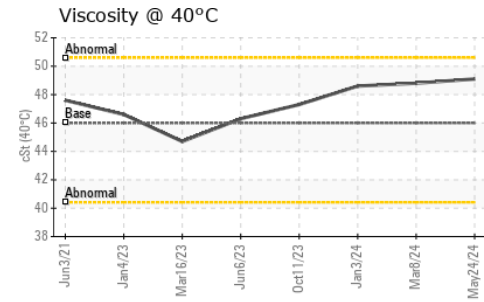
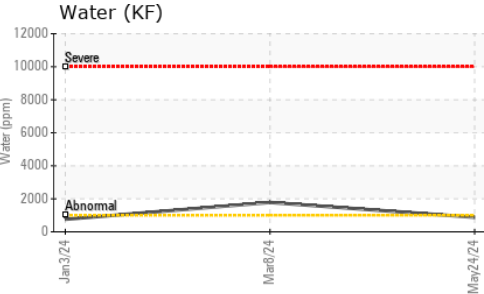
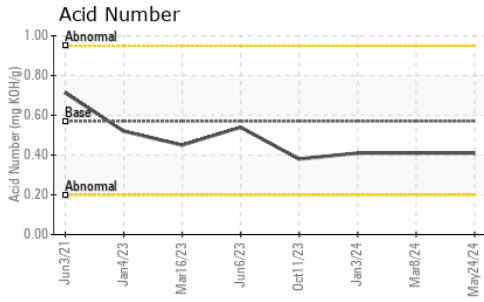
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>15	<1	<1	<1
Potassium	ppm	ASTM D5185m	>20	3	0	0
Water	%	ASTM D6304	>0.1	0.088	▲ 0.178	0.076
ppm Water	ppm	ASTM D6304	>1000	880	▲ 1780	760
Particles >4µm		ASTM D7647	>20000	---	● 20969	---
Particles >6µm		ASTM D7647	>5000	---	3140	---
Particles >14µm		ASTM D7647	>640	---	91	---
Particles >21µm		ASTM D7647	>160	---	18	---
Particles >38µm		ASTM D7647	>40	---	0	---
Particles >71µm		ASTM D7647	>10	---	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	---	● 22/19/14	---
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT	▲ MODER
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	0.2%	0.2%	0.2%

FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		2	3	<1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	0	0	<1
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	25	1	0	0
Calcium	ppm	ASTM D5185m	200	55	34	27
Phosphorus	ppm	ASTM D5185m	300	351	289	315
Zinc	ppm	ASTM D5185m	370	445	337	400
Sulfur	ppm	ASTM D5185m	2500	1051	890	826
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.41	0.41	0.41
Visc @ 40°C	cSt	ASTM D445	46	49.1	48.8	48.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0022472 **Received** : 20 Jun 2024
Lab Number : 06215753 **Tested** : 22 Jun 2024
Unique Number : 11088617 **Diagnosed** : 22 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: KF)

RIVER METALS RECYCLING - DECATUR FACILITY
 4301 IVERSON BLVD
 TRINITY, AL
 US 35673
 Contact: LARRY BARBER
 larry.barber@rmrecycling.com

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)

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F: