

RVBF Machine Id 1491073 Component Diesel Engine Fluid SHELL 15W40 (48 QTS)

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RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.	Sample Number		Client Info		RPL0021215		
	Sample Date		Client Info		09 Jul 2024		
	Machine Age	hrs	Client Info		1773		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		Not Changd		
	Sample Status				ABNORMAL		
	Iran			. 100	04		
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m		34		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m	>4	0		
	Titanium Silver	ppm	ASTM D5185m	. 0	<1 0		
	Aluminum	ppm	ASTM D5185m		13		
	Lead	ppm	ASTM D5185m ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		7		
	Tin	ppm	ASTM D5185m		7 <1		
	Vanadium	ppm ppm	ASTM D5185m	>15	<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
<u></u>		Scalar	visual	NONE			
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8		
	Potassium	ppm	ASTM D5185m	>20	22		
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.6		
	Nitration	Abs/cm	*ASTM D7624	>20	13.2		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	26.7		
	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	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m	> 150	6		
	Boron	ppm ppm	ASTM D5185m	>150	27		
The BN level is low. The condition of the oil is acceptable for the time in service.	Barium		ASTM D5185m		0		
	Molybdenum	ppm ppm	ASTM D5185m		112		
	Manganese	ppm	ASTM D5185m		0		
	Magnesium	ppm	ASTM D5185m		510		
	Calcium	ppm	ASTM D5185m		1727		
	Phosphorus	ppm	ASTM D5185m		926		
	Zinc	ppm	ASTM D5185m		1086		
	2.110	PP'''					

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m

Base Number (BN) mg KOH/g ASTM D2896

Abs/.1mm *ASTM D7414 >25

ASTM D445

2844

27.9

3.8

14.4



