

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL



Machine Id LIEBHERR PR766 016664-1421

Diesel Engine

{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 0W40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.



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		LH0265154		
Sample Date		Client Info		16 Jun 2024		
Machine Age	hrs	Client Info		9313		
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)	>100	4		
Chromium	ppm	ASTM D5185(m)	>5	0		
Nickel	ppm	ASTM D5185(m)	>5 >5	۰ <1		
Titanium	ppm	ASTM D5185(m)	20	0		
Silver	ppm	ASTM D5185(m)	>3	<1		
Aluminum	ppm	ASTM D5185(m)	>15	2		
Lead	ppm	ASTM D5185(m)	>30	- 10		
Copper	ppm	ASTM D5185(m)	>125	374		
Tin	ppm	ASTM D5185(m)	>5	0		
Vanadium	ppm	ASTM D5185(m)	-	0		
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Silicon	ppm	ASTM D5185(m)	>60	4		
Potassium	ppm	ASTM D5185(m)	>20	<1		
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol	%	ASTM D7922*		0.0		
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	7.6		
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.4		
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 D5185(m)		1		
Boron	ppm	ASTM D5185(m)		2		
Barium	ppm	ASTM D5185(m)		_ <1		
Molybdenum	ppm	ASTM D5185(m)		1		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		32		
Calcium	ppm	ASTM D5185(m)		2088		
Phosphorus	ppm	ASTM D5185(m)		877		
Zinc	ppm	ASTM D5185(m)		1032		
Sulfur	ppm	ASTM D5185(m)		2814		
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.0		
Visc @ 40°C	cSt	ASTM D7279(m)	-	80.4		
Visc @ 100°C	cSt	ASTM D7279(m)		13.8		
Viscosity Index (VI)	Scale	ASTM D2270*		177		
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