

Machine Id LIEBHERR LRB18 111114

Swing Drive

GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

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.

	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		LHMC141289		
	Sample Date		Client Info		21 May 2024		
	Machine Age	hrs	Client Info		487		
	Oil Age	hrs	Client Info		487		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
	Iron	ppm	ASTM D5185m	>400	29		
	Chromium	ppm	ASTM D5185m	>10	0		
	Nickel	ppm	ASTM D5185m	>10	0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m	>25	<1		
	Lead	ppm	ASTM D5185m	>50	<1		
	Copper	ppm	ASTM D5185m	>200	43		
	Tin	ppm	ASTM D5185m	>10	4		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Silicon	ppm	ASTM D5185m	>50	3		
	Potassium	ppm	ASTM D5185m	>20	2		
	Water		WC Method	>0.2	NEG		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
	Sodium	ppm	ASTM D5185m	>170	3		
	Boron	ppm	ASTM D5185m	400	1		
	Barium	ppm	ASTM D5185m	200	2		
	Molybdenum	ppm	ASTM D5185m	12	<1		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	12	<1		
	Calcium	ppm	ASTM D5185m	150	17		
	Phosphorus	ppm	ASTM D5185m	1650	1209		
	Zinc	ppm	ASTM D5185m	125	18		
	Sulfur	ppm	ASTM D5185m	22500	31791		
	Vice @ 10°C	oCt	ACTM DAAS	1/2	201		

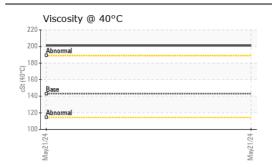
Visc @ 40°C

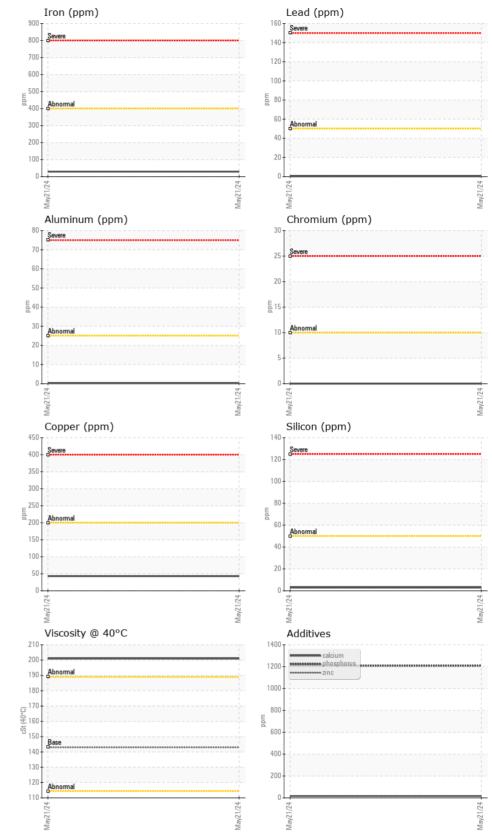
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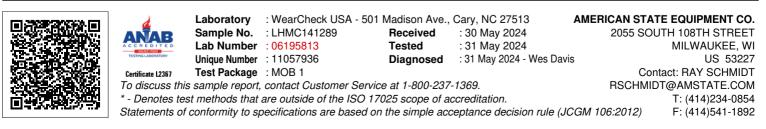
ASTM D445 143

Contact/Location: RAY SCHMIDT - LEC0007

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Contact/Location: RAY SCHMIDT - LEC0007 Page 2 of 2