WEAR CONTAMINATION FLUID CONDITION

NORMAL NORMAL



(74611A)

FREIGHTLINER RL-63

Diesel Engine

DIESEL ENGINE OIL SAE 40 (--- GAL)

DIESEL ENGINE OIL SAE 40 (MAL)						
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
TECOMMEND/THON	Sample Number		Client Info		WC0941088		
Resample at the next service interval to monitor.	Sample Date		Client Info		12 Jun 2024		
	Machine Age	hrs	Client Info		3333		
	Oil Age	hrs	Client Info		600		
	Filter Age	hrs	Client Info		600		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>90	52		
	Chromium	ppm	ASTM D5185m	>20	1		
	Nickel	ppm	ASTM D5185m	>2	0		
	Titanium	ppm	ASTM D5185m	>2	<1		
	Silver	ppm	ASTM D5185m	>2	0		
	Aluminum	ppm	ASTM D5185m	>20	3		
	Lead	ppm	ASTM D5185m	>40	0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m	>15	0		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTABINATION	0:1:		AOTM DE40E	05			
CONTAMINATION	Silicon	ppm	ASTM D5185m		4		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		5		
,	Fuel		WC Method	>3.0	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol Soot %	0/	WC Method	. 6	NEG 2.3		
	Nitration	% Abs/cm	*ASTM D7844 *ASTM D7624	>0	2.3 15.3		
	Sulfation	Abs/.1mm	*ASTM D7024		29.7		
	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		*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>216	4		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	250	6		
	Barium	ppm	ASTM D5185m	10	<1		
	Molybdenum	ppm	ASTM D5185m	100	98		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m	450	868		
	Calcium	ppm	ASTM D5185m	3000	1240		
	Phosphorus	ppm	ASTM D5185m	1150	1061		
	Zinc	ppm	ASTM D5185m	1350	1261		
	Sulfur	ppm	ASTM D5185m		3468		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	27.7		
	Base Number (BN)	0 0	ASTM D2896		6.3		
	Visc @ 100°C	cSt	ASTM D445	14.4	14.3		





Certificate L2367

Laboratory Sample No.

Lab Number : 06223198 Unique Number : 11101395

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0941088

Received **Tested** Test Package : MOB 1 (Additional Tests: TBN)

: 28 Jun 2024 Diagnosed

: 30 Jun 2024 - Don Baldridge

: 28 Jun 2024

307 WHITE ST DANBURY, CT US 06810 Contact: CHRIS CONTI

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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.

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

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