

Machine Id LIEBHERR 117059 Component Crowd Winch Drive

GEAR OIL LS 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL LS 80W90. Please confirm.

WEAR

All component wear rates are normal.

CONTAMINATION

The water content is negligible. 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		LH0274602		
Sample Date		Client Info		04 Jun 2024		
Machine Age	hrs	Client Info		490		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		N/A		
Sample Status				NORMAL		
Iron	ppm	ASTM D5185(m)	>200	164		
Chromium	ppm	ASTM D5185(m)	>10	2		
Nickel	ppm	ASTM D5185(m)	>10	1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)		<1		
Lead	ppm	ASTM D5185(m)		0		
Copper	ppm	ASTM D5185(m)		1		
Tin	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)		<1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Water	%	ASTM D5103(III) ASTM D6304*	>0.2	0.024		
ppm Water		ASTM D0304*	>2002	241		
Silt	ppm scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	VLITE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water		Visual*	>0.2	.2%		
	Scala	visuai	20.2	.2 /0		
Sodium	ppm	ASTM D5185(m)		2		
Boron	ppm	ASTM D5185(m)	150	<1		
Barium	ppm	ASTM D5185(m)		1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		2		
Magnesium	ppm	ASTM D5185(m)	10	3		
Calcium	ppm	ASTM D5185(m)	70	104		
Phosphorus	ppm	ASTM D5185(m)	2000	1212		
Zinc	ppm	ASTM D5185(m)	50	93		
Sulfur	ppm	ASTM D5185(m)	20000	24812		
Visc @ 40°C	cSt	ASTM D7279(m)	140	198		
		. /		\sim /		

Contact/Location: Service Manager - ASTSCA





