



LIEBHERR L580 070558-1762

Component Front Differential

LIEBHERR GEAR BASIC 90 LS (--- GAL)

Resample at the next service interval to monitor.

RECOMMENDATION

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.

(GAL)						
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0218127	LH0275613	
Sample Date		Client Info		12 Mar 2024	02 Jan 2024	
Machine Age	hrs	Client Info		1460	797	
Oil Age	hrs	Client Info		0	0	
Filter Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Filter Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
Iron			>800	114	289	
Iron Chromium	ppm	ASTM D5185(m)	>000		209	
Nickel	ppm	ASTM D5185(m)		<1	2	
Titanium	ppm	ASTM D5185(m)	>4	<1 0	0	
	ppm	ASTM D5185(m)	>8	-		
Silver	ppm	ASTM D5185(m)	00	0	0	
Aluminum	ppm	ASTM D5185(m)	>20	<1	2	
Lead	ppm	ASTM D5185(m)	>10	3	3	
Copper	ppm	ASTM D5185(m)	>100	87	98	
Tin	ppm	ASTM D5185(m)	>5	6	13	
Vanadium	ppm	ASTM D5185(m)		0	0	
White Metal	scalar	Visual*	NONE	VLITE	NONE	
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
	scalar ppm	Visual* ASTM D5185(m)	NONE	NONE 7	NONE 20	
Yellow Metal						
Yellow Metal Silicon	ppm	ASTM D5185(m)	>75	7	20	
Yellow Metal Silicon Potassium	ppm	ASTM D5185(m) ASTM D5185(m)	>75 >20	7 <1	20 0	
Yellow Metal Silicon Potassium Water	ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method	>75 >20 >.2	7 <1 NEG	20 0 NEG	
Yellow Metal Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual*	>75 >20 >.2 NONE	7 <1 NEG NONE	20 0 NEG LIGHT	
Yellow Metal Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual*	>75 >20 >.2 NONE NONE	7 <1 NEG NONE NONE	20 0 NEG LIGHT NONE	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual*	>75 >20 >.2 NONE NONE NONE	7 <1 NEG NONE NONE NONE	20 0 NEG LIGHT NONE NONE	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual*	>75 >20 >.2 NONE NONE NONE NORML	7 <1 NEG NONE NONE NONE NORML	20 0 NEG LIGHT NONE NONE NORML	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual*	>75 >20 >.2 NONE NONE NONE NORML NORML	7 <1 NEG NONE NONE NONE NORML NORML	20 0 NEG LIGHT NONE NONE NORML NORML	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual*	>75 >20 >.2 NONE NONE NONE NORML NORML	7 <1 NEG NONE NONE NONE NORML NORML NEG	20 0 NEG LIGHT NONE NONE NORML NEG	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual*	>75 >20 >.2 NONE NONE NORML NORML >.2	7 <1 NEG NONE NONE NORML NORML NEG 3	20 0 NEG LIGHT NONE NORML NORML NEG 9	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar gpm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m)	>75 >20 >.2 NONE NORME NORML >.2	7 <1 NEG NONE NONE NORML NORML NEG 3 2	20 0 NEG LIGHT NONE NORML NORML NEG 9 1	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m)	>75 >20 >.2 NONE NONE NORML NORML >.2	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0	20 0 NEG LIGHT NONE NORML NORML NEG 9 1 0	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >.2 NONE NORML NORML >.2 0 0 0	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0 0	20 0 NEG LIGHT NONE NORML NORML NEG 9 1 0 0	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>75 >20 >.2 NONE NORME NORML >.2 0 0 0 0 0	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0 0 0 20	20 0 NEG LIGHT NONE NORML NORML NEG 9 1 0 0 0 68	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185(m) 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)	>75 >20 >.2 NONE NONE NORML NORML >.2	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0 0 0 20 <1	20 0 NEG LIGHT NONE NORML NORML NEG 9 1 0 0 68 1	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) 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)	>75 >20 >.2 NONE NONE NORML NORML >.2 0 0 0 0 0 0 0 1 2 1	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0 0 20 20 <1 4	20 0 NEG NONE NONE NORML NORML NEG 9 1 0 0 68 1 9	
Yellow Metal Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185(m) 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)	>75 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 0 1 0 2 1 2 143	7 <1 NEG NONE NONE NORML NORML NEG 3 2 0 0 20 <1 4 2360	20 0 NEG LIGHT NONE NORML NORML NEG 9 1 0 0 68 1 9 1 9 1 0 0 68 1 9 2240	





