

Machine Id LIEBHERR LTR1100 97693 Component Hydraulic System Fluid LIEBHERR HYDRAULIC 37 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

All component wear rates are normal.

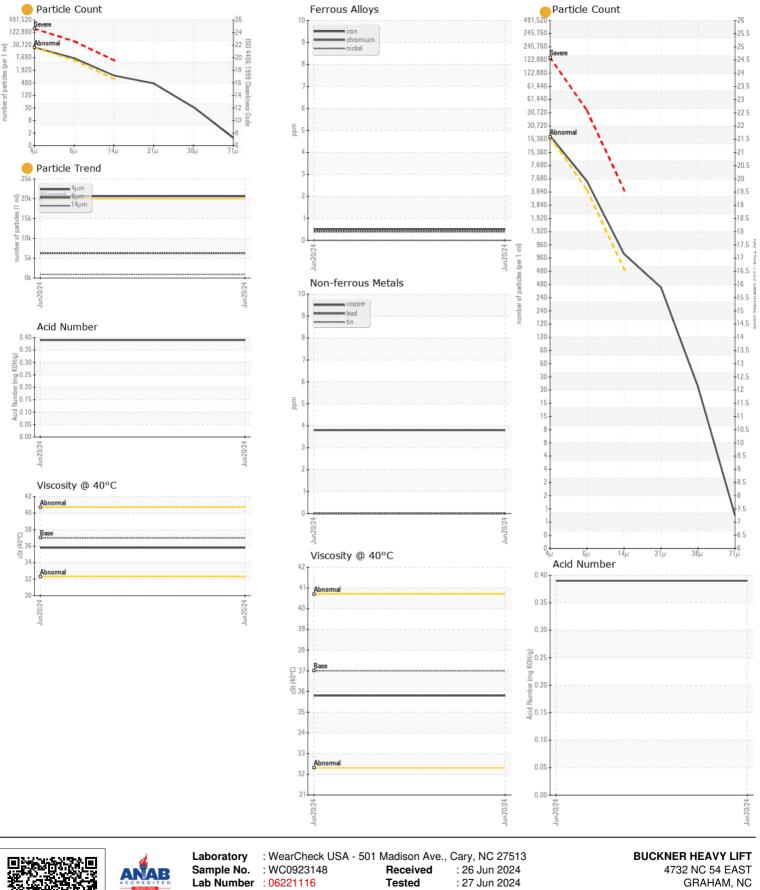
CONTAMINATION

There is a moderate amount of particulates present in the oil.

FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0923148		
Sample Date		Client Info		20 Jun 2024		
Machine Age	hrs	Client Info		6230		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		Changed		
Sample Status				ATTENTION		
Iron	ppm	ASTM D5185m	>30	<1		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>4	0		
Lead	ppm	ASTM D5185m	>22	0		
Copper	ppm	ASTM D5185m	>35	4		
Tin	ppm	ASTM D5185m	>4	0		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>15	3		
Potassium	ppm	ASTM D5185m	>20	1		
Water		WC Method	>0.1	NEG		
Particles >4µm		ASTM D7647	>20000	<b>e</b> 20610		
Particles >6µm		ASTM D7647	>5000	6272		
Particles >14µm		ASTM D7647	>640	938		
Particles >21µm		ASTM D7647	>160	<b>e</b> 390		
Particles >38µm		ASTM D7647	>40	29		
Particles >71µm		ASTM D7647	>10	1		
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<u> </u>		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.1	NEG		
O e ell'e un				4		
Sodium	ppm	ASTM D5185m		1		
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		6		
Calcium	ppm	ASTM D5185m		40		
Phosphorus	ppm	ASTM D5185m		254		
Zinc	ppm	ASTM D5185m		287		
Sulfur	ppm	ASTM D5185m		4402		
Acid Number (AN)	mg KOH/g	ASTM D8045	07	0.39		
Visc @ 40°C	cSt	ASTM D445	37	35.8		



 Unique Number
 : 11099313
 Diagnosed
 : 27 Jun 2024 - Don Baldridge
 US 27253-9215

 Certificate L2367
 Test Package
 : CONST
 Contact: MICHAEL LAWSON

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 michaell@bucknercompanies.com

 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 T: (336)376-8888

 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)
 F: (336)376-4090

Contact/Location: MICHAEL LAWSON - BUCGRA Page 2 of 2