

WEAR	NORMAL
CONTAMINATION	
FLUID CONDITION	NORMAL

Machine Id LIEBHERR LH40M 156305-1215

Rear Left Wheel Hub

GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION
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Resample at the next service interval to monitor.

## WEAR

All component wear rates are normal.

## CONTAMINATION

There is no indication of any contamination in the oil.

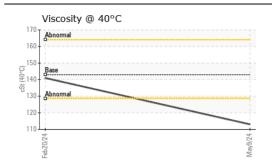
## FLUID CONDITION

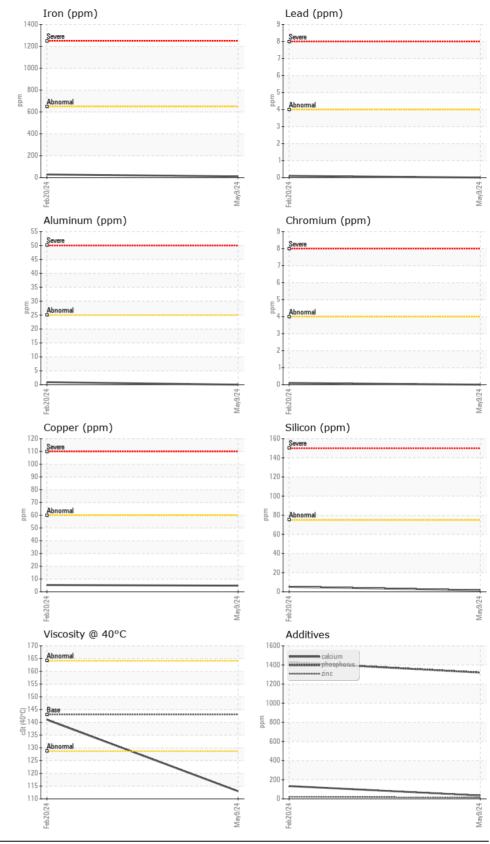
The condition of the oil is acceptable for the time in service.

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH	LH0278477	
Sample Date		Client Info		09 May 2024	20 Feb 2024	
Machine Age	hrs	Client Info		1010	536	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Filter Changed		Client Info		None	None	
Sample Status				NORMAL	NORMAL	
			050		00	
Iron	ppm	ASTM D5185(m)	>650	11	28	
Chromium	ppm	ASTM D5185(m)	>4	0	<1	
Nickel	ppm	ASTM D5185(m)	>4	0	0	
Titanium	ppm	ASTM D5185(m)	>4	0	0	
Silver	ppm	ASTM D5185(m)	05	0	0	
Aluminum	ppm	ASTM D5185(m)	>25	0	<1	
Lead	ppm	ASTM D5185(m)	>4	0	<1	
Copper	ppm	ASTM D5185(m)	>60	5	5	
Tin	ppm	ASTM D5185(m)	>4	0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	NONE	VLITE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
Silicon			75	•	_	
0	ppm	ASTM D5185(m)	>75	2	5	
Potassium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	>75	2 <1	5	
					-	
Potassium		ASTM D5185(m)	>20	<1	1	
Potassium Water	ppm	ASTM D5185(m) WC Method	>20 >0.2	<1 NEG	1 NEG	
Potassium Water Silt	ppm scalar	ASTM D5185(m) WC Method Visual*	>20 >0.2 NONE	<1 NEG NONE	1 NEG NONE	
Potassium Water Silt Debris	ppm scalar scalar	ASTM D5185(m) WC Method Visual* Visual*	>20 >0.2 NONE NONE	<1 NEG NONE NONE	1 NEG NONE NONE	
Potassium Water Silt Debris Sand/Dirt	ppm scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE	<1 NEG NONE NONE NONE	1 NEG NONE NONE	   
Potassium Water Silt Debris Sand/Dirt Appearance	ppm scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE	<1 NEG NONE NONE NONE NORML	1 NEG NONE NONE NONE NORML	   
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>20 >0.2 NONE NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG	1 NEG NONE NONE NORML NORML NEG	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2	<1 NEG NONE NONE NORML NORML NEG	1 NEG NONE NONE NORML NORML NEG 2	     
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400	<1 NEG NONE NONE NORML NORML NEG 1 240	1 NEG NONE NONE NORML NORML NEG 2 10	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 >170 400 200	<1 NEG NONE NONE NORML NORML NEG 1 240 <1	1 NEG NONE NONE NORML NORML NEG 2 10 1	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0	1 NEG NONE NONE NORML NORML NEG 2 10 1 1 <1	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400 200 12	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1	1 NEG NONE NONE NORML NORML NEG 2 10 1 1 <1	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 >170 400 200 12	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1 0 <1 1	1 NEG NONE NONE NORML NORML NEG 2 10 1 1 <1 <1 <1 <1	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML NORML >0.2 >170 400 200 12 12	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1 1 35	1 NEG NONE NONE NORML NORML NEG 2 10 1 2 10 1 <1 <1 <1 <1 <1 <1 34	
Potassium Water Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400 200 12 12 12 150 1650	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1 1 240 <1 1 35 1320	1 NEG NONE NONE NORML NORML NEG 2 10 1 <1 <1 <1 <1 <1 134 1428	
Potassium Water Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400 200 12 12 12 150 1650 125	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1 1 35 1320 14	1 NEG NONE NONE NORML NORML NEG 2 10 1 <1 <1 <1 <1 <1 <1 <1 134 1428 21	
Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >0.2 NONE NONE NORML >0.2 >170 400 200 12 12 12 150 1650	<1 NEG NONE NONE NORML NORML NEG 1 240 <1 0 <1 1 240 <1 1 35 1320	1 NEG NONE NONE NORML NORML NEG 2 10 1 <1 <1 <1 <1 <1 134 1428	

Report Id: URBWIN [WCAMIS] 02635403 (Generated: 05/15/2024 14:02:32) Rev: 1

Submitted By: Vincent Blanchette





Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **Urban Mine** CALA Sample No. Received 72 Rothwell Rd. :LH : 14 May 2024 Lab Number : 02635403 Tested Winnipeg, MB : 14 May 2024 ISO 17025:2017 Accredited Laboratory Unique Number : 5776556 Diagnosed : 14 May 2024 - Wes Davis CA R3P 2H7 Test Package : MOB 1 Contact: SERVICE To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (204)774-0192 Validity of results and interpretation are based on the sample and information as supplied.

Submitted By: Vincent Blanchette Page 2 of 2

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