



24999 - Hydraulic System

Sample No: LH0281444

Oil Type: NOT GIVEN

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	PLE INF	ORMATION			
Sample Number		LH0281444	LH0270452		
Sample Number		LIU201444			
Sample Date		27 Nov 2023	23 Jul 2023		
Machine Hours		997	5414		
Oil Hours		0	0		
Oil Changed		Not Changd	Not Changd		
Sample Status		NORMAL	ABNORMAL		
Visc @ 40°C	cSt	43.7	○ 44.5		
11					

Water	%	NEG	NEG		
Particles >4µm		0 11902	0 73649		
Particles >6µm		1816	0 16902		
Particles >14µm		0 47	342		
ISO 4406:1999 (c)		21/18/13	23/21/16		
Silicon	ppm	5	6		
Sodium	ppm	3	2		
Potassium	ppm	○ <1	○ <1		

$\overline{\mathbf{O}}$ **WEAR METALS** Iron ppm 07 6 Copper ppm 05 06 Lead **○** <1 ○ <1 ppm Tin ppm 0 $\bigcirc 0$ Aluminum ppm ○ <1 $\bigcirc 1$ Chromium 0 0 ppm Molybdenum 0 ppm 0 Nickel ppm 0 $\bigcirc 0$

inium ppm 0	0	
er ppm <1 (0	
nganese ppm 0	<1	
nadium ppm 0	0	
nganese ppm 0	<1	

	DITIVES			
Calcium	ppm	1106	1305	
Magnesium	ppm	4	4	
Zinc	ppm	707	692	
Phosphorus	ppm	608	643	
Barium	ppm	<1	0	
Boron	ppm	<1	<1	

LIEBHERR CANADA LTD.

1015 SUTTON DRIVE BURLINGTON, ON CA L7L 5Z8 Contact: Joseph Gillis joseph.gillis@liebherr.com T: F: (905)319-6622

Diagnosis

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The condition of the oil is acceptable for the time in service.

Depot: LIEMIS Unique No: 5684530 Signed: Wes Davis **Report Date:** 30 Nov 2023

Contact/Location: Joseph Gillis - LIEMIS

CONSTRUCTION EQUIPMENT



GRAPHS

Ferrous Alloys Particle Count 10 - 491,520 -26 iron 9 chromium 245,760 -25 nickel 8 122,880 -24 61,440 -23 6 ppm E, 30,720 -22 Ahnorm 15,360 -21 3 7,680 20 2 3,840 -19 0 180 4406:1999 Cleanliness 1,920 Nov27/23 mber of particles (per 1 ml) Jul23/23 960 Non-ferrous Metals 480 10 copper 240 9 🛤 lead -14 g tin 120 8 60. -13 ß -12 30 mdo Ę 15 -11 3 8. ·10 2 4 .9 2 -8 0 Nov27/23 Jul23/23 1 0**+** 4μ 71µ 21µ 38µ 14µ 6j. Viscosity @ 40°C 52 Abnormal 50 48 40°C) cSt (40°C) 44 42 40 Abnormal 38 Nov27/23 -Jul23/23