## LIEBHERR

**CONSTRUCTION EQUIPMENT** 

### LIEBHERR R940 056182 - Hydraulic System

Sample No: LH0289860

Oil Type: LIEBHERR HYDRAULIC HVI

Sample Information					
Sample Number		LH0289860	LH0279224		
Sample Date		30 Apr 2024	03 Jan 2024		
Machine Hours		1000	571		
Oil Hours		0	0		
Oil Changed		Not Changd	Not Changd		
Sample Status		NORMAL	ATTENTION		
Oil Condition					
Visc @ 40°C	cSt	○ 38.0	39.9		

Conta	ımination			
Water	%	NEG	NEG	 
Particles >4µm		<b>12801</b>	<b>28057</b>	 
Particles >6µm		<b>914</b>	○ 3984	 
Particles >14µm		<b>21</b>	O 57	 
ISO 4406:1999 (c)		21/17/12	22/19/13	 
Silicon	ppm	<b>3</b>	<b>4</b>	 
Sodium	ppm	<b>2</b>	<b>1</b>	 
Potassium	ppm	<b>1</b>	0	 

<b>(0)</b>				
Wed	ar Metals			
Iron	ppm	<b>14</b>	O 10	 
Copper	ppm	<b>9</b>	0 8	 
Lead	ppm	<b>0</b>	O <1	 
Tin	ppm	<b>0</b>	O 0	 
Aluminum	ppm	<1	O 1	 
Chromium	ppm	<b>1</b>	O <1	 
Molybdenum	ppm	<1	O <1	 
Nickel	ppm	<b>0</b>	O 0	 
Titanium	ppm	0	0	 
Silver	ppm	0	0	 
Manganese	ppm	<b></b> <1	O 0	 
Vanadium	ppm	0	0	 

Add	itives			
Calcium	ppm	589	○ 820	 
Magnesium	ppm	62	41	 
Zinc	ppm	<b>609</b>	O 644	 
Phosphorus	ppm	<b>521</b>	O 549	 
Barium	ppm	<b>○</b> <1	O 0	 
Boron	ppm	<b>1</b>	O <1	 



#### **LIEBHERR CANADA LTD.** 1015 SUTTON DRIVE BURLINGTON, ON

CA L7L 5Z8

Contact: Steve Lehto steve.lehto@liebherr.com

T: (905)319-9222 F: (905)319-6617

#### 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: LIEMIS
Unique No: 5775513
Signed: Kevin Marson
Report Date: 10 May 2024

# CONSTRUCTION EQUIPMENT





#### **Graphs**

