



LIEBHERR 141909 - Hydraulic System

Sample No: LH0151329

Oil Type: LIEBHERR HYDRAULIC 37

Sample Number	r	LH0151329	LH0183582	
Sample Date		04 Jun 2024	15 May 2024	
Machine Hours		545	500	
Oil Hours		0	0	
Oil Changed		Not Changd	Changed	
Sample Status		NORMAL	NORMAL	
A				
	Condition			
Visc @ 40°C	cSt	0 37.0	37.0	
11				
Con	taminati	on		
Water	%	NEG	NEG	
Particles >4µm	/0	NEG	Q 4909	
		504	0 699	
Particles >6µm		0 45	-	
Particles >14µm ISO 4406:1999 (c)		18/16/13		
Silicon		0 2		
Sodium	ppm		01	
	ppm	0	0	
Potassium	ppm	○ <1	○ <1	
O we				
Wee	ar Metals	5		
Iron	ppm	○ <1	◯ <1	
Copper	ppm	3	03	
	ppm	0	0	
Lead	0000	0	0	
Lead Tin	ppm			
	ppm ppm	0	00	
Tin	ppm		0	
Tin Aluminum Chromium	ppm ppm	0	0	
Tin Aluminum	ppm ppm ppm	○ 0○ 0○ 0○ 0	0	
Tin Aluminum Chromium Molybdenum	ppm ppm ppm ppm	○ 0 ○ 0		
Tin Aluminum Chromium Molybdenum Nickel	ppm ppm ppm ppm ppm	0 0 0 0 0	0 0 0 0	
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver	ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese	ppm ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	 Image: Section of the sectio
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	 Image: Section of the sectio
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	 Image: Section of the sectio
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	 Image: Section of the sectio
Tin Aluminum Chromium Molybdenum Nickel Titanium Silver Manganese Vanadium	ppm ppm ppm ppm ppm ppm ppm ppm	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	Image: select

266

0 ()

00

LIEBHERR CANADA LTD.

49C MEWS PLACE ST. JOHN'S, NL CA A1B 4N2 Contact: Warren Coombs warren.coombs@liebherr.com T: F: (709)368-6494

Diagnosis

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.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. Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

Depot:LIE49STJUnique No:5798714Signed:Wes DavisReport Date:12 Jun 2024Contact/Location: WarrerCoombs - LIE49STJ

0 265

0 (

0

Phosphorus

Barium

Boron

ppm

ppm

ppm

LEBHERR 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 5 30,720 -22 Ahnorm 15,360 -21 3 7,680 20 3,840 -19 0. 1,920 -18 🛛 Jun4/24 mber of particles (per 1 ml) May15/24 4406:1999 Cleanliness 960 Non-ferrous Metals 480 10 copper 240 9 MA lead -14 g tin 120 8 -13 60. 6 30 -12 mdd 5 15 -11 3 8. ·10 2 4. 9 2 8 0 Jun4/24 May15/24 0**+** 4μ 21µ 38µ 14µ 6j. Viscosity @ 40°C 44. 43 Abnormal 42 41 40 () 39 St (+0-C) 38 37 Base 36 35 34 Abnormal 33 32 Jun4/24 -May15/24

Report Id: LIE49STJ [WCAMIS] 02641175 (Generated: 06/12/2024 10:14:13) Rev: 1