



LIEBHERR L566 1758-71605

Rear Differential

LIEBHERR GEAR BASIC 90 LS (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.



Bearing and/or bushing wear is indicated.

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LH0277181		
Sample Date		Client Info		10 Jul 2024		
Machine Age	hrs	Client Info		2470		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		None		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>1200	233		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>4	4		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>5	3		
Lead	ppm	ASTM D5185m	>4	0		
Copper	ppm	ASTM D5185m	>40	A 134		
Tin	ppm	ASTM D5185m	>4	5		
Vanadium	ppm	ASTM D5185m		0		
White Metal	scalar	*Visual	NONE	MODER		
Vollow Motal	coolar	*\/iouol	NONE	NONE		
renow wetai	Scalai	VISUAI	NONL	NONE		
Silicon	ppm	ASTM D5185m	>50	13		
Silicon Potassium	ppm ppm	ASTM D5185m	>50 >20	13 1		
Silicon Potassium Water	ppm ppm	ASTM D5185m ASTM D5185m WC Method	>50 >20 >.2	13 1 NEG		
Silicon Potassium Water Silt	ppm ppm scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >.2 NONE	13 1 NEG NONE		
Silicon Potassium Water Silt Debris	ppm ppm scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual	>50 >20 >.2 NONE NONE	13 1 NEG NONE NONE	 	
Silicon Potassium Water Silt Debris Sand/Dirt	ppm ppm scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual	>50 >20 >.2 NONE NONE NONE	13 1 NEG NONE NONE NONE	 	
Silicon Potassium Water Silt Debris Sand/Dirt Appearance	ppm ppm scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual	>50 >20 >.2 NONE NONE NORE	13 1 NEG NONE NONE NONE NORML		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor	ppm ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual	>50 >20 >.2 NONE NONE NORML NORML	13 1 NEG NONE NONE NORE NORML		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 >20 >2 NONE NONE NORML >.2	13 1 NEG NONE NONE NORML NORML NEG		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 >.2 NONE NONE NORE NORML NORML >.2	13 1 NEG NONE NONE NORE NORML NEG		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>50 >20 >.2 NONE NONE NONE NORML NORML >.2	13 1 NEG NONE NONE NORML NORML NEG 3		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>50 >20 >.2 NONE NORE NORML NORML >.2	13 1 NEG NONE NONE NORML NORML NEG 3 2		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	>50 >20 >.2 NONE NONE NORML NORML >.2	13 1 NEG NONE NONE NORML NORML NEG 3 2 0		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >.2 NONE NONE NORML NORML >.2	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0		
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 ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >.2 NONE NORML NORML >.2 0 0 0 0 0 0 	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0 0 21		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >20 NONE NONE NONE NORML >.2 0 0 0 0 0 0 0 2 1	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0 21 3		
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 D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >20 NONE NONE NONE NORML >.2 0 0 0 0 0 0 0 2 1 <1	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0 21 3 64		
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 scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>50 >20 >20 NONE NONE NORML NORML >.2 0 0 0 0 0 0 1 1 2143	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0 21 3 64 2143		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >2 NONE NORME NORML >2 0 0 0 0 <1 <143 <1 	13 1 NEG NONE NONE NORML NORML NEG 3 2 0 0 21 3 64 2143 50		
Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >50 >20 >20 >20 NONE NONE NONE NONE NONE NORML >.2 0 0 0 0 0 1 2143 <1 23468 	13 13 NEG NONE NONE NORML NORML NEG 3 2 0 0 21 3 64 2143 50 25746		







Sample No. Received 4800 SOLVAY RD : LH0277181 : 15 Jul 2024 Lab Number : 06237122 Tested JAMESVILLE, NY : 17 Jul 2024 Diagnosed Unique Number : 11125956 : 17 Jul 2024 - Don Baldridge Test Package : MOBCE Contact: Service Manager Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

US 13078

Laboratory

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BARRETT/COLAS