

Machine Id FREIGHTLINER RL-24

Diesel Engine

GIBRALTAR 15W/40 SUPER S-3 LX (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0875517		
	Sample Date		Client Info		08 Apr 2024		
	Machine Age	hrs	Client Info		9525		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
WEAR	Iron		ASTM D5185m	. 00	68		
Metal levels are typical for a new component breaking in.	Chromium	ppm ppm	ASTM D5185m		3		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	~_	0		
	Silver	ppm	ASTM D5185m	-3	0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead		ASTM D5185m		-4		
	Copper	ppm ppm	ASTM D5185m		23		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m	20	0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
		304141	visual	NONE			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>20	19		
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4		
	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	2.8		
	Nitration	Abs/cm	*ASTM D7624	>20	9.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8		
	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		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		9		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0		
	Molybdenum	ppm ppm	ASTM D5185m	66	94		
	Manganese	ppm	ASTM D5185m	00			
	Magnesium	ppm	ASTM D5185m	1000	884		
	Calcium	ppm	ASTM D5185m		1240		
	Phosphorus	ppm	ASTM D5185m		1059		
	Zinc		ASTM D5185m		1059		
	Sulfur	ppm	ASTM D5185m	12/0	3062		
	Oxidation	ppm Abs/.1mm	*ASTM D5165111	>25	14.9		
	Base Number (BN)				8.2		
	Dase Multiber (BIN)	niy NOR/g	ASTIVI D2096	10.1	0.2		

14.8

ASTM D445 15.5

Visc @ 100°C cSt



